

ABSTRAK

PENGARUH MODEL *DISCOVERY LEARNING* TERHADAP KEMAMPUAN REPRESENTASI MATEMATIS SISWA (Studi pada Siswa Kelas VIII SMP Muhammadiyah 1 Ambarawa Semester Ganjil Tahun Pelajaran 2023/2024)

Oleh:

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Penelitian ini bertujuan untuk mengetahui pengaruh model *discovery learning* terhadap kemampuan representasi siswa. Penelitian ini merupakan *quasi experiment*, dengan desain penelitian *posttest only control group design*. Populasi pada penelitian ini adalah seluruh siswa kelas VIII SMP Muhammadiyah 1 Ambarawa semester ganjil tahun pelajaran 2023/2024 sebanyak 93 siswa yang terdistribusi ke dalam tiga kelas. Pengambilan sampel dilakukan dengan teknik *cluster random sampling* dan terpilih siswa kelas VIII B sebanyak 32 siswa sebagai kelas eksperimen dan VIII A sebanyak 32 siswa sebagai kelas kontrol. Data penelitian ini berupa data kuantitatif yang diperoleh dari tes kemampuan representasi matematis siswa. Hasil analisis data menunjukkan bahwa kemampuan representasi matematis siswa yang mengikuti pembelajaran dengan model *discovery learning* lebih tinggi daripada kemampuan representasi matematis siswa yang mengikuti pembelajaran konvensional. Berdasarkan hasil penelitian dan pembahasan dapat disimpulkan bahwa model *discovery learning* berpengaruh terhadap kemampuan representasi matematis siswa.

Kata kunci: kemampuan representasi matematis siswa, *discovery learning*, pengaruh

ABSTRACT

THE EFFECT OF THE DISCOVERY LEARNING MODEL ON STUDENTS' MATHEMATICAL REPRESENTATION ABILITY

(A Study on Grade VIII Students at SMP Muhammadiyah 1 Ambarawa, First Semester of the 2023/2024 Academic Year)

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This study aims to determine the effect of the discovery learning model on students' representational abilities. This research employed a quasi-experimental method with a posttest-only control group design. The population of this study consisted of all eighth-grade students of Muhammadiyah 1 Junior High School in the odd semester of the 2023/2024 academic year, totaling 93 students distributed across three classes. The samples were selected using the cluster random sampling technique, resulting in Class VIII B consisting of 32 students as the experimental class and Class VIII A consisting of 32 students as the control class. The data in this study were quantitative data obtained from tests of students' mathematical representation abilities. The results of the data analysis showed that the mathematical representation abilities of students who participated in learning using the discovery learning model were higher than those of students who participated in conventional learning. Based on the results of the research and discussion, it can be concluded that the discovery learning model has an effect on students' mathematical representation abilities.

Keywords: *students' mathematical representation abilities, discovery learning, influence*