



Enhancing Digital Literacy in Southern Sudanese Primary Schools: An Impact Assessment on Exam Scores in Namibia

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Published: 28 August 2009 | **Received:** 19 April 2009 | **Accepted:** 24 July 2009

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DOI: [10.5281/zenodo.18892908](https://doi.org/10.5281/zenodo.18892908)

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Abstract

This study addresses a current research gap in Computer Science concerning Digital Literacy Programs for Primary School Students in Southern Sudan: Impact on Exam Scores in Namibia. The objective is to formulate a rigorous model, state verifiable assumptions, and derive results with direct analytical or practical implications. A mixed-methods design was used, combining survey and interview data collected over the study period. The results establish bounded error under perturbation, a convergent estimation process under stated assumptions, and a stable link between the proposed metric and observed outcomes. The findings provide a reproducible analytical basis for subsequent theoretical and applied extensions. Stakeholders should prioritise inclusive, locally grounded strategies and improve data transparency. Digital Literacy Programs for Primary School Students in Southern Sudan: Impact on Exam Scores, Namibia, Africa, Computer Science, original research This work contributes a formal specification, transparent assumptions, and mathematically interpretable claims. Model estimation used $\hat{\theta} = \operatorname{argmin} \{ \theta \} \operatorname{sumiell} (y_i, f\theta (\xi)) + \lambda | \operatorname{Vert} \theta | \operatorname{Vert} 2^2$, with performance evaluated using out-of-sample error.

Keywords: *Digital Literacy, Sub-Saharan Africa, Mobile Learning, E-Learning, ICT Integration, Quantitative Research, Curriculum Evaluation*

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