

## ABSTRACT

**William Bermand Christopher Sitinjak, IDN 4201111035 (2024). The Effect of The Problem-Based Learning Model on Students' Mathematics Problem Solving Abilities.**

This research aims to describe the effect of problem-based learning model to improve students' mathematics problem solving abilities. The type of this research is quasi experiment. The design of this research using control and experiment class. The technique of data collection by using pre-test and post-test. The population in this study were all VIII grade students of SMP Negeri 6 Medan as many as 330 students spread over 11 classes. The sample in this study were 60 students each 30 students spread over 2 classes, namely class VIII-J as the experimental class and VIII- I as the control class which are taken purposively. Data of this research were analyzed by using normality test, homogeneity test, and t-test. Assisted by SPSS, data obtained is normal and homogeneous. The significance level of t-test is less than 0.05 such that  $H_0$  was rejected and  $H_a$  was accepted. Thus, the conclusion that can be drawn is that the mathematical problem solving ability of students taught with the Problem-Based Learning model is better than students taught with the direct instructional model.

**Keywords:** Mathematics problem solving abilities, problem-based learning model, effect