

ABSTRAK

PENGARUH MODEL *PROJECT BASED LEARNING* TERHADAP KEMAMPUAN REPRESENTASI MATEMATIS SISWA (Studi pada Siswa Kelas VIII SMP Negeri 26 Pesawaran Semester Ganjil Tahun Ajaran 2023/2024)

Oleh

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Penelitian eksperimen semu ini bertujuan untuk mengetahui pengaruh model *Project Based Learning* (PjBL) terhadap kemampuan representasi matematis siswa. Populasi penelitian ini adalah seluruh siswa kelas VIII SMP Negeri 26 Pesawaran tahun pelajaran 2023/2024 sebanyak 94 siswa yang terdistribusi ke dalam tiga kelas secara heterogen yaitu kelas VIII-A, VIII-B, dan VIII-C. Sampel penelitian ini adalah kelas VIII-B sebanyak 31 siswa dan kelas VIII-C sebanyak 32 siswa yang dipilih dengan teknik *cluster random sampling*. Desain penelitian yang digunakan adalah *randomized pretest-posttest control group design* dengan kelas VIII C sebagai kelas eksperimen dan kelas VIII B sebagai kelas kontrol. Data penelitian ini berupa data kuantitatif yang diperoleh melalui tes kemampuan representasi matematis. Berdasarkan hasil uji *Mann-Whitney U* diperoleh bahwa median data *gain* kemampuan representasi matematis siswa yang mengikuti model PjBL lebih tinggi daripada median data *gain* kemampuan representasi matematis siswa yang mengikuti pembelajaran konvensional. Dengan demikian dapat disimpulkan bahwa model PjBL berpengaruh terhadap kemampuan representasi matematis siswa kelas VIII di SMP Negeri 26 Pesawaran.

Kata kunci: pengaruh, *Project Based Learning* (PjBL), representasi matematis

ABSTRACT

THE EFFECT OF PROJECT-BASED LEARNING MODEL ON STUDENTS' MATHEMATICAL REPRESENTATION ABILITY (Study on Students of Class VIII SMP Negeri 26 Pesawaran Odd Semester of the 2023/2024 Academic Year)

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This quasi-experimental research aims to determine the effect of the Project Based Learning (PjBL) model on students' mathematical representation skills. The population of this study were all VIII grade students of SMP Negeri 26 Pesawaran in the 2023/2024 academic year as many as 94 students distributed into three classes heterogeneously that is class VIII-A, VIII-B, and VIII-C. The samples of this study were VIII-B class of 31 students and VIII-C class of 32 students selected by cluster random sampling technique. The research design used was randomized pretest-posttest control group design with class VIII C as the experimental class and class VIII B as the control class. This research data is in the form of quantitative data obtained through the mathematical representation ability test. Based on the Mann-Whitney U test results, it was found that the median data gain of mathematical representation ability of students who followed the PjBL model was higher than the median data gain of mathematical representation ability of students who followed conventional learning. Thus it can be concluded that the PjBL model has an effect on the mathematical representation skills of class VIII students at SMP Negeri 26 Pesawaran.

Keywords: effect, mathematical representation, Project Based Learning (PjBL)