

**THE DIFFERENCE OF STUDENTS' MATHEMATICAL REPRESENTATION
ABILITY BY USING PROBLEM BASED LEARNING AND INQUIRY
BASED LEARNING ON THE TOPIC OF STATISTICS IN
GRADE VIII SMP NEGERI 1 TANJUNG MORAWA
ACADEMIC YEAR 2016/2017**

Abstract

The type of this research is quasi – experiment. The aim of this research was to determine whether student's Mathematical Representation Ability taught by using Problem Based Learning is higher than Inquiry Based Learning for Grade VIII in SMP Negeri 1 Tanjung Morawa. The population is all students of grade VIII in SMP Negeri 1 Tanjung Morawa A.Y. 2016/2017. Sampling Techniques that is used in this research is Purposeful sampling. There are two samples in this research namely, Experimental class A is VIII-1 taught by Problem Based Learning and Experimental class B is VIII-2 taught by Inquiry Based Learning. This research using posttest only group control, 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. The result of the research shows that the mean score are 83.08 in experiment class A and 78.58 in experiment class B and results of hypothesis test of data from both experimental class in post test was found that $t_{calculated}(2.284) > t_{table}(1.671)$. It indicates that H_0 is rejected. So, we can conclude that the students' mathematical representation ability in the classroom taught using Problem-Based Learning model is higher than in the class taught using Inquiry Based Learning model.