

Review of: "Interactive e-Contents: A Novel Gamification Approach for Students' Satisfaction"

Ahmad Faiz Azizi Ahmad Fauzi¹

¹ Universiti Teknologi Malaysia

Potential competing interests: No potential competing interests to declare.

1. Introduction:

The introduction provides a clear overview of the evolution of computer-based education and its role in e-learning, with reference to key players such as software manufacturing companies and educational institutions. However, consider providing a brief definition or explanation of "e-learning" for readers who may not be familiar with the term.

2. Research Questions:

The research questions are clearly stated, guiding the reader on the specific objectives of the study. However, it might be beneficial to briefly explain why these questions are important or relevant to the field.

3. Transition:

The transition between the introductory paragraph and the list of research questions is abrupt. Consider adding a sentence or two that bridges the introduction to the research questions more smoothly.

4. Interactive Content and Engagement:

The concept of engagement in e-learning is well-explained, emphasizing the active role of learners. Consider expanding on how the design of electronic content can ensure active engagement, possibly providing specific examples or principles.

5. Research Objectives:

The research objectives are outlined in a clear and concise manner. However, it might be helpful to explicitly state that the study aims to contribute to the existing knowledge on interactive content in e-learning.

6. Contents

The term "Learning Objects" is introduced without a clear definition. Consider providing a brief explanation or reference for readers who may not be familiar with this term. The shift from traditional to electronic content interaction is well-described.

However, it would be helpful to elaborate on the significance and potential benefits of this shift for student learning outcomes. The distinctions between formal, non-formal, and informal education are well-explained. However, consider briefly discussing the implications of these different forms of education for e-learning and interactive content.

7. Methodology

The methodology presents a well-rounded approach to evaluating the designed game by integrating various models and incorporating dimensions of flow experience. To strengthen the methodology, explicit rationales for model selection, detailed explanations of model integration, and more examples of variables and dimensions could be included. Additionally, providing further details on expert consultation and a clearer presentation of the flow between different concepts would enhance the overall robustness of the methodology.

8. Findings

The findings are generally well-presented, and the use of appropriate statistical tests adds validity to the results. The interpretations of the observed ratios in the binomial test are straightforward, and the positive relationships identified in the Pearson correlation test align with expectations. Comparisons with other research provide valuable context. However, to enhance the critical assessment, consider providing additional statistical details, discussing the practical significance of the relationships, and further elaborating on the implications of the findings for the field.

9. Limitations

The limitations are well-articulated, providing transparency about potential challenges faced during the research process. The acknowledgment of ethical principles and financial constraints demonstrates a conscientious approach to research. However, to strengthen the discussion of limitations, consider providing more details on how specific challenges were managed during the study and how the research team adapted methodologies to address these constraints. Additionally, discussing potential implications for the generalizability and validity of the study's findings would contribute to a more comprehensive understanding of the limitations.

10. Suggestions

The suggestions demonstrate a thoughtful consideration of gamification elements in education. To strengthen these suggestions, it would be beneficial to provide more detailed implementation strategies, potential challenges, and empirical evidence supporting the effectiveness of similar approaches. Additionally, acknowledging the cultural and contextual factors in the implementation of gamified elements is crucial for a comprehensive understanding of their impact.

11. Conclusions

The conclusion effectively summarizes the research process, findings, and recommendations. It provides a clear picture of the positive outcomes related to student satisfaction and the potential application of gamification in e-learning. To enhance the conclusion, the inclusion of more methodological details and a discussion of potential biases would

contribute to the transparency and reliability of the research. Additionally, providing specific recommendations for institutions to address the identified limitation and discussing the practicalities of integrating gamification into LMS would strengthen the applicability of the conclusion.