ABSTRAK

AMALIA. Perbandingan Kemampuan Komunikasi Matematis Siswa yang Belajar Menggunakan Model Pembelajaran *Team Assisted Individualization* dan Model Pembelajaran *Cooperative Integrated Reading and Composition* pada Materi Teorema Pythagoras. Skripsi. Jakarta: Program Studi Pendidikan Matematika, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Negeri Jakarta, 2019.

Penelitian ini bertujuan untuk mengetahui apakah terdapat perbedaan antara kemampuan komunikasi matematis siswa yang belajar menggunakan model pembelajaran *Team Assisted Individualization* dan siswa yang belajar menggunakan model pembelajaran *Cooperative Integrated Reading and Composition*. Jika terdapat perbedaan, apakah kemampuan komunikasi matematis siswa yang belajar menggunakan model pembelajaran *Cooperative Integrated Reading and Composition* lebih tinggi dari siswa yang belajar menggunakan model pembelajaran *Team Assisted Individualization*.

Penelitian dilaksanakan di SMP Negeri 158 Jakarta pad abulan Januari 2019. Metode penelitian yang digunakan adalah *quasi experiment*. Pengambilan sampel menggunakan Teknik *cluster random sampling*, dipilih dua kelas eksperimen secara acak dari lima kelas yang berdistribusi normal, homogen, dan memiliki kesamaan rata-rata. Kelas ekperimen I terdiri dari 35 siswa yang diberikan perlakuan model pembelajaran TAI sedangkan kelas ekperimen II yang terdiri dari 35 siswa diberikan perlakuan model pembelajaran CIRC. Instrumen penelitian yang digunakan adalah tes akhir kemampuan komunikasi matematis pada pokok bahasan Teorema Pythagoras sebanyak 6 butir soal uraian yang telah teruji valid dan reliabel.

Berdasarkan hasil uji analisis diperoleh bahwa kedua kelas berpopulasi normal, dan memiliki varians yang sama, sehingga dihitung dengan uji-t yang memiliki varians yang sama. Berdasarkan perhitungan uji-t dengan taraf siginifikansi $\alpha = 0{,}05$ didapatkan $t_{hitung} = -2{,}779$ dan $t_{tabel} = -1{,}668$ maka tolak H_0. Berdasarkan hasil tersebut dapat disimpulkan bahwa rata-rata kemampuan komunikasi matematis siswa yang belajar menggunakan model pembelajaran CIRC lebih tinggi daripada kemampuan komunikasi matematis siswa yang belajar menggunakan model pembelajaran TAI pada materi Teorema Pythagoras.

Kata Kunci: *Model Pembelajaran Team Assisted Individualization, Model Pembelajaran Cooperative Integrated Reading and Composition, Kemampuan Komunikasi Matematis.*

ABSTRACT

AMALIA. Comparison of the Ability of Mathematical Communication Students Who Learn Use to Team Assisted Individualization Model and Cooperative Integrated Reading and Composition Model in Pythagorean Theorem. Jakarta: Mathematics Education Program, Faculty of Mathematics and Natural Sciences, State University of Jakarta, 2019.

This study aims to determine whether there is a difference between the ability of mathematical communication students who learn to use Team Assisted Individualizaton model and students who learn to use Cooperative Integrated Reading and Composition model. If there is a difference, is the ability to communicate mathematically students who learn to use Cooperative Integrated Reading and Composition model is higher than students learning to use Team Assisted Individualization model.

The research was conducted in Junior High School 158 of Jakarta in January 2019. The research method used was quasi experiment. Sampling method using cluster random sampling techniques, selected two random experimental classes of four classes that are normally distributed, homogeneous, and have an average similarity. The experimental class I consisted of 35 students who were given the treatment of TAI model while the experimental class II consisting of 35 students was given treatment of CIRC model. The research instrument used is the final test of the ability of mathematical communication on the subject of pythagorean theorem as much as 6 items of tested description valid and reliable.

Based on the results of the analysis test divided into two classes of normal populated, and have the same variance, so calculated by t-test that has the same variance. Based on t-test calculation with significance level $\alpha = 0{,}05$ result t-count $= -2{,}779$ and t-table $= -1{,}668$ then H_0 is rejected. Based on these results can be concluded the average mathematical communication ability of students who learn to use CIRC model higher than the average mathematical communication ability of students who learn to use TAI model in pythagorean theorem.

Keywords: *Team Assisted Individualization Model, Cooperative Integrated Reading and Composition Model, Mathematical Communication Ability*.