

ABSTRAK

PENGARUH MODEL *PROBLEM BASED LEARNING* TERHADAP KEMAMPUAN KOMUNIKASI MATEMATIS SISWA SMP (Studi pada Siswa Kelas VIII SMP Negeri 10 Bandar Lampung Semester Genap Tahun Ajaran 2024/2025)

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Penelitian ini bertujuan untuk mengetahui pengaruh model *Problem Based Learning* terhadap kemampuan komunikasi matematis siswa SMP. Populasi pada penelitian ini adalah seluruh siswa kelas VIII SMP Negeri 10 Bandar Lampung tahun ajaran 2024/2025 sejumlah 344 siswa yang terbagi dalam 11 kelas yaitu kelas VIII.1 sampai VIII.11. Sampel penelitian ini adalah kelas VIII.3 sebanyak 32 siswa dan kelas VIII.4 sebanyak 31 siswa yang dipilih dengan teknik *purposive sampling*. Desain penelitian yang digunakan adalah *pretest-posttest control group design* dengan kelas VIII.3 sebagai kelas eksperimen dan VIII.4 sebagai kelas kontrol. Pengambilan teknik sampel ini dilakukan secara pertimbangan tertentu, pertimbangan yang digunakan adalah kedua kelas diajar oleh guru yang sama dan memiliki kemampuan yang relatif sama. Data pada penelitian ini berupa data kuantitatif yang diperoleh melalui tes kemampuan komunikasi matematis siswa. Berdasarkan hasil uji hipotesis menggunakan uji *Mann-Whitney U* diperoleh bahwa median peningkatan kemampuan komunikasi matematis siswa yang mengikuti model *Problem Based Learning* lebih tinggi daripada median peningkatan kemampuan komunikasi matematis siswa yang mengikuti pembelajaran konvensional, sehingga dapat disimpulkan bahwa penerapan model *Problem Based Learning* berpengaruh terhadap kemampuan komunikasi matematis siswa.

Kata Kunci: komunikasi matematis, pengaruh, *problem based learning*

ABSTRACT

THE EFFECT OF PROBLEM BASED LEARNING MODEL ON STUDENTS' MATHEMATICAL COMMUNICATION ABILITY OF JUNIOR HIGH SCHOOL

**(Study on VIII grade students of SMP Negeri 10 Bandar Lampung even
semester academic year 2024/2025)**

By

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This study aims to determine the effect of Problem Based Learning model on students' mathematical communication ability of junior high school. The population in this study were all VIII grade students of SMP Negeri 10 Bandar Lampung in the academic year 2024/2025 totaling 344 students divided into 11 classes, namely classes VIII.1 to VIII.11. The samples of this study were VIII.3 class of 32 students and VIII.4 class of 31 students selected by purposive sampling technique. The research design used was pretest-posttest control group design with class VIII.3 as the experimental class and VIII.4 as the control class. This sampling technique was carried out by certain considerations, the considerations used were that both classes were taught by the same teacher and had relatively similar abilities. The data in this study are quantitative data obtained through tests of students' mathematical communication ability. Based on the results of hypothesis testing using the Mann-Whitney U test, it was found that the median gain score of mathematical communication ability for students who participated the Problem Based Learning model is higher than the median gain score of mathematical communication ability for students who participated the conventional learning, it can be concluded that the implementation of the Problem Based Learning model has an effect on students' mathematical communication ability.

Keywords: *effect, mathematical communication, problem based learning,*