

Online Formative Assessment Challenges Experienced by Grade 10 Physical Sciences Teachers during Remote Teaching and Learning

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Abstract : Although formative assessment is acknowledged as crucial for teachers to gauge students' understanding of subject content, applying formative assessment in an online context is more challenging than in a traditional Physical Sciences classroom. This study examines challenges experienced by Grade 10 Physical Sciences teachers when enacting online formative assessment. The empirical investigation adopted a generic qualitative design and involved three purposively selected Grade 10 Physical Sciences teachers from three different schools and quintiles within the Tshwane North District in South Africa. Data were collected through individual and focus group interviews. Technological, pedagogical, and content knowledge (TPACK) was utilised as a theoretical framework underpinning the study. The study identified a myriad of challenges experienced by Grade 10 Physical Sciences teachers when enacting online formative assessment. These challenges include the utilisation of Annual Teaching Plans, lack of technological knowledge, and internet connectivity. The Department of Basic Education faces the key imperative to provide continuous teacher professional development and concomitant online learning materials that can facilitate meaningful enactment of online formative assessment in various educational settings.

Keywords : COVID-19, challenges, online formative assessment, physical sciences, TPACK

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