



Developing EdTech Solutions for Remote Learning in Rural Mozambique: A Systematic Review

Mafura Zola¹, Samson Kumbueka^{2,3}, Geraldine Cipuri^{2,4}, Issac Chifundo⁵

¹ Lúrio University

² Catholic University of Mozambique

³ Department of Software Engineering, Eduardo Mondlane University (UEM), Maputo

⁴ Department of Data Science, Lúrio University

⁵ Eduardo Mondlane University (UEM), Maputo

Published: 20 August 2012 | **Received:** 01 April 2012 | **Accepted:** 22 July 2012

Correspondence: mzola@aol.com

DOI: [10.5281/zenodo.18948937](https://doi.org/10.5281/zenodo.18948937)

Author notes

Mafura Zola is affiliated with Lúrio University and focuses on Computer Science research in Africa.

Samson Kumbueka is affiliated with Catholic University of Mozambique and focuses on Computer Science research in Africa.

Geraldine Cipuri is affiliated with Catholic University of Mozambique and focuses on Computer Science research in Africa.

Issac Chifundo is affiliated with Eduardo Mondlane University (UEM), Maputo and focuses on Computer Science research in Africa.

Abstract

The adoption of remote learning in rural areas of Mozambique has been hindered by technological barriers and infrastructure limitations. A comprehensive search strategy using multiple databases was employed with specific inclusion criteria based on relevance to educational technology applications in rural settings. The review identified a significant proportion, approximately 60%, of studies focusing on the development and implementation of mobile-learning applications tailored for remote learning environments. While EdTech solutions have shown promise, there is a need for further research to address issues such as digital literacy among learners and teacher training in utilising these technologies effectively. Investment should be directed towards the development and dissemination of user-friendly EdTech tools that are compatible with local contexts. Teacher training programmes should also be strengthened to maximise the impact of remote learning initiatives. Model estimation used $\hat{\theta} = \operatorname{argmin}\{\theta\} \operatorname{sumiell}(y_i, f\theta(\xi)) + \lambda \operatorname{Vert}\theta \operatorname{rVert} 2^2$, with performance evaluated using out-of-sample error.

Keywords: *Remote learning, Rural areas, Educational technology, Africa, Development, Methodology, Technology assessment*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ **REQUEST FULL PAPER**

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa



Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge