Enhanced Learning Outcomes Through Computer-Aided Teaching Systems in Rural Tanzanian Schools: A Three-Year Assessment

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Abstract

Computer-aided teaching systems (CATS) have been increasingly adopted in educational settings to enhance learning outcomes and bridge digital divides. A qualitative approach was employed using interviews with teachers and students, as well as observation logs. Data were analysed through thematic analysis. Teachers reported increased engagement among students, particularly in mathematics subjects, leading to improved learning outcomes compared to traditional teaching methods. The findings suggest that CATS can significantly enhance educational quality in rural settings by fostering student participation and understanding of complex concepts. Schools should continue integrating CATS with supportive teacher training programmes to maximise benefits for students across all subjects.

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

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