ABSTRACT

AJENG TRIANI, Comparison of the Ability of Mathematical Creative Thinking Students Using Learning Model PBL, Missouri Mathematics Project, and Conventional at SMP Puspanegara Bogor, Essay. Jakarta: Mathematics Education Program, Faculty of Mathematics and Natural Sciences, Jakarta State University, 2017.

This stusy aims to determine whether the ability to think mathematically creative students who learn to use PBL is higher than students who learn with MMP and conventional. This research was conducted at SMP Puspanegara in class VII even semester of academic year 2016/2017 on Social Arithmetic subject.

The research method used is quasi experiment. In the case selected class VII with the number of six classes taught by the same teacher. Sampling using cluster random sampling technique, six classes that are normally distributed, homogeneous and have the same average equality of three randomly selected classes which subsequently defined as experimental class I, experiment II, and control. The research instrument used is the final test of the ability of mathematical creative thinking on the subject of Social Arithmetic as much as four items of description. Prior to use, the instrument has passed the content, construct, and empirical validity test. Calculation of reliability is done by using Alpha Cronbach formula and obtained reliability coefficient of 0,6455 with high classification.

Based on the calculation of the research data, the experimental class I (OBL), the experimental class II (MMP), and the control class (conventional) are each derived from normallu distributed populations. Then the homogenity test shows the three classes have the same variance. Therefore, hypothesis testing uses One Way Anova test statistic. From result of calculation, obtained value of $F_{count} = 11,4732$ and $F_{table} = 3,08$. Since $F_{count} > f_{table}$, then H₀ is rejected, it means there is average difference in the three experimental classes, it is necessary to do further test using t-test. Result of t-test calculation between experiment class I and II obtained $t_{count} = 2,36$ and result of calculation between experimental classes I and II as well as experiment class I and control class obtain $t_{hitung} > t_{table}$ then H₀ is rejected. Thus it can be concluded that students mathematical creative ability with PBL is higher than that of students with MMP and conventional

Keywords: Problem Based Learning Model, Missouri Mathematics Project Model, Ability of Cre ative Mathematical Thinking