

**THE DIFFERENCE OF PROBLEM – BASED LEARNING MODEL AND
COOPERATIVE TYPE OF THINK – PAIR – SHARE TOWARD
STUDENTS’ MATHEMATICS ACHIEVEMENT ON TOPIC
OF STATISTICS IN GRADE XI SMA NEGERI 2 BALIGE**

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ABSTRACT

The research is aimed to find out if there is a difference between Problem – Based Learning (PBL) Model and Cooperative Type of Think – Pair – Share (TPS) Model toward students’ mathematics achievement on topic statistics. The type of this research is Quasi Experiment Research which was conducted in SMA Negeri 2 Balige. The population of this research is all regular students at SMA Negeri 2 Balige. The sampling technique applied was cluster random sampling. The experiment class I that is chosen XI Science 6 consist of 32 students, meanwhile the experiment class II that is chosen XI Science 7 consist of 31 students. The instrument used to measure the students’ mathematics achievement was a multiple choice test. The normality test used of Liliefors’ test and the homogeneity test by using Fisher test. The data analysis technique was t-test at the level of significance $\alpha = 5\%$.

Before doing the hypothesis test, it would be done normality and homogeneity test beforehand. From the result of those tests, sample was taken from normal distributed and homogeneous variance. From the data analysis of each of experimental class were obtained that the average score of posttest in experiment class I is 16.03 and the average score of posttest in experiment class II is 14.06. Then the test of hypothesis by using t-test which is $t_{\text{calculate}} = 3.057$ and $t_{\text{table}} = 2.000$ so that $t_{\text{calculate}} > t_{\text{table}}$ ($3.057 > 2.000$). Consequently H_0 is rejected and accept H_a .

So, it can be concluded that there is a difference between Problem – Based Learning (PBL) Model and Cooperative Type of Think – Pair – Share (TPS) Model toward students’ mathematics achievement. Based on the research that has been done, mathematics teachers are suggested to use Problem – Based Learning model or Think – Pair – Share model as learning model alternative in improving students’ mathematics achievement.