

**THE DIFFERENCE OF STUDENTS' PROBLEM SOLVING  
ABILITY THAT TAUGHT USING COOPERATIVE TYPE  
THINK – PAIR – SHARE (TPS) AND STUDENT  
TEAMS – ACHIEVEMENT DIVISIONS  
(STAD) IN GRADE XI SMA NEGERI 5  
MEDAN A.Y 2016/ 2017**

**Mutiara Apriliani Naibaho (ID. 4123111050)**

**ABSTRACT**

The aim of this research is to know whether there is difference of student's Mathematics Problem Solving Ability taught by using Cooperative Learning model TPS and Cooperative Learning model STAD type for Grade XI in SMA N 5 Medan. The population is all students of grade XI in SMA N 5 Medan Academic Year. 2016/2017. Sampling Techniques that is used in this research is random sampling. There are two samples in this research namely, Experiment Class I is XI MIPA 1 taught by cooperative learning model TPS and Class B is XI MIPA 4 taught by cooperative learning model STAD. Each of class consist of 40 students. Technique of analyzing data is consisted of normality, homogeneity, and hypothesis test. Based on normality and homogeneity test, the data was taken from normal distribution and homogeneous population. . Hypothesis test is done by using analysis of T-test. The result of T-test show that  $t_{\text{calculated}} = 0.100$  and  $t_{(0.5)(78)} = 1.99$ . Consequently  $t_{\text{calculate}} < t_{\text{table}}$ , then  $H_0$  is accepted. The result of research is different with the research hypothesis where in the research hypothesis is said there is no difference of Cooperative model type Think – pair – Share (TPS) and Student Teams – Achievement Division (STAD) towards students' problem solving ability but in the research result there is difference of Cooperative model type Think – pair – Share (TPS) and Student Teams – Achievement Division (STAD) towards students' problem solving ability. It is because even though both of the classroom accept different treatment where class Experiment I taught using TPS which make them work alone and then get in pair and Class Experiment II taught using STAD which make them work in group but because the research done in almost the same time and also because in learning model TPS and STAD, the learning process is almost same and both of the class have the same initial capabilities which can be seen in the result of Pre – test so that once this model is applied there is no significant difference in problem solving ability. So, we can conclude that there is no difference of students' mathematics problem solving ability taught by using cooperative learning model TPS type and cooperative learning model STAD type.

**Keyword** : *problem solving, cooperative learning, TPS, STAD*