

ABSTRACT

Mentari Novyati S.N. (2018). Improvement of Mathematical Reasoning Ability and Self-efficacy Ability of Junior High School Students Through Genertified Learning Model with PQ4R Method (Preview, Question, Read, Recite, Review)

Mathematical material and mathematical reasoning are two things that cannot be separated. However, the low mathematical reasoning on students causes learning activities to be less effective. Lack of mathematical reasoning on students can be caused by learning activities that are not effective, learning models that are less precise so that the learning objectives are not achieved. Therefore, it is necessary to apply an appropriate learning model so that learning activities will be effective and students' mathematical reasoning abilities will increase. One alternative learning that is expected to be able to improve students' mathematical reasoning ability is the Generative learning model with the PQ4R Method. This research method is experimental research. The population in this study were students of SUKARAJA 2 Junior High School with a sample of eighth grade students of SMP 2 SUKARAJA selected randomly according to class. The instrument in this study is a test and attitude scale. The test was tested first. From the results of the trial of the questions not all at once all categorized as good, therefore the questions that do not meet the requirements have been corrected so that they are worthy of being used as research instruments. Analysis of research data using the IBM SPSS Statistic 17.0 for Windows program. Based on the data analysis, it was concluded that: (1) the improvement of students' mathematical reasoning ability which was applied in the generative learning model with the PQ4R method was higher than the students who applied the Discovery Learning learning model. (2) the improvement of students' self-efficacy ability using the generative learning model with the PQ4R method is better than students who use Discovery Learning. (3) there is no correlation between mathematical reasoning ability and self-efficacy that uses generative learning models with the PQ4R method.

Keywords: *Mathematical Reasoning Ability, Self-efficacy, and Generative Learning Model with PQ4R Method*