

ABSTRACT

Novia Tiarsa Lugita (145050063). 2018. "Improvement of Mathematical Communication Ability and Self-Confidence of Middle School Students through Process Oriented Guided Inquiry Learning (POGIL)".

The purpose of this study was to determine: 1) the improvement of mathematical communication skills of students who obtained mathematics learning using a Process Oriented Guided Inquiry Learning (POGIL) model approach was higher than students who obtained the ordinary learning model, 2) self-confidence of students who obtained learning Mathematics by using the Process Oriented Guided Inquiry Learning (POGIL) model approach is better than students who obtain the usual learning model, 3) students mathematical communication skills who obtain Process Oriented Guided Inquiry Learning (POGIL) models are better than students who obtain the usual learning model, 4) the correlation between students' mathematical communication skills and self-confidence who obtained Process Oriented Guided Inquiry Learning (POGIL) models. This research was conducted at the VIII Bandung National Middle School, 2018/2019 school year. The method used in this study is the experimental research method with the Pretest-Posttest Control Group Design research design. Samples This study consisted of 80 students consisting of 40 experimental class students and 40 control class students with the topic of Number Patterns. From the results of the trial, it was found that all test questions were feasible to use and self-confidence scale. Based on the analysis using SPSS 17.0 for Windows software, the results of the research data are concluded: 1) The improvement of mathematical communication skills of students who obtained mathematics learning using the Process Oriented Guided Inquiry Learning (POGIL) model approach was higher than students who obtained the ordinary learning model, 2) Self-confidence of students who obtained mathematics learning using the Process Oriented Guided Inquiry Learning (POGIL) model approach was better than students who obtained the ordinary learning model, 3) students' mathematical communication skills who obtained Process Oriented Guided Inquiry Learning (POGIL) models were better than students who obtained the usual learning model, 4) there was a correlation between mathematical communication skills and self-confidence of students who obtained Process Oriented Guided Inquiry Learning (POGIL) models.

Keywords: POGIL Model, Mathematical Communication Ability, Self-confidence.