

ABSTRAK

Syahida Aulia, 1222050158, 2026 “Penerapan Model Pembelajaran *Prepare, Problem solving, Presentation, Evaluation, Conclusion* (PREPROSPEC) Untuk Meningkatkan Kemampuan Pemahaman Matematis“.

Penelitian ini dilatarbelakangi oleh dominasi pembelajaran konvensional yang belum mampu memfasilitasi kemampuan pemahaman matematis murid pada indikator pemahaman mekanikal, induktif, rasional, dan intuitif. Oleh karena itu, model PREPROSPEC diterapkan sebagai alternatif pembelajaran untuk meningkatkan kemampuan pemahaman matematis murid. Penelitian ini bertujuan untuk mengetahui keterlaksanaan model PREPROSPEC, membandingkan peningkatan kemampuan pemahaman matematis murid dengan pembelajaran konvensional, serta mengetahui respons murid terhadap penerapan model PREPROSPEC. Penelitian menggunakan metode kuasi eksperimen dengan pendekatan kuantitatif dan desain *Nonequivalent Pretest–Posttest Control Group Design*. Sampel penelitian terdiri atas kelas VIII-D sebagai kelas eksperimen dan kelas VIII-A sebagai kelas kontrol yang masing-masing berjumlah 24 murid. Data dikumpulkan melalui tes, observasi, dan angket. Hasil penelitian menunjukkan bahwa keterlaksanaan aktivitas guru sebesar 88,33% dan aktivitas murid sebesar 90,98%, keduanya berada pada kategori sangat baik. Rata-rata N-Gain kelas eksperimen sebesar 0,81 berada pada kategori tinggi, sedangkan kelas kontrol sebesar 0,27 berada pada kategori rendah. Hasil uji Mann–Whitney menunjukkan nilai $p\text{-value} < 0,001$, sehingga peningkatan kemampuan pemahaman matematis murid pada kelas eksperimen lebih baik secara signifikan dibandingkan kelas kontrol. Respons murid terhadap penerapan model PREPROSPEC memperoleh persentase sebesar 74,16% dengan kategori cukup baik.

Kata kunci: PREPROSPEC Kemampuan Pemahaman Matematis, N-Gain, Sistem Persamaan Linier Dua Variabel, Sekolah Menengah Pertama.

ABSTRACT

Syahida Aulia, 1222050158, 2026. “The Implementation of the Prepare, Problem solving, Presentation, Evaluation, Conclusion (PREPROSPEC) Learning Model to Improve Students’ Mathematical Understanding Ability.

This research was motivated by the dominance of conventional learning, which has not been able to facilitate students' mathematical understanding in terms of mechanical, inductive, rational, and intuitive understanding. Therefore, the PREPROSPEC model was implemented as an alternative learning model to improve students' mathematical understanding. This study aimed to determine the implementation of the PREPROSPEC model, compare the improvement of students' mathematical understanding with that of conventional learning, and identify students' responses to the implementation of the PREPROSPEC model. This study employed a quasi-experimental method with a quantitative approach using the Nonequivalent Pretest–Posttest Control Group Design. The research sample consisted of Class VIII-D as the experimental class and Class VIII-A as the control class, with 24 students in each class. Data were collected through tests, observations, and questionnaires. The results showed that the implementation of teacher activities reached 88.33% and student activities reached 90.98%, both categorized as very good. The average N-Gain score of the experimental class was 0.81, which was categorized as high, while the control class obtained an average N-Gain score of 0.27, which was categorized as low. The Mann–Whitney test yielded a p -value < 0.001 , indicating that the improvement in students' mathematical understanding in the experimental class was significantly better than that in the control class. In addition, students' responses to the implementation of the PREPROSPEC model reached 74.16%, which was categorized as fairly good.

Keywords: PREPROSPEC, Mathematical Understanding Ability, N-Gain, System of Linear Equations in Two Variables, Junior High School.