



Adoption and Impact of Educational Technology in Kenyan Low-Resource Schools,

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Author notes

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Abstract

{ "background": "Educational technology (EdTech) has been increasingly adopted in schools across Kenya to enhance learning outcomes. However, low-resource settings often face unique challenges that affect the effectiveness of EdTech implementation.", "purposeandobjectives": "This study aims to examine the adoption and impact of educational technology in Kenyan low-resource schools, focusing on the period from to . The objectives are to assess the uptake of digital devices such as computers and tablets, evaluate their integration into curricula, and measure student performance improvements.", "methodology": "The research employs a mixed-methods approach combining quantitative data (student test scores) with qualitative interviews (teachers and students). Data was collected from schools in four regions across Kenya. A sample of 100 randomly selected schools were included to ensure representation.", "findings": "A significant proportion, 65%, of the sampled schools reported using at least one form of EdTech, primarily for mathematics and language subjects. The integration level varied widely, with some schools implementing comprehensive digital learning environments while others used devices minimally. Student test scores showed a positive trend in reading and writing skills post-EdTech intervention, though improvements were more pronounced among students from higher socio-economic backgrounds.", "conclusion": "While initial EdTech adoption was patchy across Kenya's low-resource schools, the findings suggest that strategic deployment of digital resources can lead to noticeable educational benefits. However, these gains are not uniform and require tailored strategies for equitable impact.", "recommendations": "Schools should prioritise teachers' professional development in EdTech use to maximise learning outcomes. Policymakers must allocate more resources towards infrastructure and teacher training to support a broader adoption of digital tools.", "keywords": "Educational Technology, Low-Resource Schools, Kenya, Adoption Impact", "contribution_statement": "This study offers novel insights into the implementation challenges and potential

benefits of EdTech in Kenyan contexts by employing a mixed-methods approach that integrates both quantitative data on student performance and qualitative insights

Keywords: *Kenya, Sub-Saharan, Pedagogy, E-Learning, Technological Barriers, Socioeconomic Disparities, Universal Design for Learning*

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