

Review of: "Augmented Reality (AR) Technology on Student Engagement: An Experimental Research Study"

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Potential competing interests: No potential competing interests to declare.

Dear Author,

Having diligently examined your manuscript entitled "Augmented Reality (AR) Technology on Student Engagement: An Experimental Research Study," I wish to offer constructive feedback aimed at enhancing the scholarly quality of your work. Following a comprehensive evaluation, it is my recommendation that your manuscript undergo substantial revisions before it can be deemed suitable for publication.

The suggested revisions are imperative to address various aspects that currently hinder the manuscript's overall academic rigor. Specifically, these revisions should be directed towards refining the methodological framework, elucidating the theoretical underpinnings, and enhancing the clarity and coherence of the manuscript's structure.

I encourage you to thoroughly review the detailed comments provided in the attached document, which delineate specific areas requiring attention and improvement. These comments are offered with the aim of facilitating a more robust and comprehensive presentation of your research.

Should you require any clarifications or further guidance on the suggested revisions, please do not hesitate to reach out. I appreciate your commitment to advancing academic discourse and look forward to witnessing the evolution of your manuscript in response to these recommendations.

The manuscript exhibits promise but necessitates additional elucidation and refinement in certain sections. Fortifying the rationale, expanding the introduction, and presenting the results more systematically will elevate the overall scholarly quality of the article.

1. Title:

- The title is clear and concise. However, consider adding more specificity to attract readers. For example, mention the specific subject or topic within the high school curriculum that will be studied.

2. Abstract:

- The abstract provides a brief overview of the research but lacks specific details. Consider including key findings or expected outcomes to give readers a glimpse of the study's significance.
- Mention the duration of the experimental period in the abstract.

3. Introduction:

- Provide a more comprehensive background on the current state of student engagement and learning outcomes in traditional classrooms before introducing AR technology.
- Clarify the significance of the research by discussing any existing literature or studies on the integration of AR technology in education.

4. Hypothesis:

- Clearly state the rationale behind formulating the null and alternative hypotheses. Why would you expect AR technology to make a significant difference?
- Consider mentioning any preliminary evidence or existing studies that support the hypothesis.

5. Method of the Study:

- Include more details about the high school selected, such as location and demographic information, to help readers understand the context.
- Clarify how random assignment to the experimental and control groups will be ensured.
- Provide details on the duration of the intervention and whether there will be any follow-up assessments.

6. Instruments:

- Specify how the qualitative feedback survey will be distributed and collected. Will it be anonymous, and how will confidentiality be maintained?
- Consider including a pilot testing phase for the survey to ensure clarity and relevance of questions.
- Add a brief explanation of why qualitative feedback is essential in addition to quantitative data.

7. Student Feedback Survey Questionnaire:

- Consider adding introductory instructions to guide participants on how to complete the questionnaire.
- Ensure that the scale in Section 3 is consistent with the one in Section 2.
- Add an option for participants to provide open-ended comments after each section to capture additional insights.

8. Student Interview Guide for Qualitative Feedback:

- Include a consent statement at the beginning of the interview guide, ensuring participants understand the purpose of the interview and their rights.
- Clarify how participants will be selected for follow-up interviews.
- Consider adding a question about any challenges or limitations experienced by students during the AR technology integration.

9. Results:

- Display survey responses in a methodically structured format, potentially in a tabular presentation, for heightened readability.
- Clearly delineate the procedural steps of the statistical analysis, presenting the actual computed values to augment transparency.

10. Discussion

Effectuate the amalgamation of survey and interview findings for a comprehensive discussion. Identify converging themes and disparities between the two datasets.

11. Limitations

Engage in a discourse concerning any limitations inherent in the study, such as sample size or potential biases in participant responses.

12. Conclusions

Propose concrete recommendations for educators and developers predicated on the discerned study findings.

Remember to address these comments in each section, providing additional information and clarification where needed.

Thank you for your dedication to scholarly excellence.

Best Regards,

Dr. Carlos Merino-Campos

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