

**ZMATH 2014d.00563**

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**The realistic reasons behind unrealistic solutions: the role of interpretive activity in word problem solving.**

Learn. Instr. 15, No. 1, 69-83 (2005).

Summary: It is known that school-aged children have a strong tendency to solve mathematical word problems by mechanically calculating numbers even if their calculational answers seem unrealistic. The present study found that undergraduate students also demonstrate this tendency, but many of them could justify their “unrealistic” responses with sensible rationales. In-depth clinical interviews revealed that some of the “unrealistic” responses stemmed from simply an unanticipated, but realistic understanding of the problem situations, while others stemmed from intentionally conforming to the culture of schooling. It is suggested that cognitive functioning in problem solving is highly dependent on an individual’s contextual interpretation of the activity.

*Classification:* F90 D50

*Keywords:* word problems; problem solving; unrealistic solutions; contextual interpretations

doi:10.1016/j.learninstruc.2004.12.004