ABSTRACT

RATNA PUSPITASARI, Influence Model Missouri Mathematics Project (MMP) Assisted Mathematical Communications Multimedia Capabilities Against Students In SMP Negeri 92 Jakarta Thesis. Jakarta: Mathematics Education, Department of Mathematics, Faculty of Mathematics and Natural Sciences, State University of Jakarta, in 2017.

This study aims to determine empirically whether the test results communication skills students acquire mathematical study of mathematics by using multimedia-assisted learning model MMP higher when compared to students who obtain study of mathematics by using conventional learning models. The research was conducted in class VIII SMP Negeri 92 Jakarta 2016/2017 school year in November-December 2016.

The method used is the method of quasi experiment (quasi-experiment). The sampling technique using two stage random sampling technique that is the first stage purposive sampling also known as a consideration, where sampling is done individually or researcher. Then, the second stage cluster random sampling to determine the class of the control (conventional models) and the experimental class (models Missouri Mathematics Project (MMP) Assisted Multimedia) of the four classes were selected randomly. The second class of experiments that have been derived from normal distributed population, have the same variance or homogeneous, and have the same average. The research instrument used was a test of mathematical communication skills on the subject of Systems of Linear Equations Two Variables (SPLDV) as much as 5 about the description. Prior to use, the instrument has gone through the test content validity, construct validity and empirical validity. Reliability calculations done using Cronbach Alpha formula and obtained reliability coefficient of 0.7182 which is included in the high category. In addition, the calculation is done well and level of difficulty distinguishing matter of stating the matter 5 includes enough, three relatively simple matter (matter of numbers 1,3, and 5), one matter were moderate (Question 2), and the first question pertained difficult (question 4).

Based on research data calculations, the experimental class derived from normal distributed population and have the same variance or homogeneous. Therefore, hypothesis testing is done by using a statistical test-tdengan same variance. Based on test results, obtained by value t = 1.7279 and table = 1.6669. Tcount over ttable so H0 is rejected at the significance level $\alpha = 0.05$. From these results it can be concluded that the average increase student learning communication skills with models Missouri Mathematics Project (MMP) Multimedia Assisted higher than the students who studied with conventional models.

Keywords: Model MMP Multimedia Aided, Conventional Model, Mathematical Communications Capabilities