

ABSTRACT

TAMARA PRIMADONA. Comparison of Problem Based Learning Learning Model (PBL) and Two Stay Two Stray to Mathematical Problem Solving Ability of Junior High School Students in District Grogol Petamburan. Essay. Jakarta: Mathematics Education Program, Faculty of Mathematics and Natural Sciences, Jakarta State University, 2017.

This study aims to obtain information whether there is a significant difference between the problem solving ability of mathematical students learning with PBL learning model and learning model two stay two stray. The study was conducted at SMPN 89 Jakarta in Grade VII even semester of academic year 2016/2017 on the subject of quadrilateral and triangle. This study was conducted during May 2017.

The method used in this research is quasi experimental method (quasi experiment). Sampling is done by multistage sampling technique. The first step is by using simple random sampling technique, that is, the selection of schools from 6 Junior High School in Grogol Petamburan Sub-district which is accredited A. Next, using purposive sampling technique, that is choosing one of two teachers who teach mathematics in class VII. The final step by using cluster random sampling to determine the class that will be the research sample, that is experimental class I (learning model of learning based learning) and experiment class II (two stay two stray learning model). The two selected experimental classes are from normally distributed, homogeneous, and average populations. The research instrument used is the test of mathematical problem solving ability on rectangular and triangular material. The test is in the form of a description of 5 questions that have been tested for validity and reliability first.

Based on the calculation of the research data, the two experimental classes are from normally distributed populations and have the same or homogeneous variance. Hypothesis testing is done by using t-test statistic with equal variance at significance level $\alpha = 0,05$. Based on the calculation, the $t_{value} = 2.185188$, while the $t_{table} = 1.66724$, then $t_{value} > t_{table}$ and H_0 rejected. Because of reject H_0 , it can be concluded that there are differences in the ability of problem solving mathematical problems of junior high school students in Grogol Petamburan subdistrict on quadrilateral and triangle material between students learning with problem based learning model and students learning with two stay two stray learning model. Furthermore, based on the average of mathematical problem solving test results of junior high school students in Grogol Petamburan subdistrict on quadrilateral and triangle material that study with problem-based learning model is higher than students learning with two stay two stray learning model.

Keywords: Mathematical Problem Solving Ability, Problem Based Learning, and Two Stay Two Stray.