ABSTRACT


Mathematical communication is the ability to express mathematical ideas coherently to friends, educators, through language, verbal, writing. In order to create indicators in mathematical communication skills, self-confidence is needed in these things. However, mathematical communication skills and student self-confidence are still low. One of the learning that is considered suitable to be used to improve mathematical communication skills and self-confidence of junior high school students is the Problem Centerd Learning (PCL) model. The purpose of this study aims to: 1) know the achievement of mathematical communication skills of students who obtained the PCL model better than students who received ordinary models; 2) know the improvement of mathematical communication skills of students who obtained the PCL model compared to students who obtained the ordinary model; 3) know the increase in self-confidence of students who obtained the PCL model compared to students who obtained the ordinary model; 4) describe the effectiveness of the PCL model for students' mathematical communication skills. This study uses a quasi-experimental method. The population in this study were eighth grade students of Bandung National Middle School. Samples are taken as many as two randomly selected classes. The research instrument used was a type test of mathematical communication ability questions and attitude scale questionnaire. Data analysis was performed using the t-test and effect size test. Based on the analysis of research data, it can be concluded that: 1) Achievement of mathematical communication skills of students who obtain the PCL model is better than students who obtained the ordinary model, 2) the improvement of mathematical communication skills of students who obtained the PCL model was higher than students who obtained the ordinary model, 3) the self-confidence of students who obtained the PCL model was better than the students who obtained the ordinary model, 4) effectiveness of the PCL model for mathematical communication skills classified as large categories. Thus the PCL model can be used as an alternative for teachers in carrying out classroom learning

Keywords: Problem Centered Learning, Mathematical Communication, Self-confidence.