

Review of: "Enhancing Science Education with Learning Management System for Effective Learning Outcomes"

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Potential competing interests: No potential competing interests to declare.

The article discusses how Learning Management Systems can be used for science education with effective learning outcomes. From the existing literature, the features of LMS and technology-assisted education have been presented. There are some excellent points highlighted by the authors on LMS, but this draft needs to be improved before publication. I hope the comments below can help address some of the issues in this manuscript.

Major comments:

1. As a reader interested in updating ideas on LMS in science education, I could not find novelty in the description, as the article lacks highlighting the novelty in the analysis. I also feel that statistical inputs from the reviews presented are not documented.
2. The abstract can benefit from a redraft. For example, in the abstract, it may be better to rewrite sentences with terms like 'till horrifyingly poor, horrifying learning outcomes, etc. "Horrifying" is not easy to compare. The overall flow related to the work, from the background, research methodology, statistical contribution, and key findings, seems misplaced. The authors could recheck sentence framing and use clear and direct language to make it apt and technical for readers from many related disciplines. A few keywords may also help.
3. In the introduction, apart from explaining the concepts in science education, the authors need to present the importance of their research, focus and scope, and problem statement. I feel the key hypotheses or objectives of the study were not presented appropriately in this draft.
4. While elaborating on the LMS, perhaps it would also be crucial for the authors to indicate how the LMS has an emphasis on teaching and learning pedagogy. This may imply incorporating a survey of literature towards this perspective. Also, while talking about the use of LMS, the pedagogical aspects in terms of education research have not been addressed. Was there a rationale that I may have missed on this?
5. Overall, the article lacks a novel theme for readers aiming to explore the impact of LMS. Can the authors consider adding additional research perspectives to the present draft? The authors may perform a meta-analysis highlighting literature-based choices and analysis and evaluate the success and failures of implementation methodologies, survey analysis, and statistical perspectives. The discussion must outline the novelty and the relevance of the research in the current context. The article could highlight original empirical research or case studies within the Digital Learning domain.

Minor comments:

1. On page 3, second paragraph, second line, -A spelling issue was noted. Perhaps running a full grammar check can help improve readability.

2 Citations may be missing in the first paragraph of the introduction section,

3. On page 8, in the section, "How Does Education Take Place? - The relevance of that part (sensory information, perception, and cognition) in the article needs to be addressed. Modify the section by including suitable scientific studies that discuss information transferring and its perception by the students by all learning management methodologies.