

## **ABSTRAK**

**Chichilya Elfryda Sihotang, NIM 4183311052 (2023). Penerapan Model Pembelajaran *Project Based Learning* untuk Meningkatkan Kemampuan Komunikasi Matematis Siswa SMP Negeri 4 Medan**

Penelitian ini bertujuan untuk mengetahui penerapan model pembelajaran *Project Based Learning* dapat meningkatkan kemampuan komunikasi matematis siswa kelas VIII-6 SMP Negeri 4 Medan pada materi bangun ruang sisi datar. Siswa kelas VIII-6 di SMP Negeri 4 Medan sebanyak 31 siswa merupakan subjek dari penelitian ini dan kemampuan komunikasi matematis siswa dengan menerapkan model pembelajaran *Project Based Learning* merupakan objek dari penelitian ini. Penelitian ini merupakan Penelitian Tindakan Kelas yang dilaksanakan sebanyak 2 siklus. Hasil analisis data diperoleh pada siklus I sebanyak 14 peserta didik (45,16%) memiliki kemampuan komunikasi matematis dalam kategori minimal cukup dengan rata-rata 67,38 lalu meningkat pada siklus II yaitu sebanyak 27 peserta didik (87,10%) memiliki kemampuan komunikasi matematis dalam kategori minimal cukup dengan rata-rata kelas 81,82. Hasil observasi guru dalam pembelajaran diperoleh nilai rata-rata 2,5 (cukup) pada siklus I dan pada siklus meningkat menjadi 3,3 (baik). Maka, dari hasil tersebut diperoleh hasil tes kemampuan komunikasi matematis peserta didik meningkat di setiap siklusnya, minimal 85% siswa di kelas mencapai skor kemampuan komunikasi matematis  $\geq 70$  dan hasil skor observasi guru adalah  $\geq 3$ . Jadi, dapat disimpulkan bahwa dengan menerapkan model pembelajaran *Problem Based Learning* dapat meningkatkan kemampuan komunikasi matematis siswa kelas VIII-6 di SMP Negeri 4 Medan.

**Kata Kunci :** Model pembelajaran *Project Based Learning* (PjBL), kemampuan komunikasi matematis



## **ABSTRACT**

**Chichilya Elfryda Sihotang, NIM 4183311052 (2023). Application of the Project Based Learning Model to Improve Mathematical Communication Skills of SMP Negeri 4 Medan.**

*This study aims to determine the application of the Project Based Learning learning model can improve the mathematical communication skills of class VIII-6 students of SMP Negeri 4 Medan on the material of flat sided shapes. Students in class VIII-6 at SMP Negeri 4 Medan as many as 31 students are the subjects of this study and students' mathematical communication abilities by applying the Project Based Learning learning model are the objects of this study. This research is a Classroom Action Research conducted in 2 cycles. The results of data analysis were obtained in cycle I as many as 14 students (45.16%) had mathematical communication skills in the minimal category enough with an average of 67.38 then increased in cycle II, namely as many as 27 students (87.10%) had the ability mathematical communication in the minimal enough category with a class average of 81.82. The results of teacher observations in learning obtained an average value of 2.5 (enough) in the first cycle and increased to 3.3 (good) in the cycle. So, from these results it was obtained that the results of students' mathematical communication ability tests increased in each cycle, at least 85% of students in the class achieved a score of mathematical communication ability  $\geq 70$  and the result of the teacher's observation score was  $\geq 3$ . So, it can be concluded that by applying the Problem Based Learning can improve the mathematical communication skills of class VIII-6 students at SMP Negeri 4 Medan.*

**Keyword:** Project Based Learning (PjBL) model, mathematical communication skills

