

**ZMATH 2013b.00272**

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**An exploratory study contrasting high- and low-achieving students' percent word problem solving.**

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Summary: This study evaluated whether schema-based instruction (SBI), a promising method for teaching students to represent and solve mathematical word problems, impacted the learning of percent word problems. Of particular interest was the extent that SBI improved high- and low-achieving students' learning and to a lesser degree on the indirect effect of SBI on transfer to novel problems, as compared to a business as usual control condition. Seventy 7th grade students in four classrooms (one high- and one low-achieving class in both the SBI and control conditions) participated in the study. Results indicate a significant treatment by achievement level interaction, such that SBI had a greater impact on high-achieving students' problem solving scores. However, findings did not support transfer effects of SBI for high-achieving students. Implications for improving the problem-solving performance of low achievers are discussed.

*Classification:* C73 F93

*Keywords:* low achievement; problem solving; grade 7; word problems (mathematics); research methodology; discovery processes; high achievement; mathematical concepts; evaluation; scores; elementary school students; middle school students

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