ABSTRACT

Rifa Aghnia Fi'la. Improvement of Mathematical Problem Solving Ability and Self-Regulated Learning of Junior High School Students through Project-Based Learning Models.

One subject that plays a role in the world of education is mathematics. But the reality now is that students' ability to master mathematics is very low. One of the main factors of the decline in the achievement of mathematics is the ability to solve problems that are still low. Therefore the purpose of this study was to (1) find out the improvement of mathematical problem solving abilities of students who obtained project-based learning models higher than students who obtained conventional learning, (2) know the completeness of students who obtained project-based learning models and (3) knowing that self-regulated learning students who obtain project-based learning model are better than students who obtain conventional learning. The research method used in this study is an experimental method. The research design used was pretest-posttest control group. The sampling technique used was purposive sampling technique. The subjects in this study were eighth grade students at Pasundan 6 Bandung Junior High School with each student for the experimental class and the control class were 27 people in the experimental class and 25 people in the control class. Data collection techniques used instruments in the form of written tests of problem solving abilities and self-regulated learning questionnaires. Data processing and analysis using the help of Microsoft Excel and SPSS version 17.0. The results of this study indicate that the improvement of students' mathematical problem solving abilities that obtain project-based learning model is higher than those of students who obtain conventional learning models. As well as self-regulated learning students who obtain project-based learning are not significantly different from students who obtain conventional learning models.

Keywords: Project-Based Learning, Problem Solving Ability, Self-Regulated Learning