

**THE INFLUENCE OF THE PROBLEM BASED LEARNING (PBL)  
MODEL TO IMPROVE PRIMARY SCHOOL STUDENTS' ABILITY TO  
UNDERSTAND MATHEMATICAL CONCEPTS**

**TRI ASSYFA LESTARI  
205060159**

**ABSTRACT**

*The background to this research is that the cognitive learning outcomes and understanding of students at SD Negeri 210 Babakan Sinyar are still low, and there is still a need for innovation in learning activities. This research aims to determine the learning process that involves learning using Problem Based Learning (PBL) and conventional models. To determine differences in students' ability to understand mathematical concepts. To determine the influence of the Problem Based Learning (PBL) model. To determine the increasing influence of the Problem Based Learning (PBL) model. This research uses quantitative methods with a quasi-experimental research approach, non-equivalent control group design type. The population of this study was 25 students in class IV C (experiment) and 23 students in class IV B (control) using a conventional learning model. The data collection technique used is through pretest posttest, observation sheets and interviews. Data analysis techniques were carried out using normality tests, homogeneity tests, independent sample t tests, effect size tests, and N Gain tests. Based on the results of this research, it shows that there are differences between the experimental class and the control class. This can be seen from the results of the independent sample t test which produces a significance value of 0.000, and there is an influence on learning outcomes between the experimental class and the control class. This can be seen from the results of the Effect Size test, namely 1.868, which means that the Problem Based Learning (PBL) model has a strong influence on students' ability to understand mathematical concepts. Apart from that, there was an increase between the experimental class and the control class. This can be seen from the N Gain score test results of 0.6 in the experimental class and 0.5 in the control class. So it can be concluded that there are differences between classes that use the Problem Based Learning (PBL) model and classes that use the conventional model. Apart from that, there is the influence of the Problem Based Learning (PBL) model to improve elementary school students' ability to understand mathematical concepts. And there was a significant increase in the experimental class before and after using the Problem Based Learning (PBL) model.*

*Keywords: Problem Based Learning (PBL) Model, Concept Understanding Ability, Elementary School Students*