



Assessment of Educational Technologies in Rural Malawi Secondary Schools: An Evaluation of Engagement and Learning Outcomes

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Abstract

Educational technologies have become integral to teaching and learning in rural Malawi secondary schools, yet their effectiveness on student engagement and learning outcomes remains under-researched. A mixed-methods approach was employed, including a survey of 300 students and teachers from randomly selected schools across three regions in Malawi. Quantitative data analysed using descriptive statistics to evaluate engagement levels and learning outcomes, while thematic analysis of qualitative responses provided deeper insights into student experiences with technology. Students reported moderate levels of engagement (mean score = 7.2 out of 10) when using educational technologies, though there was significant variability across different subjects and grade levels. Learning outcomes showed a positive correlation with technology use in mathematics and language arts classes, with an average improvement of 5% in test scores compared to non-users. The findings suggest that while educational technologies can enhance student engagement and learning outcomes in certain subject areas, more targeted interventions are needed to ensure equitable access and use across all schools. Schools should prioritise professional development for teachers on using technology effectively. District education authorities should allocate resources to support the implementation of digital classrooms in rural settings.

Keywords: Rural, Engagement, Technology, Evaluation, Impact, Contextualization, Quantitative

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