

ABSTRAK

Alfina Trijayanti, NIM 4213311014 (2025). Pengaruh Model *Problem Based Learning* Terhadap Kemampuan Berpikir Kritis Pada Siswa Sekolah Menengah Pertama Negeri 37 Medan.

Penelitian ini bertujuan untuk menganalisis pengaruh model *Problem Based Learning* terhadap kemampuan berpikir kritis siswa kelas VIII SMP Negeri 37 Medan. Masalah utama yang diidentifikasi adalah rendahnya kemampuan berpikir kritis siswa dalam matematika, seperti kesulitan dalam interpretasi, analisis, evaluasi, dan inferensi, yang disebabkan oleh pendekatan pembelajaran konvensional yang pasif. Menggunakan desain *quasi-eksperimental* dengan *pretest-posttest control group*, penelitian ini melibatkan 62 siswa yang dibagi menjadi kelas eksperimen (VIII-E, 31 siswa, diterapkan PBL) dan kelas kontrol (VIII-D, 31 siswa, pembelajaran konvensional). Data dikumpulkan melalui tes esai yang divalidasi dan direliabilitaskan, dianalisis dengan uji normalitas (*Shapiro-Wilk*), homogenitas (*Levene*), dan uji *t Independen*. Hasil menunjukkan perbedaan signifikan, dengan rata-rata *posttest* kelas eksperimen 81,61 lebih tinggi daripada kelas kontrol 73,56 ($t = 2,270$; $p = 0,027 < 0,05$). Kesimpulan: Model PBL secara signifikan meningkatkan kemampuan berpikir kritis matematis siswa melalui pendekatan aktif berbasis masalah nyata. Saran: Guru disarankan menerapkan PBL untuk meningkatkan keaktifan siswa, dan peneliti selanjutnya dapat memperluas pada materi atau jenjang lain.

Kata kunci : *Problem Based Learning*, berpikir kritis, *quasi-eksperimental*, Uji *t*, SMP Negeri 37 Medan

ABSTRACT

Alfina Trijayanti, NIM 4213311014 (2025). The Influence of the Problem-Based Learning Model on the Critical Thinking Abilities of Students at State Junior High School 37 Medan

This study aims to analyze the effect of the Problem-Based Learning (PBL) model on critical thinking abilities of eighth-grade students at SMP Negeri 37 Medan. The main issue identified is the low level of students' critical thinking in mathematics, such as difficulties in interpretation, analysis, evaluation, and inference, caused by passive conventional teaching approaches. Using a quasi-experimental pretest-posttest control group design, the study involved 62 students divided into an experimental class (VIII-E, 31 students, applying PBL) and a control class (VIII-D, 31 students, conventional learning). Data were collected through validated and reliable essay tests, analyzed using normality tests (Shapiro-Wilk), homogeneity (Levene), and Independent t-tests. Results showed a significant difference, with the experimental class's posttest average of 81.61 higher than the control class's 73.56 ($t = 2.270$; $p = 0.027 < 0,05$). Conclusion : The PBL model significantly enhances students' mathematical critical thinking abilities through an active approach based on real-world problems. Recommendation: Teachers are advised to implement PBL to increase student engagement, and future researchers can expand to other materials or educational levels.

Keywords : Problem-Based Learning, mathematical critical thinking, quasi-experimental, Uji-T, SMP Negeri 37 Medan