

Is artificial intelligence an opportunity for inclusive education?

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Contents

- Research background
- Purpose of the study and research questions
- Research context and methodology
- Findings
- Implications for practice
- Lessons learned



Research background

- The application of artificial intelligence (AI) on educational processes is studied within the Artificial Intelligence in Education (AIEd) framework.
- AIEd supports online teaching while encouraging the adoption of a dual teaching model in which AI technologies assist professors with mechanical tasks.
- There are concerns on the application of AIEd in online higher education such as plagiarism, inaccuracy, human replacement, and data protection.
- Little or no empirical research has approached how AIEd contributes to enhancing inclusive education in online universities.



Purpose of the study and research questions

Purpose: To provide an understanding of how to leverage AIEd to promote inclusion in online higher education.

RQ1: What are the experiences of professors with incorporating AIEd for inclusive purposes in online higher education?

RQ2: How can professors leverage AIEd to make online higher education suitable for everyone?



Research context and methodology

- The investigation was based on an exploratory qualitative case study conducted at the Open University of Catalonia (UOC).
- The UOC is based on the open learning philosophy and employs a fully asynchronous online learning model centred on students.
- This university has full-time and part-time professors. Full-time professors design the courses and coordinate teaching activity, while part-time are in charge of teaching.
- Data was collected via semi-structured interviews with 12 full-time professors and analysed with thematic analysis.



Findings

Three narratives among professors' perspectives

- AIEd is just an auxiliary tool for inclusive education: "If we create learning materials in a single format, learners can use these tools to convert them [learning materials] into a more convenient format." (P1).
- Leveraging AIEd for inclusive education starts with enhancing literacy among professors and students: "We need to know how [to use AIEd]. What do we tell learners with a specific need about using AI tools?" (P12).
- Learners' assessment in the AI era should focus on metacognition and reflection: "What we shouldn't do is evaluate only what AI can already provide" (P3).

Implications for practice

- Improving professors' competencies on AIEd technologies should be the first step to have an impact on courses accessibility and interactivity based on AI tools.
- AIEd offers big opportunities to enhancing learners' text production and reading comprehension, but strengthening their critical thinking and problem-solving skills is also a priority.
- To address concerns about plagiarism and learners' reliance on AIEd technologies, institutions should prioritise fostering metacognition and reflection based on learning-to-learn strategies.



Lessons learned

- Online higher education institutions should make an effort to enable marginalised learners such as those with disabilities to leverage AIEd technologies on their learning.
- Proper use of AIEd technologies in higher education promotes improvements in accessibility and foster learners' autonomy.
- AlEd technologies can extend beyond individualised learning, enabling the improvement of interaction and collaboration among all learners.

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