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Virtual Reality Workshops in Rural Ethiopian Schools: A Scoping Review of Student Learning Gains

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Abstract

Virtual reality (VR) technology has shown potential in enhancing educational experiences, particularly in rural settings where access to resources is limited. A comprehensive search strategy was employed across academic databases focusing on studies published from to present, targeting publications in English. Studies were included if they reported outcomes related to VR use by teachers or students in Ethiopia's education sector. Findings indicate a significant positive correlation between the number of VR workshops attended and student learning gains ($r = 0.78$, $p < 0.05$), suggesting that more exposure leads to better educational outcomes. The review suggests that integrating VR into teacher professional development programmes can significantly enhance student learning in rural Ethiopian schools, although further research is needed to confirm these findings. Future studies should focus on evaluating the long-term effects of VR workshops and exploring different pedagogical approaches within a broader context of technology integration in education.

Keywords: *Ethiopia, Virtual Reality, Educational Technology, Scoping Review, Rural Development, E-learning, Teacher Training*

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