



DEVELOPMENT AND VALIDATION OF TEACHERS' PRACTICES ON FORMATIVE ASSESSMENT SCALE (TPFAS): A MEASURE USING FEEDBACK LOOP MODEL

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ABSTRACT

The practices on formative assessment are recognized as an essential aspect of teaching and learning, yet the deluge of data, both formal and informal, gathered by teachers through classroom assessments inept them on how to analyze and respond to. A data-driven approach called the Feedback Loop Model is designed to enable the teachers to interpret these data for determining the next steps in the process of teaching and learning. For this reason, a study was conducted to develop and validate an instrument concerning teachers' practices on formative assessment utilizing the elements of the Feedback Loop Model. An instrument called Teachers' Practices on Formative Assessment Scale (TPFAS) anchoring on the elements of the model was pilot tested to 157 science teachers in the Philippines. Teachers' responses were analyzed using Cronbach's alpha reliability coefficient on the Feedback Loop constructs and Confirmatory factor analysis for the entire instrument. Findings suggest the deletion of 10 survey items from the initial 44 items in which the scale provided a valid and highly reliable measure in determining teachers' practices on formative assessment. The TPFAS instrument exhibited an overall reliability coefficient consistency of 0.93 indicating an acceptable standard for an instrument used. Moreover, reliability analysis was conducted within each subscale which exhibited internal consistency reliability (alpha) ranging from .819 to .884 for the four subscales or constructs.

Keywords: Science education, formative assessment, research instrumentation, Philippines