

Effect of Core Learning Models with Cognitive-Conflict Strategy towards the Mathematics Problem Solving and Anxiety of SMP Students

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Abstract

To improve the ability of mathematical problem solving and to decrease mathematical anxiety, the teacher needs a teaching strategy which invites students to learn actively. Thus, this research aimed to know the improvement of the students' ability of mathematical problem solving using *CORE* learning with cognitive-conflict strategy and conventional learning, and to know the influence of *CORE* learning with cognitive-conflict strategy towards the students' mathematic anxiety. This quasi-experimental research used non-equivalent control group design. Implementation of this research was conducted on grade VIII students in one of the State Junior High School in Cimahi. Instruments used consist of test and non-test. The test instrument was a test of mathematical problem solving skills presented as pre-test and post-test, while non-test instrument consist of mathematical anxiety scale, observation sheet and interview. Quantitative data analysis was done by using t test and *Wilcoxon sign rank test*, while qualitative data analysis was done descriptively. The results of this study showed that the students that had *CORE* learning model with cognitive-conflict strategy have improved the mathematic ability of problem solving better than the students that used the conventional learning, and the *CORE* learning model with conflict strategy have effected to decrease the students' mathematic anxiety.

Keywords: *CORE Learning Model, Cognitive-Conflict Strategy, Mathematic, understanding, Mathematic Problem Solving, and Mathematic Anxiety*