ABSTRACT

FARDIAH MUSNI, *Improving Mathematical Reasoning Abilities of Students Using Learning CORE (Connecting, Organizing, Reflecting, Extending) Model Topic's Circles in Class VIII-4 Junior High School 27 Jakarta. SKRIPSI. Mathematics Education's Program, Faculty of Mathematics and Natural Science, State University of Jakarta, 2016.*

Based on the observations and the results of tests of mathematical reasoning abilities pre-study students do in class VIII-4 Junior High School 27 Jakarta showed that mathematical reasoning skills students categorized as low, at 33.31 on the maximum value of 100, therefore it is necessary to improve the ability of students' mathematical reasoning. One effort to overcome the problem of learning that occurs is using the CORE model. Model CORE consists of four phases, namely connecting, organizing, reflecting, and extending, each stage can improve the ability of students in the learning of mathematical reasoning. This study aims to improve students' mathematical reasoning on the subject of the circle in class VIII-4 Junior High School 27 Jakarta through learning using models CORE

This research is a classroom action that is carried out in three cycles and each cycle consists of four phases: planning, implementation, analysis, and reflection. Each cycle of learning models using CORE. Students are also given the final test at each cycle to measure students' mathematical reasoning abilities. The study lasted from January to March 2016 in class VIII-4 Junior High School 27 Jakarta academic year 2015/2016 the number of students 36 people.

The results showed that the learning of mathematics using CORE model learning can improve students' mathematical reasoning abilities. It is shown by an increase in average test of mathematical reasoning abilities in each cycle. The average value of mathematical reasoning ability of class VIII-4 Junior High School 27 Jakarta in the first cycle was 55.42, the second cycle increased to 68.52, and the third cycle increased to 79.83. Then the number of students who value the ability of mathematical reasoning reaches or exceeds 75 also increased. In the first cycle as much as 11.1% of students, on the second cycle increased to 41.7% of the students, and the third cycle increased to 80.6% of students.

Keywords: Mathematical Reasoning Ability, Learning CORE Model