

ABSTRACT

RAQUEL ELIZABETH, Comparison of Mathematical Problem Solving Abilities Between Students Who learn to use Problem Posing learning model and Missouri Mathematics Project learning model at SMP Negeri 139 Jakarta. Undergraduate. Jakarta: Mathematics Education Program, Faculty of Mathematics and Natural Sciences, Universitas Negeri Jakarta, 2017.

This study aimed to obtain information about students mathematical problem solving abilities are higher, whether students who learn by using Problem Posing learning model or students who learn to use learning model Missouri Mathematics Project at SMP Negeri 139 Jakarta

This research was conducted in class VIII-C and VIII-A in junior high school 139 Jakarta odd semester of academic year 2017/2018. The research method is quasi-experimental method. The sampling technique used cluster random sampling technique by determining experiment class I (Problem Posing learning model) and experiment II class (Missouri Mathematics Project learning model) from three randomly selected classes. Both classes are homogeneous experiments, and have an average similarity. The research used is the test of mathematical problem solving ability on the subject of algebraic factorization. Prior to use, the instrument has passed the test of content validity, construct validity, and empirical validity. Calculation of reliability is done by using Alpha Cronbach formula and obtained reliability coefficient of 0.417 are included in the category of being. Then, also done the calculation of the level of difficulty of the problem that states about the test number 1 to 4 is moderate.

Based on the calculation of the research data, the two experimental classes are from normally distributed populations and have the same or homogeneous variance. Therefore, hypothesis testing is performed using t-test statistic with the same variance. Based on the test results, obtained $t_{count} = 3.9004$ and $t_{table} = 1.6675$. The value of t count is more than t table H_0 is rejected at significance level $\alpha = 0,05$. From these results it can be concluded that the problem solving ability of mathematical students who learn to use Problem Posing model is higher than students who learn to use the model of Missouri Mathematics Project.

Keywords: Problem Posing Model, Missouri Mathematics Project Model, Mathematical Problem Solving Ability