Digital Literacy Pedagogy in Senegalese Adolescent Girls: A Dakar Initiative

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Abstract

In Senegalese schools, digital literacy is underdeveloped despite the increasing importance of technology in education and daily life. The study employed a mixed-methods approach involving pre- and post-training assessments, focus group discussions, and surveys to evaluate the impact of the intervention. A statistically significant increase (t-test $p < 0.05$) was observed in participants' ability to use digital tools for problem-solving tasks compared to baseline scores. The training programme successfully improved adolescent girls' digital literacy skills, with a notable improvement in their application of technology in academic and social contexts. Further research should explore the long-term effects and scalability of similar interventions across different demographics and regions. Model estimation used $\hat{\theta} = argmin_{\theta} \, sumiell(y_i, f_{\theta}(\xi)) + \lambda lVert\theta rVert\, 2^2$, with performance evaluated using out-of-sample error.

Keywords: *African Digital Literacy, Senegalese Education, Ethnographic Research, Participatory Action Research, Adolescent Development, Technological Gap, Community Engagement*

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