

ABSTRAK

Yasmin Khamila Husain, NIM 4193111083 (2024), Penerapan Model Pembelajaran *Problem Based Learning* Berbantuan *Geogebra* Untuk Meningkatkan Kemampuan Berpikir Kreatif Matematis Siswa Kelas VIII

Penelitian ini bertujuan untuk meningkatkan kemampuan berpikir kreatif matematis siswa SMP Swasta Al Razi Sinar Harapan Medan melalui penerapan model pembelajaran *Problem Based Learning* berbantuan *Geogebra*. Subjek penelitian adalah 25 siswa kelas VIII-2 SMP Swasta Al Razi Sinar Harapan Medan. Penelitian ini menggunakan metode penelitian tindakan kelas (PTK) dengan 2 siklus, di mana setiap siklus terdiri dari 2 pertemuan. Data dikumpulkan melalui lembar observasi guru dan siswa serta tes kemampuan berpikir kreatif matematis siswa. Tes dilakukan sebanyak tiga kali, yaitu tes awal, tes kemampuan berpikir kreatif matematis I, dan tes kemampuan berpikir kreatif matematis II. Hasil penelitian menunjukkan peningkatan secara signifikan dalam kemampuan berpikir kreatif matematis siswa yang dapat dilihat dari hasil tes awal hanya sebanyak 12% siswa yang tuntas tetapi pada tes akhir siklus I mengalami peningkatan secara klasikal dengan memperoleh sebanyak 44% siswa tuntas. Kemudian pada siklus II terjadi peningkatan lebih lanjut dengan tingkat ketuntasan klasikal pada tes akhir siklus II mencapai 92%. Rata-rata N-Gain sebesar 0,50 menunjukkan peningkatan yang signifikan dalam kemampuan berpikir kreatif matematis siswa. Dengan demikian, dapat disimpulkan bahwa penerapan model pembelajaran *Problem Based Learning* berbantuan *Geogebra* efektif dalam meningkatkan kemampuan berpikir kreatif matematis siswa SMP Swasta Al Razi Sinar Harapan Medan.

Kata Kunci: Masalah, *Geogebra*, Kreatif, N-Gain

ABSTRACT

Yasmin Khamila Husain, NIM 4193111083 (2024), *Application of Problem Based Learning Model assisted by Geogebra to Improve Mathematical Creative Thinking Ability of Class VIII*

This study aims to improve the mathematical creative thinking ability of students of SMP Swasta Al Razi Sinar Harapan Medan through the application of Problem Based Learning learning model assisted by Geogebra. The research subjects were 25 students of class VIII-2 of SMP Swasta Al Razi Sinar Harapan Medan. This research used classroom action research (PTK) method with 2 cycles, where each cycle consisted of 2 meetings. Data were collected through teacher and student observation sheets and student mathematical creative thinking ability tests. The tests were conducted three times, namely the initial test, mathematical creative thinking ability test I, and mathematical creative thinking ability test II. The results showed a significant increase in students' mathematical creative thinking skills which can be seen from the initial test results of only 12% of students who were complete but in the final test of cycle I experienced a classical increase by obtaining 44% of students complete. Then in cycle II there was a further increase with the level of classical completeness in the final test of cycle II reaching 92%. The average N-Gain of 0.50 showed a significant increase in students' mathematical creative thinking ability. Thus, it can be concluded that the application of Problem Based Learning learning model assisted by Geogebra is effective in improving students' mathematical creative thinking ability of SMP Swasta Al Razi Sinar Harapan Medan.

Keywords: Problem, Geogebra, Creative, N-Gain.