



# Pre-service Training Programmes and Teacher Efficacy in Enhancing Mathematics Achievement Among Kenyan Primary School Students: A Survey Analysis

Mwihaki Okoth<sup>1</sup>, Ondieki Ngugi<sup>2,3</sup>

<sup>1</sup> Department of Interdisciplinary Studies, Technical University of Kenya

<sup>2</sup> Department of Research, Technical University of Kenya

<sup>3</sup> Maseno University

**Published:** 08 September 2004 | **Received:** 13 July 2004 | **Accepted:** 18 August 2004

**Correspondence:** [mokoth@outlook.com](mailto:mokoth@outlook.com)

**DOI:** [10.5281/zenodo.18793235](https://doi.org/10.5281/zenodo.18793235)

## Author notes

*Mwihaki Okoth is affiliated with Department of Interdisciplinary Studies, Technical University of Kenya and focuses on African Studies research in Africa.*

*Ondieki Ngugi is affiliated with Department of Research, Technical University of Kenya and focuses on African Studies research in Africa.*

## Abstract

Pre-service training programmes are pivotal in developing teachers' efficacy beliefs, which can influence their ability to enhance student learning outcomes, particularly in mathematics among primary school students. A survey research design was employed to gather data from a sample of teachers across Kenya. Quantitative methods were used for statistical analysis, including regression models to explore relationships between pre-service training and student performance in mathematics. The findings indicate that teachers who completed comprehensive pre-service training programmes demonstrated significantly higher efficacy beliefs, which correlated with better mathematical achievement scores among their students. Pre-service training programmes play a crucial role in enhancing teacher efficacy beliefs, thereby positively impacting the academic success of primary school mathematics learners in Kenya. Educational policymakers should prioritise investing in robust pre-service training for teachers to ensure they are equipped with effective teaching strategies and enhanced efficacy beliefs. Pre-service Training, Teacher Efficacy, Mathematics Achievement, Primary School Students, Kenya

**Keywords:** *African geography, Pre-service training, Teacher efficacy, Mathematics achievement, Kenyan education, Quantitative methods, Educational psychology*

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