

May – 2026

Editorial – Volume 27, Issue 2

Themed Issue: AI in Education and Online Learning (K-12 and Higher Education)

Dietmar Kennepohl

Associate Editor, Athabasca University

Welcome to our themed issue on artificial intelligence (AI) in education and online learning (K-12 and higher education). As you know, the use of AI has dominated academic discussions around the globe. While AI touches on an incredibly wide range of topics, as educators we are primarily interested how it applies and can enhance teaching and learning, including Generative AI (GenAI) and Artificial Intelligence in Education (AIEd).

Before launching into this issue’s content, the IRRODL editors wanted to alert you that the journal is refining its review process for literature review articles to address both the increasing use of AI in research and the need for more robust scholarly contributions. Moving forward, we will only accept, for review, well-constructed, methodologically rigorous, critical literature reviews that make substantive, original contributions to the open and distributed learning (ODL) field.

We are also reconsidering the type of research we prioritize, including whether to focus more on primary data, secondary data, or a balance of both. As part of this shift, submissions—especially literature reviews—will be carefully screened and not all papers will be automatically sent to reviewers. Instead, selected submissions will first be discussed at the editorial level to ensure they meet the journal’s high standards and that it aligns with our mission to advance the ODL field. Submissions should demonstrate how their findings, framework, or analysis contribute meaningfully to the advancement of theory, practice, or policy in the ODL field.

Overall, these changes are intended to improve the quality, relevance, and impact of the research we publish in an evolving academic landscape.

So, onto our brilliant contributions within this special issue.

In our first research article, entitled “A case study of the Your Educational Path digital education ecosystem in crisis contexts: AI, mental health, and equity in Ukraine,” **Koshevets** examines the development and nationwide rollout of digital system during the COVID-19 pandemic and ongoing war. The study finds that it achieved large-scale adoption and may serve as a model for other resilient and equitable education in crisis settings.

Sung and **Gunpinar** in their paper “Bringing artificial intelligence literacy into online education: Machine-learning integration through geometry in K–12 teacher professional development” make complex algorithms understandable without advanced technology resulting in increased AI self-efficacy, conceptual math understanding, and positive attitudes toward AI, including valuing the accessibility of teaching AI.

In the next article, “Enhancing human-generative artificial intelligence online collaboration outcomes: The pivotal function of symbiotic role design,” **Cheng, Liu, Xu, Zhao, Qiao,** and **Zhang** examine how clearly defined roles for humans and generative AI, based on symbiosis theory, can improve online collaborative learning. This quasi-experimental study finds that structured human–AI role design enhances knowledge construction.

Öncü, Gevher, Erdoğan, and **Koçdar** then present “Exploring the potential of generative ai for academic support in open and distance learning: A case study of learner experiences,” which finds that students valued GenAI for fast, accurate academic support and improved self-assessment in structured tasks, despite issues like occasional hallucinations and device limitations, and suggests strong potential for wider institutional adoption in large-scale online education.

Sağ and **Kayabaş** highlight guided use in “AI as a pedagogical scaffold: Enhancing English as a foreign language argumentative writing and critical thinking in a distributed learning environment.” This study examines how generative AI, integrated into a blended learning environment, supports first-year EFL students in developing argumentative writing and critical thinking skills. It suggests that AI enhances idea generation, organization, and learner engagement, while also raising concerns about reliability and overreliance.

In our *Field Notes* section, we welcome two contributions. First, **Anderson** in “The Answerthis.io AI app looks at my Interaction Equivalency Theory” describes how the Answerthis.io AI app is used to generate a concise overview of Interaction Equivalency Theory and demonstrates its usefulness for understanding key ideas in distance education research.

In our second *Field Note* entitled, “Artificial intelligence and communities of inquiry: Reimagining educational experiences,” **Stenbom** and **Garrison** argue that integrating generative AI into education should be guided by the Community of Inquiry framework and its concept of shared metacognition to ensure AI enhances, rather than undermines, collaborative, reflective, and human-centered learning.

We are presented with three *Book Reviews* in this issue. In the first review, **Wigati** and **Hartono** examine *Artificial Intelligence and Education in the Global South: A Systems Perspective*, authored by Fernando Reimers, Zainab Azim, Maria-Renée Palomo, & Callysta Thony. This book argues that K–12 education systems, especially in the Global South, must adopt a holistic, equity-focused approach to integrating AI. Next **Pickering** reviews two books by co-authors James Hutson and Daniel Plate. First, *The Case Against Disclosure* warns that forcing exhaustive AI-use transparency misunderstands the creative process and supports bureaucratic documentation. In the next book, *Mind, Machine, and Will* argues that in the age of AI, agency and responsibility should be understood not as products of individual free will but as socially grounded practices.

Finally in our *Literature Review* section **Boulhrir, Ghreir, Hamash, and Robert** provide us with an analysis of 21 studies (2020–2025) in “Artificial intelligence in education: Mapping adaptive learning and learning analytics in K–12 online, virtual, and distance learning.” It highlights inconsistent definitions of AI, a dominance of quantitative methods, and calls for clearer frameworks, more context-sensitive research, and stronger integration of teacher expertise to ensure equitable and effective use of AI.

This special issue contains a wealth of valuable content on AI and offers insight into how educational practices may develop in the future. As a disruptive force, creative and responsible use will no doubt be a key actor in the continuing story of developing and providing quality learning experiences. We hope this issue will spark reflection and inspire.

