DOES THE SEQUENCE OF PROBLEM PRESENTATION IN THE WORKED EXAMPLE APPROACH AFFECT STUDENT'S PROBLEM-SOLVING ABILITY?

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ABSTRACT

This research aimed to compare the effects of problems presentation sequences in the worked example approach, namely visual-verbal and verbal-visual, on the student's problem-solving ability in learning the Pythagorean theorem. The research type was a quasi-experiment with a sample of 61 eight graders in a state junior high school. Measurements were carried out on the routine and non-routine problem-solving test scores, while the cognitive load was measured using the self-rating scale of difficulty and analyzed by the repeated measures ANOVA. The results of the research show that the visual-verbal sequence is better to apply in a worked example approach for learning Pythagorean theorem. Moreover, students find verbal presentation to be more difficult to understand in the problem-solving test.

Kata Kunci: sequences, worked example, problem solving ability, visual, verbal