

## ABSTRAK

**REZKI YANTI.** Perbedaan kemampuan komunikasi dan penalaran matematis siswa yang diajarkan dengan model pembelajaran kooperatif tipe *Make A Match* dan *Number Head Together*. Tesis. Medan: Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2022.

Penelitian ini bertujuan untuk mengetahui: (1) perbedaan kemampuan komunikasi matematis siswa yang diajar antara model pembelajaran kooperatif tipe *Make A Match* dengan *Number Head Together* (2) perbedaan kemampuan penalaran matematis siswa yang diajar antara model pembelajaran kooperatif tipe *Make A Match* dengan *Number Head Together* (3) interaksi antara model pembelajaran kooperatif tipe *Make A Match* dan *Number Head Together* dengan kemampuan awal siswa terhadap kemampuan komunikasi matematis siswa (4) interaksi antara model pembelajaran kooperatif tipe *Make A Match* dan *Number Head Together* dengan kemampuan awal siswa terhadap kemampuan penalaran matematis siswa. Penelitian ini merupakan penelitian semi eksperimen. Populasi penelitian ini adalah siswa kelas VII MTs Negeri 3 Tapanuli Selatan, dengan analisis ANAVA dua jalur. Hasil penelitian menunjukkan bahwa (1) Terdapat perbedaan kemampuan komunikasi matematis antara siswa yang diajar dengan model pembelajaran kooperatif tipe *Make A Match* dan *Number Head Together*, (2) Terdapat perbedaan kemampuan penalaran matematis antara siswa yang diajar dengan model pembelajaran kooperatif tipe *Make A Match* dan *Number Head Together*, (3) Tidak terdapat interaksi antara model pembelajaran dan kemampuan awal matematika terhadap kemampuan komunikasi matematis siswa (4) Tidak terdapat interaksi antara model dan kemampuan awal matematika terhadap kemampuan penalaran matematis siswa.

**Kata Kunci:** Model Pembelajaran Kooperatif Tipe *Make A Match* dan *Number Head Together*, Kemampuan Awal Matematika, Kemampuan Komunikasi Matematis, Kemampuan Penalaran Matematis.



## ABSTRACT

**REZKI YANTI.** Differences in communication skills and mathematical reasoning of students who are taught with cooperative learning models of Make A Match and Number Head Together. Thesis. Medan: Postgraduate Mathematics Education Study Program, Medan State University, 2022.

This study aims to determine: (1) the differences in the mathematical communication skills of students who are taught between the Make A Match and Number Head Together (2) the differences in the mathematical reasoning abilities of the students taught between the Make A Match and the Number Head Together (3) interaction between cooperative learning models of Make A Match and Number Head Together with students' initial ability to students' mathematical communication skills (4) interactions between cooperative learning models of Make A Match and Number Head Together with students' initial abilities on students' mathematical reasoning abilities . This research is a semi-experimental research. The population of this study were seventh grade students of MTs Negeri 3 Tapanuli Selatan, with two-way ANAVA analysis. The results showed that (1) there were differences in mathematical communication skills between students who were taught using the Make A Match and Number Head Together, (2) there were differences in mathematical reasoning abilities between students taught with the Make A Match and Number Head Together, (3) There is no interaction between the learning model and the initial mathematical ability of students' mathematical communication skills (4) There is no interaction between the model and the initial mathematical ability of the students' mathematical reasoning ability.

**Keywords:** Cooperative Learning Model Make A Match and Number Head Together, Early Mathematics Ability, Mathematical Communication Ability, Mathematical Reasoning Ability.

