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What teachers say about student difficulties solving mathematical word problems in grades 2–5.

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Summary: This study investigated teachers' perspectives of difficulties students have solving mathematical word problems and causes of those difficulties. Classroom practices and strategies teachers used in their attempts to foster student problem solving success were also studied. Participants were 70 second-fifth grade teachers from 42 different schools in a south central region of the United States. Data included analyses of interview transcriptions of teachers' responses. Findings from teachers' responses showed students' abilities to read and understand the problem was the most frequently cited difficulty; standardized testing and text difficulties were the most cited causes of those difficulties. Examination of teachers' responses to practices and strategies used in the classroom revealed the most cited practice was working the problem independently and the most cited strategy taught to students was to identify key words. This study revealed the significant role reading plays in teachers' perspectives of students' difficulties solving mathematical word problems and provided insight into practices and strategies teachers reported using to teach word problems. With attention to teacher-reported causes of difficulties and importance of this ability for students, this study also showed the impact state mandated testing has on instruction of mathematical word problems.

Classification: D52 D72

Keywords: problem solving; teaching; word problems; teacher views; research; teacher interviews; learning problems; student errors; understanding; sources of students' mathematical difficulties; reading; teacher attitudes; primary education; problem-solving strategies

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