

ABSTRACT

Yunichi C. Silalahi. Application of Search, Solve, Create, and Share (SSCS) Model assisted by Geogebra to Improve Mathematical Problem Solving Ability and Learning Independence of Junior High School Students.

The use of inappropriate learning models can affect the effectiveness of learning activities and can affect learning objectives. Therefore, it is necessary to update the learning model and media so that learning activities can run effectively and optimally. One alternative that can be used is the Search, Solve, Create, and Share (SSCS) learning model assisted by Geogebra. Mathematical problem solving skills can be mastered well if supported by affective abilities, one of which is learning independence. The purpose of this study was to find out: 1) whether the increase in mathematical problem solving ability of students who obtained Geogebra-assisted SSCS learning model is higher than students who obtained conventional learning model; 2) whether the learning independence of students who obtained Geogebra-assisted SSCS learning model is better than students who obtained conventional learning model; 3) whether there is a correlation between mathematical problem solving ability and learning independence of students who obtained Geogebra-assisted SSCS learning model. The research method used is a quasi-experiment with a non-equivalent control group design. The subjects of this study were students of class VIII SMPN 12 Bandung. The research instruments used were mathematical problem solving ability test and learning independence questionnaire. Based on the results of data analysis, it was concluded that: 1) the mathematical problem solving ability of students who obtained the SSCS learning model assisted by Geogebra was higher than students who obtained the conventional learning model; 2) the learning independence of students who obtained the SSCS learning model assisted by Geogebra was better than students who obtained the conventional learning model; 3) there was no correlation between the SSCS learning model assisted by Geogebra on mathematical problem solving ability and student learning independence.

Keywords: *Mathematical Problem Solving Ability, Learning Independence, Search, Solve, Create, and Share (SSCS), and Geogebra.*