

ABSTRAK

MASITAH PUSPA SARI. Perbedaan Kemampuan Komunikasi Matematis Siswa Antara Model Pembelajaran Kooperatif Tipe *Group Investigation* dan Tipe *STAD* Berbasis Sainifik di SMPN 1 Bendahara. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, 2016.

Penelitian ini bertujuan untuk mengetahui perbedaan kemampuan komunikasi matematis siswa antara model pembelajaran kooperatif tipe *Group Investigation* dan tipe *STAD* berbasis saintifik, interaksi antara model pembelajaran dan kemampuan awal matematika (tinggi, sedang, rendah) terhadap kemampuan komunikasi matematis siswa dan proses jawaban siswa yang diajar dengan kedua tipe pembelajaran kooperatif. Jenis penelitian kuasi eksperimen. Populasi seluruh siswa SMP Negeri 1 Bendahara. Sampel menggunakan teknik *purposive sampling*. Instrumen yang digunakan adalah tes kemampuan komunikasi matematis siswa. Data dianalisis menggunakan ANAVA dua jalur dan analisis deskriptif untuk proses jawaban siswa. Hasil penelitian menunjukkan bahwa: (1) Terdapat perbedaan kemampuan komunikasi matematis antara siswa yang belajar dengan model pembelajaran kooperatif tipe *Group Investigation* dan model pembelajaran kooperatif tipe *STAD* berbasis saintifik (2) Tidak terdapat interaksi antara model pembelajaran dan kemampuan awal matematika terhadap kemampuan komunikasi matematis siswa (3) Proses jawaban siswa pada tes kemampuan komunikasi matematis melalui pembelajaran kooperatif tipe *Group Investigation* yang termasuk kategori baik sebanyak 44,80%, kategori cukup sebanyak 39,08% dan kategori kurang baik sebanyak 16,13% (4) Proses jawaban siswa pada tes kemampuan komunikasi matematis melalui pembelajaran kooperatif tipe *STAD* yang termasuk kategori baik sebanyak 71,89%, kategori cukup sebanyak 19,8% dan kategori kurang baik sebanyak 7,3%. Hal ini menunjukkan bahwa proses jawaban siswa yang diberi pembelajaran kooperatif tipe *STAD* lebih baik dibanding dengan siswa yang diberi pembelajaran kooperatif tipe *Group Investigation*.

Kata kunci: Komunikasi Matematis, *Group Investigation*, *STAD*

ABSTRACT

MASITAH PUSPA SARI. The Difference Of The Student's Mathematical Communication Ability Between The Cooperative Learning Model Group Investigation and The Cooperative Learning Model STAD Based Scientific in SMPN 1 Bendahara. Thesis. Medan: Postgraduate School of the State University of Medan, 2016.

This study aims to determine: the difference of student's mathematical communication ability between cooperative learning model of Group Investigation and STAD-based scientific, the interaction between the learning model and initial ability (high, medium, low) of mathematical for the student's mathematical communication ability, the process of the student's answer that taught by both of cooperative learning's model. This study is a quasi experimental research. The population in this study are all students of SMP Negeri 1 Bendahara. The instrument is test of mathematical communication ability. The data analysis used was ANOVA two ways and a descriptive analysis for the answers process of each learning. The results showed that: (1) There are differences in the ability of mathematical communication between students learning with cooperative learning model Group Investigation and cooperative learning model STAD-based scientific (2) There is no interaction between the learning model and initial ability (high, medium, low) of mathematical for the student's mathematical communication ability (3) The process of the student's answer that taught by cooperative learning model Group Investigation in solving problems on tests of mathematical communication ability is categorized as good as 44.80%, a category quite as much as 39.08% and the unfavorable category as 16.13%. (4) The process of the student's answer that taught by cooperative learning model STAD in solving problems on tests of mathematical communication ability is categorized as good as 44.80%, a category quite as much as 39.08% and the unfavorable category as 16.13%. This indicates that the process of student answers by STAD cooperative learning is better than the students who were given a type of cooperative learning Group Investigation.

Keywords: Mathematical Communication, Group Investigation, STAD