Special Issue

Effects of Culture on Open Science and Artificial Intelligence in Education

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Summary

The field of Artificial Intelligence in Education (AIED) has undergone significant developments over the last three decades. With the help of AI technologies, which simulate human intelligence to make inferences and/or predictions, computer systems are being used to automate different tasks, such as personalized instructions, classroom monitoring, assignment correction and grading (Tlili et al., 2021). This could help to enhance teaching and learning experiences, hence achieve a quality education. Due to the importance of providing safe and effective learning environments, developing responsible AI in education has gained massive interest in the past years. The rise of responsible AI was not meant to give machines some kind of 'responsibility' for their actions and decisions. On the contrary, the development of responsible AI systems entails a long list of societal, legal or ethical decisions by designers, developers, and other stakeholders (Dignum, 2021). Responsible AI is concerned with the design, implementation, and use of ethical, transparent, and accountable AI technology in order to reduce biases, promote fairness, equality, and to help facilitate interpretability and explain-ability of outcomes, which are particularly pertinent in an educational context.

Meanwhile, Open Science (OS) has emerged as a field that can promote the development of AIED. For instance, open data can contribute to developing responsible AI by providing massive set of data that are collected from different contexts, societies and cultures. This data can be fed to different AI techniques to better understand how these techniques might work with different people, hence reduce bias, and promote inclusivity. However, there is a lack of understanding in the literature about how culture might affect adopting and developing AIED systems powered by OS. (Gómez-Rey, Barbera, & Fernández-Navarro, 2016; Liu et al., 2016).

Therefore, this Special Issue (SI) aims to provide deep and solid understanding of how culture might impact Open Science and Artificial Intelligence (AI and OS) in education (Burgos, 2020). Culture can be interpreted differently in the literature, and it has a broad meaning. Therefore, it is defined in this call for papers (cfp) as "the set of attitudes, values, beliefs, and behaviors shared by a group of people, but different for each individual, communicated from one generation to the next" and it affects the way we receive information and process it (Matsumoto, 1996, p. 16).

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Suggested Topics

Specifically, this SI calls for empirical studies with large sample size and analysis related, but not limited, to the following three sub-topics:

- Understanding how a specific culture can affect the adoption and behavior of students towards AI and OS.

- Investigating cultural issues and clashes between individuals from different cultures, while openly working and-or studying using AI systems.

- Cross-cultural analysis focusing on comparing *students* from different cultures that are taking distance education and AI programs in their own context (i.e., not the same context as the second perspective).

- Applying open science to develop responsible AIED systems, i.e., culture sensitive, inclusive, fair, and transparent.

Important Dates

31 January 2024
Paper Submission Deadline

31 March 2024
Notification of the first round review

31 May 2024
Revision due

31 July 2024
Acceptance Notification

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