ABSTRACT


Mathematical communication abilities are very important for students because they are the ability to convey mathematical ideas both orally and in writing and can develop students' thinking abilities. To achieve mathematical communication abilities, requires the strong character one of which is self-efficacy. But in reality the mathematical communication abilities and self-efficacy of students in Indonesia are still relatively low. One alternative learning to improve mathematical communication abilities and self-efficacy is the Probing-Prompting learning model. This model presents a series of questions that are demanding and explore students' ideas so that they can improve students' thinking processes that are able to link knowledge and experience with new knowledge being learned. The purpose of this study are: 1) To find out the increase in mathematical communication abilities of students who obtain Probing-Prompting model is higher than students who obtain conventional learning models; 2) To find out the achievement of self-efficacy of students who obtain Probing-Prompting model is better than students who obtain conventional learning models; 3) To find out whether there is a positive correlation between mathematical communication abilities and self-efficacy of students who Probing-Prompting model.

The method used in this study is a quasi-experimental method with a pretest-posttest control group experimental design. The population of this study was tenth grade students of High School No. 15 Bandung. The sampling technique was purposive sampling, using two classes, namely the control class and the experimental class. The research instrument used was a mathematical communication ability test instrument and a non-test instrument in the form of a self-efficacy questionnaire. Data analysis using SPSS Statistics 23 for Windows software. Based on the results of data analysis, the following conclusions are obtained: 1) The increase in mathematical communication abilities of students who obtain Probing-Prompting model is higher than students who obtain conventional learning models; 2) Self-efficacy of students who obtain Probing-Prompting model is better than with students who obtain conventional learning models; 3) There is a positive correlation between mathematical communication abilities and students' self-confidence who obtained the Probing-Prompting model.

Keywords: Mathematical Communication Ability, Self-Efficacy, Probing-Prompting