The Difference of Student's Problem Solving Ability Between Taught by Students Teams – Achievement Division (STAD) and Direct Instruction (DI) At Class VII SMP Negeri 1 Medan Academic Year 2011/2012

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ABSTRACT

The research aimed to find out whether there is or no the difference of student's problem solving ability of quadrilaterals taught by STAD and taught by Direct Instruction.

The research is conducted in SMP Negeri 1 Medan using experiment research on second (even) semester of class VII SMP Negeri 1 Medan academic year 2011/2012. The sample is taken by using cluster random sampling. Research's instruments in collecting data in this study are a test and an observation sheet. This test is an essay that related to the problem solving questions that was contain of 5 items about quadrilaterals questions. The test was reliable and valid based on judgment of experts.

Data that collected in this research are (1) data of student's mathematics initial ability that obtained from initial test (pretest) and (2) student's problem solving measured by using essay test after given the treatments.

Hypothesis test is done by using Two Ways Analysi of Variance (Two Way Anova). The research result shows that on significance level 0.05 (1) the student's problem solving that taught by STAD is better than taught by Direct Instruction, (2) the students' with high mathematics initial ability is not better than the students' with low mathematics initial ability in problem solving and (3) there is an interaction between teaching model and student's mathematics initial ability to student's problem solving. The result suggest that in order to teach quadrilaterals, teacher should care about student's mathematics initial ability in choosing learning model which will be used in learning activity. If the student's mathematics initial ability is low then the teaching model should be used is Direct Instruction, but if the student's initial ability is high then it should be used teaching model of STAD.

Keywords: STAD, Mathematics learning, Direct Instruction, Student's Problem Solving.