

Editorial – Embracing multidimensional perspectives on sustainable ODDE

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With an exclusive focus on publishing research into macro and meso-level issues of Open, Distance, and Digital Education (ODDE), we are committed to building on and adding to the knowledge base surrounding the delivery of United Nations Sustainable Development Goal (SDG) 4, *Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*. The establishment of SDG 4 is predicated on the reality that uneven access to (quality) education is a universal, but highly multi-faceted phenomenon emerging from, *inter alia*, the lasting impacts of historical events such as slavery and colonialism, as well as the nexus of historical and continuing international unequal power relations and interests, and national policy, financial and infrastructural contestations and realities. Sustainable education is one of the pillars that supports the sustainable development of human society and of the planet on which we live. The sustainability of education, including ODDE, can be interpreted from different perspectives, depending on different researchers' choice of disciplinary approach. This multiplicity and complexity is manifested in the articles published in this issue.

There is no doubt that micro-level research has contributed to our understanding of the sustainability of ODDE, in particular in terms of the effectiveness of learning and teaching practices. Nevertheless, without insights from macro and meso-level research, our perspective on sustainable ODDE would remain inherently limited. According to Zawacki-Richter (2009) and Zawacki-Richter and Anderson (2014), macro-level research addresses issues such as ODDE history, theory, and research; knowledge transfer; education delivery systems; internationalization and globalization of education; and access, equity and ethics while meso-level issues pertain to institutional organization, leadership, and change as well as institutional infrastructure, quality assurance, and support systems. Therefore, only researching micro-level issues cannot tackle the complexity and multidimensionality of ODDE; hence, it is unable to ensure long-term sustainability of education systems themselves as well as long-term contribution of education systems to social and environmental sustainability on the macro-level.

Sustainability is a key theme running through all the articles in this issue, explicitly or implicitly. The issue begins with Andy Lane's article "What does open, distance and digital education contribute to sustainability?". Lane's article sets out to explore the contribution of ODDE to sustainable development, focusing on environmental sustainability, economic sustainability, and social sustainability, each of which is detailed. It goes beyond the comparison of ODDE and other modes of higher education and extends the discussion to the entire higher education sector, applying systems thinking in practice. Unlike previous studies which tend to look at sustainability from the perspectives of educational institutions, Lane's article also reflects students' perspectives. Education, including ODDE, which can contribute to the sustainable development of society, should be sustainable itself. "The key to success is for a university or college to define sustainability for itself and build a unique strategy and structure which reflects its nature, context, and geography" because "there is no one standard approach to sustainability" (Lane, 2024, p. 87). This institution-specific sustainability is a striking feature of the Open University in the United Kingdom, which is used repeatedly to illustrate the author's arguments in this article.

The article "Against the commodification of education — if harms then not AI" is a critical reflection by Dagmar Monett and Gilbert Paquet. This article, although not focusing on K-12 education, echoes Williamson et al.'s (2024) call for resistance of AI until AI in K-12 education is really inevitable, necessary and good. The authors argue that we should weigh all the factors involved, in particular AI's potential risks and harms, including inherent flaws as well as ethical, environmental, legal, and technological issues of concern rather than blindly jump on the bandwagon for fear of missing out. Only by prioritizing the needs of learners, educators, and communities will education continue to be a public good. Central to what the authors advocate,

even though perhaps not expressly stated, is the sustainability of education. In other words, AI-enhanced education is not sustainable unless it can transform education for the common good.

Another critical reflection in this issue is Sanjaya Mishra's article "Can online learning be scaled using a frugal approach?". An obvious merit of this article is the author's insider perspective with a focus on frugality, minimum requirements, and careful financial investments. Using four cases from the Commonwealth of Learning (COL), the article shows that a frugal approach to scaling learner-centered online learning is feasible especially in the context of professional development. The four COL cases exemplify the traditional learner-centered distance learning, foregrounding affordability, accessibility, and flexibility. Lessons can be drawn from COL's praxis to inform large-scale capacity building at institutional, national, and international levels to promote online learning, especially in resource-constrained contexts. It goes without saying that advocating for a frugal approach to online learning is an attempt to make ODDE sustainable.

In the article "A multilingual OER MOOC: A case study on production and usage in a university cooperation", Sandra Schön and colleagues report on findings from a cross-university initiative for promoting Open Educational Resources (OER) across nine European higher education institutions. Although OER have the affordances to address inequalities in access to education (Wang & Wang, 2024), hence contributing to the achievement of SDG 4, "their adoption in educational institutions is slow" (Mishra, 2017, p. 369; also see Klar et al., 2024). Accessibility and digital competencies of both educators and students are among the factors contributing to slow adoption (Aksoy et al., 2025). The study by Schön et al. aims to address the issues of accessibility and users' digital competencies, meanwhile highlighting the importance of cross-institutional collaboration and OER's affordances to enhance radical creativity, educational accessibility, and innovation in higher education. It is worth noting that this study was conducted in the context of UNESCO's OER recommendations and the Open Science movement.

The article "Implementing micro-credentials and digital badges for flexible learning: A reflective institutional design study in Australian higher education" by Xiaoxia Wang, Scott Richardson, and Ian Rouse delineates the development and pilot implementation of micro-credentials and digital badges at a private Australian higher education provider. It expounds on the strategic rationale, instructional design decisions, and digital credentialing strategies used to boost learner engagement and facilitate modular learning pathways. A micro-credential design framework is also presented that aligns with credit point pathways. In addition to sharing insights and lessons learned from this project, the article also discusses issues of concern such as quality assurance, scalability, and recognition of alternative credentials. Micro-credentials and digital badges are strategic responses to the increasing demand for flexible learning solutions in higher education due to changes in the wider socioeconomic context. Therefore, this study also encompasses the sustainability of (higher) education in that a key aspect of sustainable ODDE is to meet changing learning needs.

The last research article of this issue is "Conceptions of education and ethics of AI in higher education: An exploratory qualitative study" by Alexander Filipović and colleagues. In light of the impact of digital transformation on higher education, this study examines how conceptions of education, namely the goals and aims of education, and the ethical evaluation of AI-based technologies are correlated in the eyes of educators and students. The ethics of AI is a hot research topic, usually covering such issues as privacy, transparency, fairness, inclusivity, data security, learner autonomy, or digital sovereignty. In comparison, the current study focuses on a new dimension by investigating the complex interplay between conceptions of education and AI ethics. Knowing this interplay and leveraging it to transform education for the better are, fundamentally speaking, relevant to the sustainability of education.

As usual, the issue concludes with an interview with a legendary figure in the field of ODDE. Featured in this issue is a conversation between Kathryn R. Johnson, our Interview Section Editor, and Rory McGreal, who shares his “unconventional” educational journey and numerous professional roles in ODDE. In his capacities as UNESCO Chair in OER and (co-)Editor of *the International Review of Research in Open and Distributed Learning (IRRODL)*, as well as in his active role in the creation of the Global OER Graduate Network (GO-GN) and the OER Knowledge Cloud, Dr. McGreal has dedicated decades of his career to enhancing the sustainability of ODDE. At the end of the interview, he calls for more historical research, emphasizing the need to learn from the history of ODDE.

In addition to the perspectives represented by the articles published in this issue, there are many other macro and meso-level issues that warrant rigorous scholarship to further enhance the sustainability of education, in particular ODDE. For example, the legacies of ODDE are under-researched despite their valuable implications for current and even future ODDE praxis (Baggaley, 2014; Moore, 2008; Xiao, 2023). Due to either ignorance or unawareness of the legacies from ODDE, we are often repeating the mistakes made by our predecessors or researching what has already been well investigated with conclusive evidence (Baggaley, 2017). Rory McGreal’s call for historical research shows that this situation is not better than nearly two decades ago when Michael Moore (2008) lamented researchers’ lack of interest in what can be learned from the history of distance education.

Having said that, instead of limiting historical research to “investigating, interpreting, and analyzing past events and their contexts” (Hassan, 2024), which is the norm, we suggest broadening its scope to cover insights from studies of earlier generations of distance education by the pioneers and other forerunners of the field. Knowledge of these insights remains pertinent today. A case in point is the Transactional Distance Theory (TDT) first introduced by Moore (1972, 1973). TDT carries implications for ODDE in the 21st century according to Xiao (2025) who argues that the essence of TDT “is of relevance across time, regardless of what technology is used in the teacher-learner transaction or how smart our teaching and learning environment is” (p. 121). This kind of theoretical foundation is particularly essential given that contemporary rhetoric around digital learning, especially artificial intelligence in education heralds the dawn of an entirely new era of educational scenarios, purportedly due to the transformative and disruptive power of digital modalities. Advocating technological determinism, this discourse tends to overlook more than 150 years of experience in distance teaching and learning, especially in the asynchronous mode, notwithstanding the relevance of proven pedagogical principles derived from earlier research to today’s digital contexts.

These proven pedagogical principles include, for example, the contribution of intrinsic motivation to continuous learner engagement, the necessity of theoretically informed instructional design, and the value of meaningful student-instructor, student-student, and/or student-content interaction. They are equally applicable to different modes of learning, from asynchronous correspondence learning to synchronous and/or asynchronous digital learning. This raises a fundamental question: To what extent are findings from studies of earlier low-tech or even no-tech mode of learning relevant, reliable, and transferable to today’s high-tech learning environments? This question is of both pragmatic and theoretical significance, given that many so-called “innovations” in digital education have their roots in well-established distance learning practices, with conclusive evidence of their pedagogical effectiveness.

We therefore welcome submissions that explicitly address the value and generalizability of earlier research findings in light of current digital education practice, in particular those that identify historical continuities, validate established pedagogical principles in new contexts, or contribute

to the theoretical grounding of ODDE, in order to facilitate evidence-based policy development as well as institutional reform and innovation.

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