The Effect of Schema-Based Instruction (SBI) in Solving Additional and Subtraction Mathematics Word Problems on Second Grade Primary Students

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Abstract

Solving mathematics word problems would be difficult for many second grade primary students. Learning to solve problems through solving mathematics word problem has many positive advantages because they may lead to thinking process. Thus a strategy which can enhance student's ability in solving mathematics word problems is needed to be developed. The purpose of this study is to investigate the effectiveness of schema-based instruction (SBI) in enhancing additional and subtraction word problems solving among second grade primary students. Participants were 28 second grade primary students of SDN Wijaya Kusuma, 12 males and 16 females. This quantitative study using randomized pretest-posttest control group experiment design. Participants were randomly assigned into two groups equally. One group received schema-based instruction (SBI) intervention while the other received traditional instruction intervention. Both groups were pretested and posttested on mathematical addition and subtraction word problems solving scale. Results analyzed by General Linear Model (GLM) revealed SBI to be more effective than GSI in enhancing students' ability in solving addition and subtraction word problems. On computational skill, both group gain nearly the same increase.

Key words: Schema-based instruction (SBI), mathematics word problem solving, primary students.