ABSTRACT

LIDYA MARDALINDA. <u>Comparison of Mathematical Reasoning Ability of</u> <u>Students Learning Using Connecting, Organizing, Reflecting, Extending (CORE)</u> <u>and Reciprocal Teaching Model at 27 Junior High School Jakarta.</u> Tesis. Jakarta: Mathematics Education Study Program, Faculty of Mathematics and Natural Sciences, <u>Universitas Negeri Jakarta</u>, 2017.

This study aims to finding out the ability of mathematical reasoning of students who learn to use CORE model is better than students who learn to use the reciprocal teaching model. This research was held in SMP Negeri 27 Jakarta on grade VIII in the academic year of 2016-2017 on subject of the building of prism and limas space.

Methodology of this research using quasi experiment method and the sampling technique is cluster random sampling. There are four classes which was taught by the same teacher. From the four classes that are normally distributed, homogeneous, and have an average similarity, two classes are selected randomly as experimental class I (CORE model) and experimental class II (reciprocal teaching model). The research instrument using final test of mathematical reasoning ability on the subject of building of prism and pyramid space. There are four number of test. Before used, the instrument has passed validity test, construct and empirical validity test. The calculation of reliability is done using Cronbach Alpa formula and obtained reliability coefficient of 0.748 included in the high category.

Based on the calculation of the research data, experimental classes I and II are normally distributed using Kolmogorov-Smirnov test. Then, the homogeneity test results show that both classes have same variance so that hypothesis test uses ttest result. From the calculation results obtained, t result = 2.148 higher than the value t table = 1.668, then H_0 rejected. Thus, it can be concluded that mathematical reasoning ability of students who learn to use CORE model is better than students who learn to use reciprocal teaching model.

Keywords: CORE; *Connecting, Organizing, Reflecting, Extending; Reciprocal Teaching, Mathematical reasoning ability; T-Test Result*