

**ZMATH 1998a.00333**

**Mathews, Susann M.**

**The effect of using two variables when there are two unknowns in solving algebraic word problems.**

Math. Educ. Res. J. 9, No. 2, 122-135 (1997).

This article reports an experiment in which Algebra I students learned to translate word problems with two unknowns from the prose representation to symbolic representation using two variables (one to represent each unknown) when they first started solving word problems with two unknowns. Their performance on a test of word problems with two unknowns was compared with the results on the same test taken by students who had learned to solve word problems with two unknowns the traditional way, using only one variable to translate from prose to an algebraic equation. Four algebra teachers and 181 of their students participated in the study. A block-randomised factorial design was used. An analysis of covariance showed a statistically significant difference in the mean scores of the experimental group and the control group on this word problem test with the experimental group scoring substantially higher. (orig.)

*Classification:* F93

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