

Exploring Possible Strategies in Improving Teacher and Learner Mathematics Performance

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ABSTRACT

The performance of high school students in Mathematics has a direct link to a country's scientific and technological advancement. The students' ability in Mathematics and Sciences is critical to their social and economic well-being (Othman, Yusof, & Mahmood, 2012 & Reddy, et al., 2015). According to the 2015 TIMMS report, the slow rate of change in the context conditions contributes to the country's levels of poverty and nature of inequality, and this rate of change is insufficient to meet the country's educational expectations and needs (Reddy, et al., 2016). Reddy, et al. conclude in the 2019 TIMMS report that the rate of improvement in Mathematics has slowed (Reddy, et al., 2020). The analysis of the Grade 12 National Senior Certificate Results from 2016 to 2019 of the high schools in the Phambela Circuit, revealed that learners' performances in Mathematics have had a negative impact on the overall pass rate of Grade 12 learners, within each high school, in the Phambela Circuit. Furthermore, parents expressed concern that the low Mathematics pass rate will prevent their children from enrolling in Mathematics and Science-related courses at institutions of higher learning. It is in this context, the researchers set out to investigate the status of teaching and learning of Mathematics in the Phambela Circuit and explore possible strategies that would assist to improve its teaching and learning.

Keywords: Conceptual Development, Mathematical Proficiency