Enhancing Digital Literacy through Community-Based Initiatives in South African Tribal Regions

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Abstract

Digital literacy is crucial for socio-economic development in South Africa's tribal regions, where access to technology is limited and digital skills are underdeveloped. A comparative analysis was conducted using surveys and interviews with participants from two distinct community-based programmes, focusing on learner demographics, programme implementation details, and pre- and post-programme assessments of digital literacy levels. The findings indicate that the proportion of learners who improved their digital skills by at least one level after participating in the programmes was 75%, suggesting a significant improvement in foundational digital competencies. Community-based initiatives have proven effective in enhancing digital literacy, particularly when tailored to local needs and supported by continuous engagement with participants. Further research should explore scalability of these findings and potential integration into existing educational systems to ensure broader impact. Policymakers are encouraged to support such community-led programmes and provide necessary resources. Model estimation used $\hat{\{}\theta\}=argmin\{\theta\}sumiell(yi,f\theta(\xi))+\lambda lVert\theta rVert2^{2}$, with performance evaluated using out-of-sample error.

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