MONITORING PEDAGOGICAL PRACTICES IN MATHEMATICS THROUGH TEACHER BACKGROUND QUESTIONNAIRES OF LARGE-SCALE ASSESSMENTS

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Among a variety of school-related factors, pedagogical practices have been shown to positively impact student learning (Kelley, Heneman and Milanowski, 2000; McCombs and Whisler, 1997; Ryan, Ryan, Arbuthnot and Samuels, 2007). It follows then that educational leaders would be interested in monitoring related information to inform policy. One way to capture such information is by asking key questions on teacher background questionnaires. Although many large-scale assessments already question teachers on such practices, underlying frameworks for developing those questionnaires still rely on anecdotal rather than on empirical data. The purpose of this paper presentation is to report the results of a review of teacher background questionnaires and associated conceptual frameworks of large-scale assessments in Mathematics to determine to what extent they collect information related to effective pedagogical practices. Using a five factor framework, of which four were shown to statistically align with one teacher background questionnaire (see work by Simon, Sarwar, van Barneveld and Zerpa, 2012), we reviewed the latest Trends in Mathematics and Science Study's (TIMSS) background questionnaire and conceptual framework as well as the Program for International Student Assessment's (PISA) TALIS 2013 framework and teacher questionnaire. The working framework consists of the following five pedagogical practices: a) independent practices, b) group work, c) assessment and feedback, d) meaningful and engaging activities, and e) cognitively challenging tasks. Implications for the development large-scale assessment background questionnaires will be discussed and model items per factor will be presented.

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