BOOK REVIEW

Handbook of Open, Distance and Digital Education: Parts I and II

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The Handbook of Open, Distance, and Digital Education (ODDE) is a comprehensive publication covering key topics from open and distance education as well as digital education. This book establishes itself as a colossus in the realm of distance education literature, spanning seven parts, 80 chapters and 1,437 pages. Covering such an extensive publication within the scope of a single review might not do justice to the significant individual contributions of this work. Consequently, this review pertains only to Part I and Part II of this book, which involves the first 14 chapters.

The parameters of the concept of ODDE are clearly set out in the Preface of the book as it pertains to different types of teaching and learning processes through which educational technologies, digital media, and different tools can be employed to provide content, communication and different aspects of interactivity and teaching.

Chapter 1, written by Olaf Zawacki-Richter and Insung Jung, provides an overview of the book and situates the rest of the chapters in terms of the 3M-framework of macro-, meso- and micro-levels of ODDE. This chapter addresses the problematic issue of terminology in reaffirming how ODDE is viewed in the literature. However, the chapter falls short in two respects. Firstly, although it attempts to address the problematic issue of terminology in reaffirming how ODDE is viewed in the literature, the definition offered, unfortunately, does not align with the initial definition in the Preface, nor does it add value to that definition. Secondly, despite attempts at clarifying ODDE-related terms, this introduction adds to the confusion by using “online learning/education” and “digital learning/education” as being synonymous without clarifying how either of them are to be understood in this work. Importantly, ODDE is considered an “overarching term”, which then with this disclaimer, covers all educational and related activities discussed in the rest of the publication. This chapter continues by contextualising the different sections (which for the sake of alignment with the titles used elsewhere in the book should have been called “parts” and not “sections”) in terms of the relevant levels. Finally, the book is positioned as offering a “transdisciplinary knowledge base in ODDE”, which it indeed succeeds in being.

Part II (according to the table of contents) or Section 1 (according to the Introduction) focuses on the theoretical foundations, history and an overview of research trends for ODDE. Chapter 2, authored by Junhong Xiao, sets the scene for the chapters that follow through explaining the interrelationship between history and theory, as well as research in ODDE. This chapter emphasises how the history of
ODDE can inform future work in the field and how, theoretically, ODDE has had interdisciplinary roots while growing the discipline through developing its own theories as well. As such, this part of the book provides a good introduction to the underlying historical and contemporary theoretical principles of ODDE.

Chapter 3 written by distinguished distance education scholar, Michael Grahame Moore, presents the history of ODDE specifically with the focus on the United States and Great Britain. This type of chapter is relevant in order to gain an understanding of developments from correspondence education to distance education. However, the narrow focus on two English-speaking countries, with some limited references to other countries, shows the need for some comprehensive addition in future similar works exploring historical developments in other contexts. The chapter promises to distill 150 years of ODDE history into a single chapter, which may seem quite ambitious. But the chapter succeeds quite well in presenting key developments in a coherent and accessible manner. It is unfortunate for such a recent publication to contain broken links, such as the one referring to International Council for Open and Distance Education conference papers on page 30. Hopefully such issues will be resolved in future updates of the book. Otherwise, the content is comprehensive enough within the scope that is available. The chapter concludes by noting the relevance of the history of ODDE. The importance of student centredness and adapting teaching to the technologies being used, as well as the nature and relevance of institutional change, are valuable lessons.

The focus shifts to open education in Chapter 4 written by Marco Kalz. Here, open education initiatives are explored through the lens of social movement theory. Considering Chapters 3 and 5, it would have made sense to have a historical overview of open education first and then this chapter could have followed later but this editorial decision does not diminish the quality of the publication. Bizarrely, the concepts of ‘openness’ and ‘open education’ are not explored in terms of flexibility of learning and the open university movement at all and here open education is equated with open educational resources (OER) and massive open online courses (MOOCs) — as a side note, these two terms are also not clearly defined in this chapter. The flexibility aspect is only mentioned in passing later on in the chapter. The chapter further presents a gentle introduction to OER with the ubiquitous references to UNESCO’s recommendation and 5Rs of retain, reuse, revise, remix and redistribute. The overview of current trends on OER and MOOCs seems slim and there are clear gaps as many significant and recent systematic literature reviews on these two topics have been ignored. The use of the social movement theory is highly relevant and prompts some interesting conclusions. As the author explores the open education movement in terms of aspects of conflict and protest, cultural representation, values and collective action, and the influence of the social, political and cultural context, it is then concluded that the field could be considered an epistemic community rather than being a social movement. Encouragingly, he concludes that research in the field has moved on from being prescriptive and relating to value-based advocacy to more evidence-based assessments on socially disadvantaged individuals.

The origins and evolution of instructional design as well as instructional technology are explored in Chapter 5 by Michael H. Molenda as the book continues with the diachronic journey of ODDE.
chapter sensibly starts off by contextualising instructional technology in terms of the development of technology in the generic sense and then focussing on aspects such as the visual instruction movement and subsequent technological developments. Edgar Dale’s Cone of Experience is mentioned without any qualification in terms of more recent nuanced views on any continuums from concrete to abstract (cf. de Bruyckere et al. 2015). The second part of the chapter pertains to the origins and evolution of instructional design or, originally, instructional systems design, following tributaries of the development of instructional design from wartime industrial training to programmed instruction and iterations of military training. This is followed by a description of how a synthesis of these tributaries formed what is regarded as instructional design. Finally, the chapter also considers some critiques on the concept and reflects on how the concept is viewed today. The author concludes by contextualising the role of instructional design in terms of distance education almost as an afterthought, and it would have been expected, within a book focussed on ODDE, that this element should have been slightly more prominent.

In the sixth chapter, Martin Weller covers the rise and development of digital education specifically in terms of five technologies: the web, Learning Management Systems (LMS), blogs, social media, and MOOCs. The discussion is done within the context of open education, here conceptualised as an umbrella term. This chapter sets out to counter the so-called year zero mentality, and also to demonstrate the importance of digital education in terms of open education. After a brief overview of the origin of the web, Weller describes how this formed a foundation for the technologies that are further discussed in the chapter. Next, the focus turns to the LMS or the virtual learning environment as a means for digital education, as it allows for rapidly developed and a unified e-learning delivery. Blogs are then considered as a precursor to Web 2.0, which was gradually adopted for digital education. The tension between the freedom of the web and the constraints of the LMS is also evidenced through this discussion on blogs. Next, social media is considered in terms of its role to share knowledge and facilitate open practice but concerns around disinformation are also noted. The last technology covered in this chapter is the MOOC. Despite this being considered a successful alignment of both digital and open education, the fact that MOOCs have been adopting conventional approaches due to commercial interests, is stated as a concern. Importantly, this chapter concludes that these technologies have opened access to education and have unique elements of control which impacts the level of openness.

In Chapter 7, Benedict du Boulay covers the very timely topic of ethical issues with regard to the application of artificial intelligence (AI). Again, this chapter follows a historical approach to the topic. An overview of the early days of AI in education is followed by a discussion around contemporary AI in terms of learning-facing, teacher-facing and administrator-facing tools. The chapter transitions to a discussion of ethical issues in general and in terms of AI and its operationalisation. The role of AI in enhancing textbooks and systems and also ethical use of data are highlighted as well. The chapter poses some interesting open questions and directions for future research and then finally considers the implications for ODDE.
In Chapter 8 the influence of the work of Otto Peters, Börje Holmberg and Michael Moore, labelled, interestingly in this chapter as “classic theorists”, on ODDE is critically considered by the chapter authors Terry Evans and Viktor Jakupec. These theorists’ work is considered within the context of the historical development of distance education and its institutions. The author states that, according to existing scholarship, it is considered that there is no unified or general theory of distance education. The chapter then also considers further important work by Keegan and Garrison, as well as Verduin and Clark. Important conclusions reached by the chapter authors are that social imperatives around distance education still persist and that distance education has been repositioning and repurposing itself through using and adapting new technologies.

Chapter 9, written by Stephen Downes, relates to so-called newer theories for digital learning spaces. After initially considering what a theory and more specifically also a learning theory involves, this chapter elevates the following phenomena as theories and then discusses them in terms of them being a reaction to traditional learning theories: connectivist pedagogy, personal learning environments and open educational practices. This chapter questions the traditional notion of a theory and also raises some interesting epistemological challenges for the reader. However, I defer to the reader to determine if these theories are new or, indeed, whether they should be regarded as theories.

In Chapter 10, Jon Dron and Terry Anderson critically discuss the objectivist, subjectivist, and complexivist pedagogical paradigms. The chapter starts off by juxtaposing the problems in-person and distance learning have to solve. Thereafter, the three noted pedagogical paradigms are unpacked as generations of distance learning moving from teaching, learning and, ultimately, knowledge. The chapter concludes by considering some emerging paradigms. The first of these is the so-called ‘data-driven pedagogy’ which relates to a paradigm where pedagogy is based on and adapted to large amounts of data derived from learning platforms, as is the case with MOOCs, for example. A further interesting paradigm that is discussed is ‘holology’ which involves learning in being part of a culture with certain common values and practices. Finally, Dron and Anderson also refer to what they term as ‘bricolagogy’ and this involves a more eclectic paradigmatic approach where, in practice, you can draw from various pedagogical methods and paradigms. The authors conclude in emphasising the increasing lack of boundaries between paradigms and the dynamic nature of this context.

Motivation is an essential component in any educational context, and this is the focus of Chapter 11, in which Clarence Ng considers motivation and empowerment in ODDE. This chapter skillfully considers key theoretical perspectives on motivation, such as sociocognitive theories and sociocultural theories, in addition to the concept of perezhivanie. Four cognitive enablers — self-efficacy, achievement goals, intrinsic motivation, and self-regulation — that are pertinent to distance education are discussed. The chapter contemplates how empowerment can be derived from enabling personal attributes, which relates to sociocognitive theories. The chapter also considers motivating contexts through sociocultural theories and, finally, also personally significant experiences, which are interpreted in terms of perezhivanie. The chapter ends by noting how all these elements are equally important for ODDE.
The twelfth chapter, by Andrina Granić, relates to technology acceptance, adoption and use by students, teachers and in some cases other relevant stakeholders. In this context, the prominence of the Innovation Diffusion Theory (IDT), the Unified Theory of Acceptance and Use of Technology (UTAUT), the Motivational Model (MM), and especially the Technology Acceptance Model (TAM) is evident. These theoretical approaches have been used to gauge acceptance, adoption and use especially in e-learning contexts followed by mobile learning, PLEs and MOOCs among others. The chapter is rounded off by identifying potential areas of further research.

In Chapter 13, Olaf Zawacki-Richter and Aras Bozkurt present a very thorough overview of research trends in ODDE through an analysis of 10,827 articles that were published between 2007 and 2016 in 26 journals on educational technology, instructional design, and distance education. This analysis found four clusters in terms of thematic scope in the journals: (1) Educational Technology, Learning, and Computer Science; (2) Educational Technology from K-12 to Higher Education; (3) Distance Education in the Context of Higher Education; and (4) Technology-Enhanced Learning in School Settings. In terms of research areas, it is significant that the majority of research articles pertain to the micro-level of teaching and learning in distance education, specifically, in terms of interaction and communication in learning communities, instructional design, as well as learner characteristics. Work on educational technology at a meso-level was also noted. Of further value are the four research waves identified by the authors: (1) the consolidation of distance teaching institutions and instructional design; (2) quality assurance and student support; (3) virtual universities, online interaction, and learning; and (4) artificial intelligence, big data, and intelligent support systems. The chapter concludes with some reflections on the role of the Covid-19 pandemic.

The final chapter considered for this review is Chapter 14, written by Heather Kanuka and which relates to big science and little science within the context of ODDE. This chapter aptly begins by situating itself within the context of ODDE and data. The author then provides a very balanced and informed discussion on the affordances and challenges for both big and little data and, by implication, also big and little science. The chapter also provides a good mix of considerations from key sources in the field as well as some practical recommendations. An interesting approach, noted in the chapter, is blending big and little data sets. Some interesting topics for further contemplation are provided and this chapter is a must-read for anyone who is considering research in ODDE.

The larger work from which these 14 chapters are drawn makes two major contributions. Firstly, this book contributes to the scholarly discourse around ODDE and secondly, through the open publication of this book, the content is available to many more potential readers. This publication is lauded for contributors from many well-established experts in the field as well as “a good mix of new names from a wide range of countries, including the Global South” (Bates, 2023). The editors also proudly attest to the diversity of perspectives. However, sadly, while about one-third of the authors come from the Global South, there are no contributions from South America and a mere five authors come from only two of the countries in Africa. Significantly, 40% of the authors come from North America and 29% from Europe.
In conclusion, Parts I and II contextualise ODDE in terms of the key concepts and the historical development of the most important aspects relevant to the field. To those readers new to ODDE, this book is useful, for it not only introduces them to the most important current voices in the field, it also provides a good anthological overview of key scholarly works. Stylistically, the chapters vary on a continuum between pragmatic handbook texts to being more scientific in nature and, ultimately, bordering on academically founded philosophical musings. As such, this publication makes for good *ad hoc* reading and reference.

**References**


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