

ABSTRACT

FAJAR DWI APRIANTO, Application of Generative Learning Model to Improve Mathematical Connection Ability on Linear Equations System of Two Variabel in Class VIII-D SMP Negeri 77 Jakarta. Thesis, Jakarta: Mathematics Education Program, Faculty of Math and Science, State University of Jakarta, 2017

Mathematical connection ability is one important aspect that must be possessed by students in learning mathematics. However, based on initial test result mathematical connection ability that has been given to students of class VIII-D SMP Negeri 77 Jakarta, showed that the mathematical connection ability of students in the class is still not good. Therefore it takes effort to improve student's mathematical connection ability. One alternative to overcome these problem is to apply the generative learning model. Generative learning model is one of the learning model based on constructivism theory. This study aims to improve the mathematical connections of students of class VIII-D SMP Negeri 77 Jakarta on linear two variables equation system material through the application of generative learning model.

This study used a qualitative approach to the type of classroom action research. This study is held in three cycles, which for each cycle consists of four stages that is planning, implementation, analysis and reflection. The study was conducted in class VIII-D in the even semester of the academic year 2017/2018 at SMP Negeri 77 Jakarta with a total of 36 students. From the total number of students of class VIII-D selected 6 students as research subjects selected based on initial test results of mathematical connection ability.

Based on the research that has been done, mathematical connection ability of students of class VIII-D SMP Negeri 77 Jakarta has increased, both seen from all students of class VIII-D or from six research subject. This can be seen from the final test result in each cycle. The average value of the final test of mathematical connection ability of class VIII-D students in first cycle reached 53, in second cycle increased to 60 and on third cycle increased to 79. The increase can also be seen from the percentage of students of class VIII-D who achieved the standard of success indicator, in first cycle 25% from 36 students reached the standard of success indicator, then on second cycle increased to 44% and in third cycle increased to 81%. While the average value of the final test of mathematical connection ability of research subject in first cycle is 69, then in second cycle increased to 81 and in third cycle increased to 93. Based on these result, it can be conclude that the application of generative learning model can improve student's mathematical connection ability on the material of two variabel linear equation system in class VIII-D SMP Negeri 77 Jakarta.

Keyword: Mathematical Connection Ability, Linear Equations System of Two Variabel and Generative Learning Model