
Title	Contextual factors that affect teachers' conceptions of assessment: Findings from a survey of Singaporean teachers
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Contextual Factors that Affect Teachers' Conceptions of Assessment: Findings from a Survey of
Singaporean Teachers

Purpose

With increasing attention to global competitiveness amid a transition to knowledge- and innovation-driven economies, many countries have embarked on educational reforms with explicit goals of supporting students' higher-order thinking and so-called 21st century skills—such as technological literacy, innovative thinking, and collaboration (Dede, 2010).

Concomitant with these transitions, there is also a need to develop and support meaningful assessment policies and practices that support such reformed visions of teaching (Reeves, 2010).

Development of aligned assessment requires attention both to the system-wide level of standardized assessments and to the school level of teachers' views and classroom assessment practices. Indeed, teachers play an essential role in the achievement of systemic educational goals (Smith & O'Day, 1990), including their classroom assessment decisions.

Despite teachers' importance in the assessment process, their own views of assessment—here called *conceptions of assessment* (COA) following Brown's (2004) usage—may not always be congruent with the stated goals of such new assessment policies. As previous work has shown, teachers have a variety of views about assessment, for example that assessment serves purposes of accountability, of improvement (Brown, Kennedy, Fok, Chan, & Yu, 2009), or that it is irrelevant (Brown, 2004). Furthermore, prior work shows that teachers' COA can have direct influence on their classroom assessment practices (James & Pedder, 2006; Tan, 2012). While prior work has identified disparities between espoused educational goals and teachers' COA and their assessment practices, relatively little prior research has explored the range of

possible influences on teachers' views. Yet identifying such influences can allow future work to develop and test interventions at the individual, school, or system level to support teachers' COA. To address this gap, the present study explores the relationships between teachers' COA and the contextual factors in Singapore.

Singapore's education system demonstrates generally high alignment among educational policy, teacher education and professional development, and curriculum development and implementation. So, visible gaps between education policy and school practice are fairly uncommon. Regarding teachers' assessment practices and COA, the Singapore Ministry of Education (2010b) has recently adopted policies promoting more holistic assessment at the school and classroom level. The goal of the policy is to encourage teachers' use of classroom assessments that go beyond conventional multiple-choice tests and that, simultaneously, can assess and support the development of students' 21st Century skills (Singapore Ministry of Education, 2010a). Despite this, there is significant concern about whether Singaporean teachers' present COA enable them to enact such assessment policies (Koh & Luke, 2009), which can derive from their COA (Tan, 2012) and reflect longstanding social values about assessment (Kennedy, 2007). Thus, Singapore provides a promising setting to examine the relationships among reform-based assessment goals, teachers' COA and assessment practices, and the competing contextual factors that influence them.

Theoretical Perspective

This work bridges two theoretical perspectives, teachers' conceptions of assessment (COA) and contextual factors. Teachers' COA are the views teachers' hold about assessment, in particular the overarching purposes and implications of assessment (Brown, 2004). Prior work has examined the different meanings of COA from both qualitative and quantitative perspectives.

For example, Brown (2006) examined the dimensionality and functioning of a questionnaire on teachers' COA. Separately, James and Pedder (2006) focused on teachers' COA around a specific purpose and form of assessment—authentic assessment in the classroom—and its relationship to their assessment practices. Tan (2012) conducted a phenomenographic study of teachers' COA and examined how these views connect with teachers' experiences and instruction.

We bridge the theoretical background on teachers' COA with theoretical work on contextual factors that can affect teachers' beliefs and behaviors. In particular, we focus on a framework of contextual factors that by Kozma (2003), which identifies three distinct but interacting levels of contextual factors: the micro level, which encompasses influences from the individual teacher and her/his classroom; the meso level, which encompasses influences within the school, such as its leadership, facilities, resources, and culture; and the macro level, which encompasses broad influences for the state, nation, or society, such as educational standards, educational policies and resources, and cultural values and expectations. By merging these two perspectives, we can examine teachers' COA at the micro level and connect it to influences at the micro, meso, or macro levels.

Techniques and Analyses

The study is a survey of Singaporean teachers' COA and the possible micro, meso, and macro influences on COA. The instruments for the survey are of two types: (1) COA, and (2) contextual factors. The COA items come from Brown's (2006) work on teachers' COA in an overarching sense, which consists of 27 items that address a set of views about assessment purposes and value.

The contextual factors items have been developed by the project based on Kozma's (2003) framework of micro-, meso-, and macro-level factors that can affect teachers' views and practices. The instrument development began with a review of contextual factors literature, followed by focus group interviews with teachers, school leaders, and teacher educators. Based on these findings, the project developed a total of 41 initial items. This is a larger number of items than were anticipated to be necessary, but sufficient to allow selection of higher-quality items as needed. Next, the authors conducted interviews with other teachers and school leaders about the items to check on readability and clarity of the initial items, and to discuss how they would respond to the items, yielding revisions to wording and format for the initial 41 questions. Next, a pilot study was conducted with a sample of 53 teachers to examine the item functioning and factor structure. A set of 30 items were retained, covering the three areas of micro, meso, and macro levels. The results also support the proposed 3-factor structure (Authors, 2013).

Data Sources & Evidence

Data for the study come from a nationally representative sample of Singaporean secondary school teachers, drawn through a two-stage sampling process—in which schools (sampling units) are first sampled, and then teachers within schools are sampled. An intended sample size of 330 teachers is to be drawn.

Results

The study is currently collecting data, with data collection expected to complete in November 2013. The AERA presentation will provide full results from the study. The presentation of results will first address the teachers' COA and compare the findings from Singapore with results from studies in other settings, namely Hong Kong, Australia, and UK.

Second, results will examine the relationships between the micro, meso, and macro contextual factors and teachers' COA.

Scholarly significance of the study

This study's scholarly significance is based on two contributions. First, the study can inform future research on COA and its antecedents or outcomes as it examines the contextual factors that may influence teachers' COA. By exploring the potential predictors of COA, this will be the first study yet to explore malleable factors for subsequent research or professional development to help teachers develop more informed COA. Secondly, as the study takes place in the famously well-aligned educational system of Singapore, comparison of the study's findings on COA with findings studies from other countries can be informative for understanding the relevance of COA within such systems. For example, the presence or absence of differences can provide insight into the role of national context on teachers' assessment views, and what this may mean for educational research on assessment policy and teacher development.

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