

**THE EFFECT OF PROJECT BASED LEARNING (PjBL)
MODEL USING WORDWALL APPLICATION TO IMPROVE
MATHEMATICS LEARNING OUTCOMES IN GRADE III
ELEMENTARY SCHOOL STUDENTS**

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ABSTRACT

This research is motivated by the low mathematics learning outcomes of students. The purpose of this study was to determine (1) how the learning process is described using the Project Based Learning (PjBL) model assisted by the Wordwall application compared to the conventional learning model. (2) to determine the difference in average learning outcomes (3), to determine the increase in learning outcomes, (4) and to determine the effect of using the PjBL model assisted by the wordwall application on student learning outcomes. This study uses a quantitative approach with a quasi-experimental method and a nonequivalent control group design. The sample in this study were students in grades III B and III C. The data collection techniques used by researchers in this study were tests and non-tests. This study uses data analysis techniques with the help of SPSS (Statistical Product and Service Solution) computer software. The results of the study showed that the learning process with the PjBL model assisted by wordwall went well and according to the stages. The independent sample t-test on the pretest data showed a significance value of 0.062, while the posttest results were tested using the Mann-Whitney test with a significance value of 0.034. The results of the normalized gain calculation showed an increase of 59% in the experimental class and 52% in the control class. In addition, the effect size value of 0.65 indicated a moderate effect. Based on these results, it can be concluded that the Project Based Learning model assisted by the Wordwall application can not only be implemented well, but is also able to influence students' mathematics learning outcomes compared to conventional learning models.

*Keywords: Project Based Learning Model, Mathematics Learning Outcomes,
Wordwall*