



Educational Technology's Impact on Early Childhood Education Outcomes in East African Cities: A Comparative Study in Mauritius

Shanice Devi Chandran¹, Komalraj Gajendra Singh²

¹ Open University of Mauritius

² Farming Technology Centre (FTC)

Published: 11 October 2010 | **Received:** 30 April 2010 | **Accepted:** 20 August 2010

Correspondence: schandran@hotmail.com

DOI: [10.5281/zenodo.18911067](https://doi.org/10.5281/zenodo.18911067)

Author notes

Shanice Devi Chandran is affiliated with Open University of Mauritius and focuses on Computer Science research in Africa.

Komalraj Gajendra Singh is affiliated with Farming Technology Centre (FTC) and focuses on Computer Science research in Africa.

Abstract

This study examines the impact of educational technology on early childhood education outcomes in East African cities with a specific focus on Mauritius. A comparative study design was employed, involving quantitative data analysis from multiple schools across Mauritius over a two-year period. Educational technology use showed an average improvement of 15% in children's literacy scores compared to traditional teaching methods, with significant variance observed among urban centers. The study concludes that the integration of educational technology can significantly enhance early childhood education outcomes but requires tailored implementation strategies for optimal results. Schools and policymakers should adopt a blended learning approach incorporating both digital tools and traditional pedagogies to maximise benefits. 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: *Geographic, Comparative Study, Early Childhood Education, Educational Technology, Methodology, Anthropology, Pedagogy*

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