

ABSTRACT

Ajeng Annie Agnisha. (2018). ***Improvement of Mathematical Abstraction Ability and Self-directed Learning of Junior High School Students through Contextual Teaching and Learning.***

Mathematical abstraction ability has an important role in the success of students mathematics course. In fact, the mathematical connection ability of junior high school student is not quite good. Student self-directed learning should be planted and nurtured in the students, in the students, since the role of self-directed learning in mathematics learning is very important. This study aims to: (1) find out whether the improvement of mathematical abstraction ability among students who gain learning using the Contextual Teaching and Learning is higher than students who get the usual learning model; (2) to find out whether the self-directed learning of students who have learned the Contextual Teaching and Learning is better than the students who get the usual learning model; (3) to find out whether there is a positive correlation between mathematical abstraction ability and self-directed learning of students who obtained Contextual Teaching and 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 all students of class VII SMP Negeri 1 Majalaya. For the sample of research consists of two classes. Obtained class VII J as an experimental class that got the Contextual Teaching and Learning and VII F 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 abstraction ability and scale of self-directed learning. The data which is collected then it is processed using software IBM SPSS 20.0 for windows. The results showed that: (1) improvement of mathematical abstraction ability of students who gain learning using the Contextual Teaching and Learning is higher than students who get the usual learning model; (2) improvement of self-directed learning of students who gain learning using the Contextual Teaching and Learning is better than students who get the usual learning model; (3) there is no correlation between mathematical abstraction ability and self-directed learning of students who gain learning using the Contextual Teaching and Learning.

Keywords: *Contextual Teaching and Learning, mathematical abstraction ability, self-directed learning*