

Artificial Intelligence: Reimagining Education

Authors : Silvia Zanazzi

Abstract : Artificial intelligence (AI) has become an integral part of our world, transitioning from scientific exploration to practical applications that impact daily life. The emergence of generative AI is reshaping education, prompting new questions about the role of teachers, the nature of learning, and the overall purpose of schooling. While AI offers the potential for optimizing teaching and learning processes, concerns about discrimination and bias arising from training data and algorithmic decisions persist. There is a risk of a disconnect between the rapid development of AI and the goals of building inclusive educational environments. The prevailing discourse on AI in education often prioritizes efficiency and individual skill acquisition. This narrow focus can undermine the importance of collaborative learning and shared experiences. A growing body of research challenges this perspective, advocating for AI that enhances, rather than replaces, human interaction in education. This study aims to examine the relationship between AI and education critically. Reviewing existing research will identify both AI implementation's potential benefits and risks. The goal is to develop a framework that supports the ethical and effective integration of AI into education, ensuring it serves the needs of all learners. The theoretical reflection will be developed based on a review of national and international scientific literature on artificial intelligence in education. The primary objective is to curate a selection of critical contributions from diverse disciplinary perspectives and/or an inter- and transdisciplinary viewpoint, providing a state-of-the-art overview and a critical analysis of potential future developments. Subsequently, the thematic analysis of these contributions will enable the creation of a framework for understanding and critically analyzing the role of artificial intelligence in schools and education, highlighting promising directions and potential pitfalls. The expected results are (1) a classification of the cognitive biases present in representations of AI in education and the associated risks and (2) a categorization of potentially beneficial interactions between AI applications and teaching and learning processes, including those already in use or under development. While not exhaustive, the proposed framework will serve as a guide for critically exploring the complexity of AI in education. It will help to reframe dystopian visions often associated with technology and facilitate discussions on fostering synergies that balance the 'dream' of quality education for all with the realities of AI implementation. The discourse on artificial intelligence in education, highlighting reductionist models rooted in fragmented and utilitarian views of knowledge, has the merit of stimulating the construction of alternative perspectives that can 'return' teaching and learning to education, human growth, and the well-being of individuals and communities.

Keywords : education, artificial intelligence, teaching, learning

Conference Title : ICES 2025 : International Conference on Educational Sciences

Conference Location : London, United Kingdom

Conference Dates : July 26-27, 2025