



# Digital Literacy Training for Senegalese Schoolteachers in Rural Areas: An Evaluation Study

Kofi Ampomah<sup>1,2</sup>, Abena Darko<sup>2,3</sup>, Yaw Boateng<sup>1,2</sup>

<sup>1</sup> Department of Cybersecurity, Noguchi Memorial Institute for Medical Research

<sup>2</sup> Food Research Institute (FRI)

<sup>3</sup> Noguchi Memorial Institute for Medical Research

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Correspondence: [kampomah@hotmail.com](mailto:kampomah@hotmail.com)

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### Author notes

*Kofi Ampomah is affiliated with Department of Cybersecurity, Noguchi Memorial Institute for Medical Research and focuses on Computer Science research in Africa.*

*Abena Darko is affiliated with Noguchi Memorial Institute for Medical Research and focuses on Computer Science research in Africa.*

*Yaw Boateng is affiliated with Department of Cybersecurity, Noguchi Memorial Institute for Medical Research and focuses on Computer Science research in Africa.*

### Abstract

Digital literacy is increasingly recognised as a critical skill for educators in contemporary educational settings, particularly in rural areas where access to digital resources may be limited. A quasi-experimental design with pre- and post-tests, conducted between September and March, included 50 Senegalese schoolteachers from rural areas. Participants were randomly assigned to either an experimental group (receiving training) or a control group (no intervention). The findings indicate that the digital literacy training led to a significant increase in participants' self-efficacy scores, with an average improvement of 25% post-training compared to baseline. This study provides preliminary evidence supporting the efficacy of structured digital literacy training programmes for educators in rural areas. Future research should explore long-term impacts and scalability. Educators and policymakers should consider incorporating regular digital literacy training into teacher development programmes, especially in underserved regions where access to technology is limited. digital literacy, schoolteachers, rural education, self-efficacy, intervention study Model estimation used  $\hat{\theta} = \underset{\theta}{\operatorname{argmin}} \{ \sum_{i=1}^n (y_i - f(\theta; \xi))^2 + \lambda \|\theta\|_2^2 \}$ , with performance evaluated using out-of-sample error.

**Keywords:** Digital Literacy, Sub-Saharan Africa, Rural Education, Participatory Action Research, Technology Integration, E-Learning, Community Development

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