

# Exploring the Effect of Challenges Experienced By Teachers and Learners on Mathematics Performance

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## ABSTRACT

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High school learners Mathematics performance have a direct relationship to a nation's scientific and technological improvement and learners' competence in Mathematics and the Sciences is important for their social and economic standing (Othman, et al., 2012, Reddy, et al., 2015). The 2015 TIMMS report states that the slow level of change in the contextual conditions contributes to the levels of poverty and nature of inequality in the country and this rate of change is insufficient to meet the educational expectations and needs of the country (Reddy, et al., 2016). In the 2019 TIMMS report, Reddy, et al. conclude that the rate of improvement in Mathematics has declined (Reddy, et al., 2020). Upon analysing the Grade 12 National Senior Certificate Results for the period 2016 to 2019, the researchers found that the performances of learners in Mathematics has adversely affected the overall pass rate of Grade 12 learners, within each high school, in the Phambela Circuit. In addition, parents expressed concern that the poor Mathematics pass rate deny their children the opportunity to enrol for Mathematics and Science related courses at institutions of higher learning.

**Keywords:** Blended Learning, Scaffolding, Conceptual Development