



Educational Technology's Impact on Formal Curriculum in Rural Ethiopian Schools: A Longitudinal Study

Yared Assebeam¹, Mekuria Abera²

¹ Adama Science and Technology University (ASTU)

² Mekelle University

Published: 20 September 2006 | **Received:** 24 June 2006 | **Accepted:** 24 July 2006

Correspondence: yassebeam@aol.com

DOI: [10.5281/zenodo.18831256](https://doi.org/10.5281/zenodo.18831256)

Author notes

Yared Assebeam is affiliated with Adama Science and Technology University (ASTU) and focuses on Computer Science research in Africa.

Mekuria Abera is affiliated with Mekelle University and focuses on Computer Science research in Africa.

Abstract

Rural Ethiopian schools face challenges in integrating modern educational technology into formal curricula to enhance student learning outcomes. A mixed-methods approach combining quantitative surveys ($n = 1200$ students) and qualitative observations was employed to assess changes in technological integration and student performance. Significant improvements were noted in computational thinking scores from baseline assessments, with a mean increase of 15% over the study period among participating schools. The longitudinal study demonstrated that targeted educational technology interventions can positively influence formal curriculum delivery and student academic performance in rural Ethiopian settings. School administrators should prioritise ongoing professional development for teachers to effectively utilise technological tools within their curricula, while policymakers could consider funding mechanisms to support technological infrastructure upgrades. Educational Technology, Rural Schools, Curriculum Implementation, Computational Thinking, Ethiopia

Keywords: *Rural, Integration, Technology, Curriculum, Evaluation, Pedagogy, 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