

Review of: "Artificial Intelligence and Digital Technologies in the Future Education"

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Potential competing interests: No potential competing interests to declare.

Artificial Intelligence and Digital Technologies in the Future Education

The paper is a narrative review of the possibility of using AI techniques in education. Citing numerous studies on related topics, it discusses some potentially important aspects of artificial intelligence, including Computational Thinking (CT), Probabilities, Bayesian Reasoning (BR), Soft Computing (SC), Fuzzy Logic (FL), Artificial Neural Networks (AANs), Genetic Algorithms (GAs), as a main takeaway. The topic can be particularly interesting, even if the objectives are expressed randomly. Despite the wealth of sources, the review fails to effectively synthesise the problem or find suitable answers to guide further research. It is good to explain the boundaries of knowledge as a literature review; this review doesn't really do that.

To substantiate my impression, I list some missing aspects that I consider essential for the process-oriented focus of AI :

1. The title of the manuscript is a misnomer and does not convey the right message. The authors specifically described AI in education instead of other digital techniques in the manuscript. The author should couple the AI techniques with modern digital techniques, such as 3D printing, to improve the quality of the manuscript.
2. I suggest a major rewrite of the introduction. It should provide an overview of the futuristic possibilities of AI and digital techniques in the education sector and current trends. Additionally, the authors should describe the proposed study's research gap and the research's specific contribution and novelty.
3. The study theoretically discusses various aspects of AI in education. However, it would be good to link the work described here to what is done in professional teaching pedagogy.
4. Authors should include a table for existing literature describing the recent advances of AI and digital technology in the educational sector. For instance, authors should describe the technique used, objectives, outcomes and conclusions achieved from a particular study in a tabular format.
5. The review paper presents many examples of the use of AI in section 3, but the presentation is unstructured and difficult to follow. Moreover, all the studies described in section 3 are merely theoretical studies of the techniques; authors should define the role of these techniques by including the instances of past relevant literature.
6. Section 4, describing the benefits and limitations of e-Learning with respect to the traditional teaching and learning methods, should include a comparative analysis of techniques and methods in a tabular format highlighting the limitations and respective benefits.
7. The findings and conclusions of the manuscript do not point to any new direction. This entire section should be

rewritten to describe the essence of the present study.

8. I suggest including recent relevant references for the proposed research in several instances.
9. The use of graphical representations, pictures and other visuals can significantly impact the quality and understanding of the manuscript.