Online Education Programmes' Impact on Literacy Among Senegalese High School Students in Gabon: A Two-Year Study

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Abstract

This study examines the impact of online education programmes on literacy rates among Senegalese high school students in Gabon. A mixed-methods approach was employed, including pre- and post-programme assessments, focus group discussions, and quantitative data analysis using logistic regression models. A significant proportion (65%) of students showed improved literacy skills after participating in the online programmes, with a confidence interval for this effect at [62%, 68%]. Online education has positively influenced student literacy levels, though further research is needed to understand long-term impacts and best practices. Investment in digital infrastructure and teacher training should be prioritised to maximise educational outcomes. online education, literacy rates, Senegalese high school students, Gabon, mixed-methods approach Model estimation used $\hat{\{\theta\}} = argmin\{\theta\} sumiell(yi, f\theta(\xi)) + \lambda lVert\theta rVert 2^2$, with performance evaluated using out-of-sample error.

Keywords: *African Geography, Online Learning, Literacy Assessment, Quantitative Research, Qualitative Research, Educational Impact Studies, Socioeconomic Factors*

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