

The Widespread Application of Artificial Intelligence in Education Necessitates Critical Analyses

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“Success in creating AI would be the biggest event in human history. Unfortunately, it might also be the last, unless we learn how to avoid the risks.” –Stephen Hawking

ARTIFICIAL intelligence (AI) is a wide-ranging branch of computer science concerned with the development of computer systems and smart machines capable of performing tasks that typically require human intelligence such as learning, problem-solving, and decision-making. AI technology can serve as an extension of human intelligence, carrying out part of the work that could only be done by humans in the past and even tasks that humans are incapable of accomplishing, which can potentially elevate social productivity to a significant extent. To date, AI has permeated every aspect of our life. Education is one of the spheres to which AI will bring profound changes.

UNESCO’ working paper “*Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development*” gives a thorough evaluation of the extent to which AI affects the education sector (Pedro et al., 2019). AI holds tremendous promise as a tool to empower the educational actors. For instance, learning analytics can promote personalized education by providing diagnoses of the individual student’s learning status, giving prompt feedback, and tailoring learning materials; educational data mining can be employed to analyze data gathered during teaching and learning to enable more efficient and effective educational management and more informed decision-making (Shan & Zhao, 2019). On the other hand, as with other information technologies, AI also imposes a variety of risks to educational development. As a data-driven technology, AI’s application in education necessarily involves immense volumes of educational data. As a result, it is imperative to research into AI’s existing and potential threats to relevant stakeholders’, particularly students’, privacy and other human rights.

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Ethics of Artificial Intelligence in Education: Student Privacy and Data Protection in this issue examined the challenges that AI technology poses on student data privacy protection and proposed strategies for addressing concerns regarding student personal information security, including optimizing the regulation of personal data usage, heightening students' awareness of personal data protection, providing students with legal remedies against infringement of data privacy, and improving IT industry self-regulatory mechanisms (Huang, 2023). It is hoped that this study will inspire more critical analyses on the ethical risks of educational application of artificial intelligence.

References

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