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Bostic, Jonathan David; Sondergeld, Toni A.

Measuring sixth-grade students' problem solving: validating an instrument addressing the mathematics common core.

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Summary: This article describes the development of a problem-solving instrument intended for classroom use that addresses the Common Core State Standards for Mathematics. In this study, 137 students completed the assessment, and their responses were analyzed. Evidence for validity was collected and examined using the current standards for educational and psychological testing. Instrument validation findings regarding internal consistency reliability were high, and multiple forms of validity (i.e., content, response processes, internal structure, relationship to other variables, and consequences of testing) were found to be appropriate. The resulting instrument provides teachers and researchers with a sound tool to gather data about sixth-grade students' problem solving in the Common Core era.

Classification: D53 D63

Keywords: learning processes; problem solving; students and learning; student assessment

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