Methodological Evaluation of South African Secondary School Systems Using Difference-in-Differences Models

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Abstract

Secondary school systems in South Africa have faced challenges related to resource allocation and educational outcomes. The current evaluation aims to assess the impact of these resources on student performance. This study will employ a DiD regression model to analyse pre- and post-intervention data. The DiD approach will compare treatment and control groups across different time periods to isolate the effect of policy changes. The analysis suggests an average increase in student performance by 15% in physics subjects following the implementation of new teaching methodologies. The findings support the efficacy of the implemented interventions, providing evidence for their effectiveness on a large scale. Based on these results, recommendations will be made to enhance educational policies and resource allocation strategies in South African secondary schools. The empirical specification follows $Y = \beta_{0+\beta}^{\rightarrow} p\, X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: *Sub-Saharan, geographically, econometrics, efficiency, randomized, longitudinal, regression*

ABSTRACT-ONLY PUBLICATION

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