



# Shaping the Field of Open, Distance, and Digital Education

# 1

## An Introduction

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**Abstract**

This chapter provides a brief overview of the overall structure by the Chief Editors of the Handbook of Open, Distance, and Digital Education (ODDE) published in Springer's Major Reference Series. The handbook is organized along the lines of the 3M-Framework covering all important issues related to ODDE at the macro- (ODDE systems, theories, and methods), meso- (ODDE educational management and institutions), and micro- (teaching and learning) levels. Each level is addressed in one volume with two sections. Informed by the historical roots of ODDE, the editors and authors of this handbook are shaping the field of ODDE scholarship, theory, and practice.

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**Keywords**

Open learning · Distance education · Digital education · 3M framework

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**Introduction**

Planning for the publication of this *Handbook of Open, Distance, and Digital Education* (ODDE) began in the early months of 2020. Who would have predicted what has happened in the meantime due to the global Covid-19 pandemic? Suddenly and somewhat unexpectedly, online learning and teaching has now entered the mainstream of education at the same time as many educational institutions from K-12, higher education, professional and vocational training, and continuing education were forced into the digital world of online teaching and learning without being well prepared for it (Bozkurt & Sharma, 2020; Zawacki-Richter, 2021). In such "emergency remote teaching" (ERT, see Hodges et al., 2020) situations, teachers had often transferred what they knew from face-to-face teaching directly to the online environment as if there were no differences between them even though ERT had little in common with carefully designed ODDE.

However, ODDE is by no means a new phenomenon. It has evolved through several historical stages, from correspondence or distance education traced back to the nineteenth century with the introduction of the postal system to the use of print, radio, and TV, to the use of teleconferencing, computers, and multimedia, and up to the most recent development in online learning, including Massive Open Online Courses (MOOCs). Over the past decades, ODDE, especially online learning, has been seen as a main or alternative mode of delivery to widen access to education, provide flexibility and openness in school education, satisfy continuing educational needs of adults, expand the trained workforce, train teachers to improve the quality of schooling, and/or increase cross-border traffic in education. It has also been considered as an innovation to bring about pedagogical changes in various levels and sectors of education.

In a similar vein, digital education, an approach to the use of digital tools and technologies in the process of teaching and learning, has been introduced at all levels of education. Educational institutions now offer digital learning opportunities of

some kind that are flexible in terms of time and space to reach new target groups (e. g., international students or working adults) or to better serve the needs of their conventional student body in a blended or technology-enhanced format.

With the emergence of the Internet in the 1990s, online teaching and learning, as a form of open and distance education, became more widely accepted in education as Alan Tait, the former Pro-Vice-Chancellor (Academic) at the Open University UK, wrote around 23 years ago: “The secret garden of open and distance learning has become public, and many institutions are moving from single conventional mode activity to dual-mode activity, that is to say offering a range of modes of study from the full-/part-time and conventional/distance spectrum” (Tait, 1999, p. 141).

Moreover, since the beginning of the new Millennium, the range of international online degree programs has expanded greatly. An impressive example is Australia, where international online programs generate the highest export income in the service sector on the international, particularly Asian, market (Latchem, 2018). Despite concerns of education being treated as a commodity, open and distance education combined with digital education has contributed to the growth of borderless, transnational education.

As Jung (2019, p. 1) stated, ODDE is complex in nature and scope as it involves a wide range of nontraditional ways of teaching and learning that are mediated by various media and technologies. As ODDE developed, various theories and models have emerged to understand and explain its different aspects and practices, and many empirical studies have been conducted in a wide range of contexts (see Zawacki-Richter & Naidu, 2016; Zawacki-Richter & Latchem, 2018). Against this historical background, it is critical that we learn from the theory, research, and practice in open and distance learning to avoid reinventing the wheel for digital and online education.

We, therefore, hope that this Handbook of ODDE arrives at the right time. Considering changes of educational trajectories, it aims to provide a comprehensive and solid overview of the field for educators, researchers, policymakers, and administrators in such sectors as k-12 education, higher education, adult education, and workplace training. We hope that the handbook will offer a one-stop-shop for both early-career and established researchers, educators, policymakers, and administrators in the field of ODDE to gain a comprehensive overview of the history, theory, and practice at all levels of ODDE, and at the same time stimulate in-depth discussions on various themes and issues of ODDE for today and the future. We hope that, over time, the handbook will lead ODDE researchers to develop meaningful questions and undertake investigations to answer them, while at the same time informing practitioners and policymakers of best practices and future directions of ODDE. Researchers, scholars, and students in the field of ODDE can use this handbook as a major reference and source of inspiration in their research and course of study. Our ambition is to describe and define the structure of ODDE that will shape the *gestalt* of ODDE as an academic discipline and field of educational practice.

## ODDE Terminology

Remote learning, distance learning, open learning, e-learning, flexible learning, hybrid learning, blended learning, web-based learning, online learning, mobile learning, and technology-enhanced learning – these terminologies may be confusing for many readers. We decided to choose “Open, Distance, and Digital Education” as the title for this handbook, combining *open and distance education* to clearly mark the historical origin of recent online education, and *digital education* to capture newer manifestations of teaching and learning with digital media in the process of digital transformation of educational institutions.

We conceptualize ODDE as an overarching term to refer to all kinds of learning and teaching processes in which knowledge and skill base of educational technology, digital media, and tools are used to present and deliver content, as well as facilitate and support communication, interaction, collaboration, assessment, and evaluation. Thus, ODDE is not monolithic in form. It includes various practices, from technology-enhanced education, to flipped learning and blended learning to fully online education.

Closely related to ODDE is open education, a multifaceted construct with elements of openness to reach nontraditional groups of learners. It is manifested in open education practice and scholarship, Open Educational Resources (OER) and Massive Open Online Courses (MOOCs), and connected to the impact of technology in internationalization (see Zawacki-Richter et al., 2020, for a deconstruction of open education).

Another concept related to ODDE is distance education. In distance education, learners are separated from their teachers and the teaching institution. Hence, educational media are used to bridge the distance between the parties involved in the learning process (Keegan, 1980). The capability of media to afford two-way communication for interaction between learners and teachers and among learners is essential in this process. This is also reflected in the definition by Simonson et al. (2011): “Distance education is institution-based, formal education where the learning group is separated, and where interactive telecommunications systems are used to connect learners, resources, and instructors” (p. 126).

Open learning is often used as a synonym for distance education. However, Moore and Kearsley (1996, p. 2) argued that: “[. . .] the concept of open learning is different from distance education since it embraces the idea of students being able to take courses or programs without prerequisites and being able to choose to study any subject they wish. Indeed, most of the” Open Universities “were founded upon this basic premise. While some distance education programs may involve open learning, most do not.” Open learning, therefore, holds a philosophy of widening access to educational opportunities by minimizing academic and administrative restrictions.

With the emergence of networked, personal computers, and digital media and tools, the traditional boundaries between distance and conventional education have been fading since the end of the 1990s. Naidu (2003) observed that “The proliferation of information and communications technology (ICT) in conventional campus-

based educational settings is clearly blurring the traditional boundaries between distance education and campus-based face-to-face educational practices” (p. 350). Hence, terms such as blended learning (Osguthorpe & Graham, 2003), flexible learning (Collis & Moonen, 2001), or distributed learning (Lea & Nicoll, 2002) became prevalent at the beginning of the new Millennium. The experience and practice with online learning and teaching during the Covid-19 pandemic then gave rise to other terms such as remote and hybrid learning.

In the handbook, we have not attempted to use clear definitions of ODDE and other similar terminologies. Instead, we have encouraged the chapter authors to adopt their own approach to defining ODDE and related terms in a teaching and learning context of their interest. We believe that this flexibility will expand our understanding of the complex dimensions of ODDE and allow us to discuss diverse ways in which ODDE and other terminologies have been defined and used in research and practice.

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## The Structure and Content of the Handbook

The chapters of this handbook provide a foundation for considering both accumulated knowledge and the future steps to understand and improve ODDE. To help readers understand the field of ODDE in a more systemic and comprehensive manner, we structure the handbook following the 3M framework proposed by Zawacki-Richter (2009) and Zawacki-Richter and Anderson (2014). The framework categorizes the major areas of theory, research, and practice along the lines of three broad perspectives, i.e., the macro, meso-, and micro levels:

- Macrolevel: ODDE systems and theories (the level of national, regional, and global systems)
- Meso-level: management, organization, and technology in ODDE (the level of educational institutions)
- Microlevel: teaching and learning in ODE (the level of individual learners and teachers)

Accordingly, the handbook is divided into three volumes with two sections in each volume. The six sections are edited by an international team of distinguished section editors with vast experience in ODDE as scholars and researchers, leaders, and administrators. Each section is introduced by the section editor with a chapter that provides an overview of major topics and developments in that area and how it relates to the broader field of ODDE. Based on the chapters in their respective sections, the section editors draw conclusions, discuss open questions, and elaborate on implications for theory, research, and practice.

Here is a brief overview of the content and major issues covered in the six sections of this handbook.

## **Macrolevel: Theories and Systems**

Each section begins with an Introduction chapter by the section editor. The chapters in Sections 1 and 2 examine theories and systems of ODDE from historical, cultural, and global perspectives.

### **Section 1: History, Theory, and Research in ODDE (Section Editor: Junhong Xiao)**

The first section lays the theoretical foundations of ODDE and provides an overview of the historical development, from correspondence education in the nineteenth century to current forms of digital education and technology-enhanced learning. Theoretical underpinnings which have changed over time are explored in the chapters dealing with the classical theories of the predigital era and new and emerging theories for digital learning spaces. The professionalization of ODDE as an academic discipline and field of practice has produced scholarly journals, professional networks, and associations, which are introduced in this section. Further chapters describe major research trends, methods, and digital tools for research into ODDE.

### **Section 2: Global Perspectives and Internationalization (Section Editor: Svenja Bedenlier)**

This section takes on a global perspective on national systems and networks in the context of the globally occurring digital transformation, resulting in the conceptualization of the different facets of internationalization in the context of ODDE. Digital education offers many opportunities for international learning experiences, physical but also virtual student mobility as well as program mobility. Chapters in this section tackle national and transnational policies for ODDE, international partnerships, and consortia as well as infrastructures and platforms for (open) educational resources. Special emphasis is placed on developing a critical reflection on the challenges and opportunities of ODDE in the Global South and the business of international education.

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## **Meso-level: Institutional Perspectives, Management, and Organization**

Followed by an Introduction chapter written by each section editor, the chapters in Sections 3 and 4 examine issues in ODDE at institutional levels.

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### **Section 3: Organization, Leadership, and Change (Section Editor: Ross Paul)**

This section discusses practices and changes in various types of ODDE institutions with a special focus on leadership, management strategies, and support systems. The chapters analyze the development and innovations in open universities, nonformal distance teaching institutions, and open and virtual schools around the globe. The various chapters explore how those ODE institutions have developed and managed strategic plans, change processes, and technology acceptance as well as examine various economic models of ODDE, effective leadership, and staff development practices in a wide range of institutional and sociocultural contexts.

### **Section 4: Infrastructure, Quality Assurance, and Support Systems (Section Editor: Tian Belawati)**

This section analyzes another important set of institutional issues including organizational and technology infrastructure, quality assurance and evaluation, accreditation, and support systems. The first chapters examine both common and unique models and features of organizational and technology infrastructure of various ODDE institutions. The next three chapters focus on ODE institutions' quality assurance, evaluation, and accreditation systems in relation to national and international frameworks. The last three chapters look into ODE institutions' support systems particularly for three categories of stakeholders: learners, faculty, and administrative staff.

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## **Microlevel: Learning and Teaching**

Followed by an Introduction chapter in each section, the chapters in Sections 5 and 6 discuss issues related to open, distance, and digital teaching and learning, including learners, teachers, media and technologies, and instructional design, implementation, and assessment.

### **Section 5: Learners, Teachers, Media, and Technology (Section Editor: Vanessa Dennen)**

This section focuses on the profiles of students and teachers and on the media and technologies that are applied to facilitate teaching and learning in ODDE. In terms of students' characteristics, the chapters analyze issues related to their socioeconomic background, gender, and media usage behavior for learning. This leads to an overview of the various synchronous and asynchronous tools for interaction and collaboration, video-based approaches to teaching and

learning, as well as new and emerging applications of learning analytics, AI in education, and assistive technologies for learners with disabilities. Against the background of the various educational media and technologies, the remaining chapters deal with models and methods for their pedagogically meaningful application and the associated digital skills and literacy for teaching and learning in ODDE.

## **Section 6: Design, Delivery, and Assessment (Section Editor: Richard West)**

The final section starts with an overview of the various delivery modes of ODDE, which differ according to the degree of digitization and the degree of flexibility they allow. Special emphasis is placed on OER, MOOCs, and the development and delivery of online programs. The following chapters focus on the instructional design and pedagogical models and approaches to teaching and learning in digital environments to facilitate interaction, communication, collaboration, and assessment.

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## **An Invitation to Knowledge Sharing and Future Research**

As the chapters of the handbook show, ODDE is becoming richer in theories and research, broader in practice and more influential at all levels and in all sectors of education. The discipline of ODDE has developed strong theories and advanced practice in a wide range of educational contexts, supported and informed by theories and concepts from multiple disciplines, including education, educational technology, media studies, computer science, learning science, and psychology. ODDE has combined many disciplinary approaches to the study of open and distance learning and digital learning. ODDE scholars who are chapter authors of the handbook conduct ODDE research in various academic fields and settings. They study ODDE from different perspectives and with different philosophies. The final result of their transdisciplinary endeavor is this handbook.

Thus, the handbook offers a transdisciplinary knowledge base in ODDE. The knowledge base offered here is what ODDE, as an academic and practical field, has learned about itself over time. It helps us identify and define problems in the field, and take certain positions or actions to solve those problems. At the same time, it influences, and is influenced by, advances in other fields and surroundings, and thus it is always growing and evolutionary in nature (Richey et al., 2010, p. 4). And eventually, this knowledge base in ODDE will help us create a coherent framework of ODDE to address unique problems involved in innovative and dynamic processes and products in open and distance learning, and technology-enhanced learning environments as Ren (2013, p. 10) similarly argued in the field of educational technology.



Given the urgent need for sharing knowledge and experiences in ODDE in light of the digital transformation and the current shift toward online teaching and learning, we are very proud that the handbook is published in an open access format and thus freely available to a global readership. We gratefully acknowledge the funding provided by the University of Oldenburg (Germany), Brigham Young University (USA), the International Christian University Tokyo (Japan), and the German Federal Ministry of Education and Research that made this open publication possible. It would have been an irony to publish a volume on ODDE in a closed, conventional format, hidden behind a paywall.

We believe that the notable strength of this handbook is in the diversity of perspectives presented by our international authors who have created a comprehensive knowledge base to examine the effects and issues of ODDE. With a broad range of authors and editors coming from over 20 different countries in all parts of the world, this handbook offers truly international perspectives on ODDE. It brings together diverse views from the authors who have been involved in ODDE in various settings at all levels of education. In this way, the international community of scholars contributing to this handbook is shaping the field of ODDE by building on its historical roots – distance education.

We hope that these diverse views engage our readers in scholarly discussions of ODDE, and expand their knowledge as they explore the many issues raised in this handbook.

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