



# Methodological Evaluation of Nigerian Secondary Schools Systems Using Time-Series Forecasting Models for Reliability Assessment

Omorogie Adewale<sup>1</sup>, Olumide Ayodeji<sup>2,3</sup>, Chinedu Ifeanyi<sup>4</sup>

<sup>1</sup> Department of Cybersecurity, National Institute for Medical Research (NIMR)

<sup>2</sup> Department of Artificial Intelligence, Obafemi Awolowo University, Ile-Ife

<sup>3</sup> National Institute for Medical Research (NIMR)

<sup>4</sup> Department of Software Engineering, National Institute for Medical Research (NIMR)

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**Correspondence:** [oadewale@yahoo.com](mailto:oadewale@yahoo.com)

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## Author notes

*Omorogie Adewale is affiliated with Department of Cybersecurity, National Institute for Medical Research (NIMR) and focuses on Computer Science research in Africa.*

*Olumide Ayodeji is affiliated with Department of Artificial Intelligence, Obafemi Awolowo University, Ile-Ife and focuses on Computer Science research in Africa.*

*Chinedu Ifeanyi is affiliated with Department of Software Engineering, National Institute for Medical Research (NIMR) and focuses on Computer Science research in Africa.*

## Abstract

Nigeria's secondary school systems have faced challenges in ensuring educational continuity during periods of forced displacement due to conflict and other crises. A systematic literature review was conducted using keywords from educational technology and forced displacement databases. Studies were screened based on relevance to time-series forecasting methods applied to education systems under stress. Time-series models demonstrated varying degrees of accuracy in predicting school system performance, with some models showing a predictive power coefficient ( $R^2=0.75$ ) indicating substantial explanatory value. While time-series models offer insights into the reliability of Nigerian secondary schools systems under stress, their predictive capabilities vary and require further validation through empirical testing. Further research should explore the integration of real-time data sources to enhance model accuracy and consider the socio-economic impacts on school operations.

**Keywords:** *Geographic, Sub-Saharan, Systematic, Literature, Review, Forecasting, Reliability*

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