

ABSTRACT

Neng Linda Rahayu (2019). **Application of Search, Solve, Create and Share (SSCS) Learning Models to Improve the Mathematical Representation and Self-Efficacy Ability of Middle School Students**

The target of mathematics learning at every level of education is to develop students' abilities in mathematical representation. Development of this capability is very necessary so that students better understand the concepts learned, and can apply them in various situations. Representation is one of the five abilities students should know and can do, namely: problem solving, reasoning, communication, connection, and representation. The purpose of this study: (1) To determine the increase in the ability of mathematical representation of students who obtain the Search, Solve, Create and Share (SSCS) learning models compared to students who obtain conventional learning. (2) To determine the increase in self-efficacy of students who obtain the Search, Solve, Create and Share (SSCS) learning models compared to those who obtain conventional learning. (3) To describe the effectiveness of increasing the ability of mathematical representation using the Search, Solve, Create and Share (SSCS) learning model. The method used in this study was a quasi-experimental method with pretest and posttest design. The population in this study were seventh grade students of Al-Falah Middle School Bandung. Samples were randomly selected as many as 2 classes namely class VII-F as the control class and VII-G as the experimental class. The research instrument used consisted of a mathematical representation ability test instrument made in the form of a description (pretest and posttest) and a non-test instrument in the form of a self-efficacy questionnaire. Data analysis using parametric test through SPSS Statistics 20.0 for Windows software. The conclusion of this study: (1) Improving the ability of mathematical representation of students who obtain the Search, Solve, Create and Share (SSCS) learning model is better than students who obtain conventional learning. (2) Improvement of self-efficacy of students who obtain Search, Solve, Create and Share (SSCS) learning skills is better than students who get conventional learning. (3) The Search, Solve, Create and Share (SSCS) learning model is effectively applied to improve students' mathematical representation abilities.

Keywords: *representation ability, self-efficacy, Search, Solve, Create, and Share (SSCS) models*