ABSTRACT

Fera Anindya Bunga Asmara. (2018). *Improvement of Mathematical Connection Ability and Self-efficacy of Senior High School Students through Learning Cycle 7E Model (Elicit, Engage, Explore, Explain, Elaborate, Evaluate, and Extend).*

This study aims to: (1) find out whether the improvement of mathematical connection ability among students who gain learning using the Learning Cycle 7E model is higher than students who get the usual learning model; (2) to find out whether the self-efficacy of students who have learned the Learning Cycle 7E model is better than the students who get the usual learning model; (3) to find out whether there is a positive correlation between mathematical connection ability and self-efficacy of students who obtained Learning Cycle 7E model. The method used in this research is the quasi experimental method with the design of pretest-postes control group. The population in this research is all students of class XI SMA Negeri 18 Garut. For sample of research consists of two group. Obtained class XI MIPA 2 as an experimental class that got the Learning Cycle 7E model and XI MIPA 1 class as the control class that get the usual learning model. The instrument used in this research is a description of the test of mathematical connection ability and scale of self-efficacy. The data collected is then processed using IBM SPSS 20.0 for windows software. The results showed that: (1) improvement of mathematical connection ability of students who gain learning using the Learning Cycle 7E model is higher than students who get the usual learning model; (2) improvement of self-efficacy of students who gain learning using the Learning Cycle 7E model is better than students who get the usual learning model; (3) there is no correlation between mathematical connection ability and self-efficacy of students who gain learning using the Learning Cycle 7E model.

Keywords: *Learning Cycle 7E, mathematical connection ability, self-efficacy*