

ZMATH 2013b.00448

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Reading grade levels and mathematics assessment: an analysis of Texas mathematics assessment items and their reading difficulty.

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Summary: Increased reading difficulty of mathematics assessment items has been shown to negatively affect student performance. The advent of high-stakes testing, which has serious ramifications for students' futures and teachers' careers, necessitates analysis of reading difficulty on state assessment items and student performance on those items. Using analysis of covariance, this study analyzed the effects of reading grade level of mathematics assessment items on student performance on the Texas assessment of knowledge and skills. Results indicated that elementary and middle school students performed significantly worse on mathematics assessment items having a reading level above the student grade level. The implications of these results are discussed.

Classification: D60 C50 D50 D70

Keywords: research; educational diagnosis; achievement measurement; class tests; readability; mathematics and language; reading difficulties; learning problems; reading ability; problem posing; primary education; lower secondary; upper secondary; problem solving; understanding; student errors

<http://math.coe.uga.edu/tme/Issues/v20n1/20.1.Lamb.p.22-34.pdf>