

## ABSTRACT

Purnamasari, Shintya Rizky. (2017). **The Application of Learning Cycle 7E Model to increase Ability of Mathematical Connection and Self-efficacy of Senior High School Students.**

One form of learning difficulties is that students find it difficult to connect the material taught by the teacher or in other words the students' mathematical connection level is still low. Students' self-efficacy should be planted and nurtured in the students, since the role of self-efficacy in mathematics learning is very important. In accordance with the problems that have been formulated, the purpose of this study is (1) to determine whether the increased ability of mathematical connections of students who gain learning using the Learning Cycle 7E model is better than students who obtain conventional learning; (2) to find out whether the increase in self-efficacy of learners using the Learning Cycle 7E model is better than that of students receiving conventional learning; (3) to find out whether there is a correlation between mathematical connection ability and self-efficacy of students who gain learning using Learning Cycle 7E model; (4) to determine whether there is a correlation between mathematical connection ability and self-efficacy of students who acquire conventional learning. The method used in this research is the experimental method with the design of pretest postes control group. The population in this research is the students of SMA Angkasa Lanud Husein Sastranegara and the samples are two classes of XI IPS in SMA Angkasa Lanud Husein Sastranegara. Instruments used in this study is a test of mathematical connection ability and scale of self-efficacy. Based on data analysis and research findings obtained can be concluded that (1) Improvement of mathematical connection ability of students who gain learning using Learning Cycle 7E learning model is better than students who get conventional learning; (2) Enhancement of self-efficacy of learners using learning model Learning Cycle 7E is better than students who have received conventional learning; (3) There is no correlation between mathematical connection ability and self-efficacy of students who gain learning using Learning Cycle 7E learning model and students who gain conventional learning.

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