Review of: "Improving Learning Outcomes through Well Designed MCQ Tests"

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Potential competing interests: No potential competing interests to declare.

The journal paper offers a well-founded and impactful exploration into enhancing assessment quality in engineering education through a novel MCQ exam protocol. It adeptly addresses the challenges of large class sizes and the limitations of current online educational tools, emphasizing the need for innovative assessment strategies that can deter cheating and encourage personalized learning.

The proposed protocol is grounded in Outcome Based Education (OBE) principles and incorporates features such as question randomization, negative marking, and the strategic use of Bloom's Taxonomy to ensure assessments evaluate higher-order thinking skills. The empirical evidence provided, based on experiments conducted at two universities, convincingly demonstrates the protocol's effectiveness in improving marks distribution and facilitating personalized feedback.

While the paper presents a strong case for its MCQ exam protocol, it could further enrich its narrative by delving deeper into limitations and potential areas for future research, particularly concerning the protocol's scalability and applicability across various educational settings and disciplines.

In summary, this paper is a valuable contribution to the field, advocating for a pragmatic solution to pressing issues in educational assessment. Its relevance, rigorous methodology, and promising results justify its acceptance and publication, with an anticipation of further research to expand on its findings and explore broader applications.