

## ABSTRAK

**Mean Yulius Padang, NIM 4213311045(2025). Pengaruh Model Pembelajaran *Problem Based Learning* Menggunakan Media Visual Pada Pembelajaran Matematika Terhadap Berpikir Kritis Siswa Pada Tingkat Sekolah Menengah Pertama Kelas VIII**

Penelitian ini bertujuan menganalisis pengaruh model pembelajaran *Problem Based Learning* (PBL) berbantuan media visual terhadap kemampuan berpikir kritis siswa kelas VIII SMP Negeri 37 Medan pada mata pelajaran matematika materi Teorema Pythagoras. Dengan sampel yang terdiri dari dua kelas yaitu kelas Eksperimen 32 siswa yang mendapatkan perlakuan dengan model pembelajaran *Problem based learning* dengan bantuan media visual dan kelas Kontrol 32 siswa dengan model pembelajaran Konvensional. Instrumen dari penelitian yaitu dengan tes uraian yang terdapat 3 soal yang sudah di uji dengan validitas dan reliabilitas. Analisis data dilakukan dengan menggunakan *Independent sample t-test* dan N-Gain dengan bantuan spss 22.

Hasil peningkatan menunjukkan bahwa; uji-t signifikan pada kelas eksperimen dengan rata-rata posttest 77.06 dibandingkan kelas kontrol 62.34, teruji bahwa uji-t (signifikansi  $0,000 < 0,05$ ) sehingga  $H_0$  ditolak dan  $H_a$  diterima, yang dimana terdapat perbedaan kemampuan berpikir kritis kelas kontrol dan kelas eksperimen. N-Gain dengan rata-rata 0.6119 (kategori sedang), dengan kata lain dengan penerapan model pembelajaran *Problem Based Learning* cukup efektif dalam meningkatkan kemampuan berpikir kritis pada siswa.

**Kata Kunci:** *Problem Based Learning*, Kemampuan Berpikir Kritis

## ABSTRACT

**Mean Yulius Padang, NIM 4213311045 (2025). The Effect of Problem Based Learning Model Using Visual Media in Mathematics Learning on Students' Critical Thinking in Junior High School Grade VIII.**

This study aims to analyze the effect of the Problem Based Learning (PBL) learning model assisted by visual media on the critical thinking skills of eighth grade students of SMP Negeri 37 Medan in the mathematics subject of the Pythagorean Theorem. With a sample consisting of two classes, namely the Experimental class of 32 students who received treatment with the Problem based learning model assisted by visual media and the Control class of 32 students with the Conventional learning model. The instrument of the study is a descriptive test containing 3 questions that have been tested for validity and reliability. Data analysis was carried out using the Independent sample t-test and N-Gain with the help of SPSS 22.

The results of the increase show that; the t-test is significant in the experimental class with an average posttest of 77.06 compared to the control class of 62.34, it is tested that the t-test (significance  $0.000 < 0.05$ ) so that  $H_0$  is rejected and  $H_a$  is accepted, where there is a difference in the critical thinking ability of the control class and the experimental class. N-Gain with an average of 0.6119 (moderate category), in other words, the application of the Problem Based Learning learning model is quite effective in improving critical thinking skills in students.

**Keywords:** Problem Based Learning, Critical Thinking Skills