



# Educational App Design Enhances Numeracy Skills Among Senegalese Primary School Students: Progress Tracking Over Two Years in Mozambique

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## Abstract

The application of digital educational tools in improving numeracy skills among primary school students is gaining traction globally, with Senegalese and Mozambican contexts being particularly relevant. The research employed a quasi-experimental design, involving randomized assignment of schools to intervention and control groups. Data were collected through pre- and post-intervention assessments, with qualitative feedback from teachers and students contributing insights into the app's usability and impact. A notable proportion (35%) of students in the intervention group demonstrated significant improvement in numeracy skills over two years compared to those in the control group. Themes emerging included enhanced engagement and increased confidence among students using the app. The educational app designed for Senegalese primary school students showed promising results in improving their numeracy skills, particularly when used consistently over time. Further research should explore scalability of these findings to other contexts and consider incorporating parental involvement strategies to maximise learning outcomes.

**Keywords:** *African, Geographic Information Systems, Quantitative Research Methodology, Educational Technology, Numeracy Development, Primary Education, Learning Analytics*

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