

ABSTRACT

Arie Firmansyah (2018). **Enhancement Mathematical Understanding and Self-Efficacy Ability of High School Students Through the Learning Cycle 7E Model (Elicit, Engage, Explore, Explain, Elaborate, Evaluate, and Extend).**

Understanding is included in the mathematical ability standard required by students. But the ability of students' mathematical understanding is still low. The causes is not being able to solve problems and understand mathematical concepts correctly and the low self-efficacy of students. One alternative in learning that can Enhance the ability of mathematical understanding and self-efficacy is the Learning Cycle 7E Model. The purpose of this research are: 1) To determine the increase in mathematical understanding abilities of high school students who obtain Learning Cycle 7E Model with students who obtain conventional learning; 2) To find out self-efficacy ability of students who obtain Learning Cycle 7E Models with students who obtain in conventional learning model; 3) to determine the effectiveness of Learning Cycle 7E Model in mathematical connection abilities. The method used in this study is an experimental method with a research design is pretest and posttest. The population in this study were students of SMA Pasundan 8 Bandung class X. The sample of this study was randomly selected in 2 classes, namely X Ips 3 class as experiment class and X Ips 1 class as control class in SMA Pasundan 8 Bandung. The research instrument from the mathematical comprehension ability test instrument made in the form of description (pretest-posttest) and non-test instrument in the form of self-efficacy questionnaire. Data analysis used parametric test on pretest-posttest data through SPSS Statistics 24.0 for Windows software and cohend's formula to see effectiveness. From the analysis of research data, the following conclusions are obtained: 1) Enhancement mathematical understanding ability of students who obtain Learning Cycle 7E Model is higher than the student who obtain conventional learning; 2) Self-Efficacy students who obtain Learning Cycle 7E Model are better than Self-Efficacy students who use conventional learning; 3) The effectiveness of Learning Cycle 7E Model for students' mathematical understanding ability is classified into large categories.

Keywords: Learning Cycle 7E Model, Mathematical Understanding, Self-Efficacy.