

## ABSTRAK

### **Friday Tindaon, NIM 4173311046 (2021). Meta-Analisis Penerapan Model Pembelajaran Problem Based Learning Untuk Meningkatkan Hasil Belajar Matematika Siswa**

Penelitian ini bertujuan untuk mendeskripsikan peningkatan hasil belajar matematika siswa sekolah menengah pertama (SMP) melalui penerapan model pembelajaran *problem based learning* berdasarkan beberapa artikel jurnal nasional. Jenis penelitian yang digunakan dalam penelitian ini adalah meta-analisis yaitu dengan melakukan perumusan masalah, mengumpulkan data dengan melakukan penelusuran artikel jurnal yang relevan pada sinta, menentukan besarnya nilai *effect size*, menganalisis artikel jurnal kemudian melakukan penarikan kesimpulan. Instrumen penelitian dalam penelitian ini adalah peneliti sendiri (*human instrument*). Peneliti memperoleh sebanyak 12 artikel jurnal nasional yang sesuai dengan kriteria sampel penelitian yang telah ditentukan. Metode penelitian yang digunakan dalam penelitian ini adalah penelitian kuantitatif. Penelitian ini dilakukan di Digital Library Universitas Negeri Medan pada semester genap tahun ajaran 2020/2021 pada 8 April sampai dengan 3 Juni 2021. Berdasarkan hasil dan pembahasan diperoleh bahwa penerapan model pembelajaran *problem based learning* dapat meningkatkan hasil belajar matematika siswa yaitu pada nilai *pretest* dan *posttest* mengalami peningkatan atau kenaikan yang signifikan. Sebelum menggunakan model pembelajaran *problem based learning* diperoleh nilai rata-rata hasil belajar matematika siswa sebesar 71,81708 sedangkan setelah menggunakan model pembelajaran *problem based learning* diperoleh nilai rata-rata hasil belajar matematika siswa sebesar 82,50567. Melalui perhitungan besar pengaruh (*effect size*) dari keduabelas artikel jurnal diperoleh nilai *effect size* tertinggi sebesar 5,10458712 yang menandakan bahwa penerapan model pembelajaran *problem based learning* memberikan pengaruh yang besar terhadap peningkatan hasil belajar matematika siswa.

**Kata Kunci:** *Problem Based Learning*, Hasil Belajar Matematika Siswa



## ABSTRACT

### **Friday Tindaon, NIM 4173311046 (2021). Meta-Analysis of the Application of Problem Based Learning Models to Improve Students' Mathematics Learning Outcomes**

This study aims to describe the improvement of mathematics learning outcomes for junior high school students through the application of problem based learning model based on several national journal articles. The type of research used in this study is meta-analysis, namely by formulating problems, collect data by searching relevant journal articles through on Sinta, determining the *effect size* value, analyzing journal articles and then drawing conclusions. The research instrument in this study is the researcher himself (human instrument). Researchers obtained as many as 12 national journal articles that match the criteria for the research sample that has been determined. The research method used in this research is quantitative research. This research was conducted in the Digital Library of Medan State University in the general semester of the 2020/2021 academic year on April 8 to June 3, 2021. Based on the results and discussion, it is found that the application of the problem based learning model can improve students' mathematics learning outcomes, namely the pretest and posttest scores have increased or increased significantly. Before using the problem based learning model, the average value of students' mathematics learning outcomes was 71,81708, while after using the problem based learning model, the average value of students' mathematics learning outcomes was 82.50567. Through the calculation of the effect size of the 12 jounal articles, the highest effect size value is 5,10458712 which indicates that the application of the problem based learning model has a major influence on improving students' mathematics learning outcomes.

**Keywords:** Problem Based Learning, Student Mathematics Learning Outcomes

