

ABSTRACT

Ade Nurfatonah (125050096), “The Influence of Learning Cycle 7E Model towards Students’ Improvement of Mathematical Problem solving at Junior High School”.

Mathematics is a subject which is taught in every level of education. Mathematics is also has a wide scope and it can be applicated in daily life activities. The survey of TIMSS and PISA showed that the mathematics of students in Indonesia, especially on mathematical problems solving are still low. One of learning models which can increase students’ mathematical problems solving ability is Learning Cycle 7E model. This research is aimed at knowing the improvement of students’ mathematical problems solving which was taught by implementing Learning Cycle 7 E Model, better than who was implemented by conventional learning model. It is also used to know students’ attitude towards Learning Cycle 7E on mathematics. The method used in this research is experimental method. The populotion of the research is the students of grade VIII of SMP (Junior High School) ‘Nasional’ Bandung. The sample of the research is grade VIII A for experimental class and grade VIII D for control class. The instrument used in this research was competence test of mathematical problem solving, namely essay and attitude questionnaires which used Likert scale. The test was tried out in grade IX. Based on the result of the test showed that all test instrumets were valid to be used in this research. The data analysis was done by SPSS 23.0, for Windows program on pre-test data analysis. Meanwhile for index gain used independent sample t-test. Furthermore, for post-test data analysis used non-parametric test, namely Mann Whitney U. The result of the data analysis showed that there is an improvement of students’ mathematical problems solving which was used Learning Cycle 7E model better than the students who used conventional learning model. Thus, it showed possitive attitude towards Mathematics learning which was used Learning cycle 7E model. Therefor, the Learning cycle model can be used as one of the alternative model to the teachers for active, afective, and joyfull learning.

Keywords: Learning Cycle 7E, Mathematical problems solving, Students’ attitude.