

## ABSTRAK

**Erlan Maulana, NIM 4152111010 (2015). Upaya Meningkatkan Kemampuan Komunikasi Matematis Siswa Melalui Pendekatan *Reciprocal Teaching* Berbantuan Aplikasi Geogebra di SMP Swasta YPAK PTPN III Sei Karang T.A 2021/2022.**

Penelitian ini bertujuan untuk meningkatkan kemampuan komunikasi matematis siswa melalui Pendekatan *Reciprocal Teaching* berbantuan *Geogebra*. Jenis penelitian ini adalah penelitian tindakan kelas (*classroom action research*), dimana pelaksanaannya terdiri dari siklus-siklus yang masing-masing siklus terdiri dari tahapan perencanaan, pelaksanaan, pengamatan dan pengumpulan data, dan refleksi. Subjek dalam penelitian ini adalah siswa kelas VIII-C SMP Swasta YPAK PTPN III Sei Karang yang berjumlah 36 orang sedangkan objek dalam penelitian ini adalah peningkatan kemampuan komunikasi matematis siswa kelas VII-C SMP Swasta YPAK PTPN III Sei Karang. Sebelum tindakan dilakukan, terlebih dahulu dilakukan tes dan observasi awal untuk mengetahui kemampuan komunikasi awal siswa. Pada siklus I, pembelajaran dilakukan dengan menerapkan pendekatan *reciprocal teaching* berbantuan *geogebra* dan kemudian dilakukan tes komunikasi I di pertemuan terakhir, begitu juga untuk siklus II. Berdasarkan hasil analisis data yang dilakukan, terjadi peningkatan kemampuan komunikasi matematis siswa yang diperoleh setelah diberikan perlakuan dengan menerapkan pendekatan *reciprocal teaching* berbantuan *geogebra*. Berdasarkan data yang diperoleh, terjadi peningkatan jumlah siswa yang memiliki kemampuan komunikasi matematis minimal pada kriteria sedang sebesar 55,6%, dimana sebanyak 24 siswa (66,7%) telah memiliki kemampuan komunikasi matematis minimal pada kriteria sedang. Nilai rata-rata kelas mengalami peningkatan sebesar 57%, dimana penelitian tersebut, dapat disimpulkan bahwa upaya peningkatan komunikasi matematis siswa melalui *reciprocal teaching* berbantuan *geogebra* berhasil meningkatkan kemampuan komunikasi matematis siswa kelas VIII-C SMP Swasta YPAK PTPN III Sei Karang T.A 2021/2022.

**Kata Kunci :** *Reciprocal Teaching, Kemampuan Komunikasi Matematis, Geogebra*

## ABSTRACT

Erlan Maulana, NIM 4152111010 (2015). Efforts to Improve Mathematical Communication Skills Students Through a Reciprocal Teaching Approach Assisted by Geogebra Applications in Junior High School Private YPAK PTPN III Sei Karang on the 2021/2022 Academic Year.

This study aims to improve students' mathematical communication skills through a *Geogebra-assisted Reciprocal Teaching* Approach. This type of research is *classroom action research*, where the implementation consists of cycles, each cycle consisting of stages of planning, implementation, observation and data collection, and reflection. The subjects in this study were class VIII-C students of SMP YPAK PTPN III Sei Karang which totaled 36 people while the object in this study was the improvement of mathematical communication skills of class VII-C students of SMP YPAK PTPN III Sei Karang. Before the action is taken, a test and preliminary observation are first carried out to find out the student's initial communication skills. In cycle I, learning is carried out by applying a *geogebra-assisted reciprocal teaching* approach and then communication test I is carried out at the last meeting, as well as for cycle II. Based on the results of the data analysis carried out, there was an increase in students' mathematical communication skills obtained after being given treatment by applying a *geogebra-assisted reciprocal teaching* approach. Based on the data obtained, there was an increase in the number of students who had minimum mathematical communication skills on medium criteria by 55.6%, of which as many as 24 students (66.7%) had minimal mathematical communication skills on medium criteria. The average grade point has increased by 57%, where the study, it can be concluded that efforts to improve students' mathematical communication through *geogebra-assisted reciprocal teaching* have succeeded in improving the mathematical communication skills of class VIII-C students of SMP YPAK PTPN III Sei Karang T.A 2021/2022.

**Keywords :** Reciprocal Teaching, Mathematical Communication Ability,  
Geogebra