ABSTRACT

DIKY ILMA HAQ. *<u>Comparison of Mathematical Connection Ability of Students Learning Using Generative Learning Model and Novick Learning Model at 110 Senior High School Jakarta</u>. Thesis: Mathematics Education Study Program, Faculty of Mathematics and Natural Sciences, Universitas Negeri Jakarta, 2017.*

This research aims to determine whether there is a difference between the mathematical connections of students who learn to use Generative learning model and Students who learn to use Novick learning model. If there is a difference, does the mathematical connection ability of students who learning using Generative learning models higher than students who learning using Novick learning model.

This research was held at 110 Senior High School Jakarta in July until August 2017. The research method used is quasi experiment. Sampling using two stage random sampling technique. The first stage is purposive sampling, in this case do selection to teachers who teach in five classes. Then the second stage is cluster random sampling, randomly selected two classes of five classes that are normally distributed, homogeneous and have an average similarity. Two classes are defined as experimental classes I and II. The research instrument used is the final test of mathematical connection ability on the subject of linear program as much as 8 items of description. 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 0.796 included in the high category. To fulfill good test requirement, the problem level of question in instrumental has also calculated.

Based on the test results the analysis is divided into two classes of normal populations, and has the same variance, so it is calculated by t-test that has the same variance. Based on the calculation of t-test t_{result} = 4,545 and t_{table}= 1.667. Therefore, $t_{result} > t_{table}$, then H_0 is rejected. Thus it can be concluded that the average of the ability of mathematical connections of students who learn to use Generative learning model is higher than the ability of mathematical connections of students who learn to use Novick learning model in SMA Negeri 110 Jakarta.

Keywords: Generative Learning Model, Novick Learning Model, Mathematical Connection Ability.