ABSTRAK

Rahmiyana. Peningkatan Kemampuan Pemahaman Konsep dan Kemampuan Komunikasi Matematis Siswa SMA/MA di Kecamatan Simpang Ulim Melalui Pembelajaran Kooperatif Tipe STAD. Tesis. Medan: Program Studi Pendidikan Matematika Pascasarjana UNIMED, 2013.

Tujuan dari penelitian ini untuk mengetahui apakah: 1) peningkatan kemampuan pemahaman konsep dan komunikasi matematis siswa yang mengikuti model pembelajaran koopertif tipe STAD lebih tinggi daripada siswa yang mengikuti model pembelajaran biasa, 2) ada interaksi antara model pembelajaran dan kemampuan awal matematika siswa terhadap peningkatan kemampuan pemahaman konsep dan komunikasi matematis siswa, dan 3) bagaimana proses jawaban siswa pada masing-masing model pembelajaran.

Penelitian berbentuk kuasi eksperimen dengan desain kelompok kontrol pretes-postes. Populasi siswa kelas X SMA/MA se-Kecamatan Simpang Ulim. Sampel dipilih secara random dengan mengacak kelas dengan responden 104 siswa. Instrumen penelitian berbentuk uraian terdiri dari tes kemampuan pemahaman konsep dan tes kemampuan komunikasi matematis. Analisis statistik data dilakukan dengan uji ANAVA Dua Jalur dan *Maan Withney*.

Hasil penelitian menunjukkan bahwa (1) Peningkatan kemampuan pemahaman konsep siswa yang mengikuti model pembelajaran koopertif tipe STAD lebih tinggi daripada siswa yang mengikuti model pembelajaran biasa (langsung). (2) Peningkatan kemampuan komunikasi matematis siswa yang mengikuti model pembelajaran koopertif tipe STAD lebih tinggi daripada siswa yang mengikuti model pembelajaran biasa (langsung). (3) Tidak ada interaksi antara model pembelajaran dan kemampuan awal matematika siswa terhadap peningkatan kemampuan pemahaman konsep siswa. (4) Tidak ada interaksi antara model pembelajaran dan kemampuan awal matematika siswa terhadap peningkatan kemampuan komunikasi matematis siswa. (5) Proses jawaban siswa pada model pembelajaran kooperatif tipe STAD lebih baik daripada model pembelajaran biasa. Dengan demikian yang menjadi saran selanjutnya: (i) Kepada lembaga terkait dapat mensosialisasikan model pembelajaran kooperatif tipe STAD dalam meningkatkan hasil belajar matematika siswa, (ii) Kepada guru dapat menggunakan model pembelajaran kooperatif tipe STAD pada pembelajaran matematika sebagai salah satu alternatif untuk menerapkan pembelajaran matematika yang inovatif, (iii) Kepada peneliti lain dapat melanjutkan penelitian pada pokok bahasan dan kemampuan matematik yang lain dengan menggunakan model pembelajaran kooperatif tipe STAD.

Kata Kunci : Kemampuan Pemahaman Konsep, Kemampuan Komunikasi Matematis, dan Model Pembelajaran Kooperatif Tipe STAD

ABSTRACT

Rahmiyana. The Increase of Senior High School (SMA/MA) Students' Understanding Concept and Mathematical Communication Skills in Simpang Ulim through STAD Cooperative Learning. Thesis. Medan: Mathematics Education Postgraduate Study Program UNIMED, 2013.

The aims of this research are to recognize whether: 1) if the increase of students' understanding concept skills and mathematical communication skills in through STAD cooperative learning is higher than those who taken direct learning, 2) there is interaction between models of learning and trior knowledg the increase of students' understanding concept skills and mathematical communication skills, and 3) how is the students' answer in solving understanding concept and mathematical communication skills test in each learning types.

This research was quasi-experimental with pretest-posttest control group design. The population was senior high school students grade X in Simpang Ulim. The sample consists of 104 students that were chosen randomly. The research instrument is focused on identifying the understanding concept and mathematical communication skills test in essay form. Data statistic analysis was completely done by Two Ways ANOVA and *Maan Withney*.

The results of this research showed: (1) the increase of students' understanding concept skills through STAD cooperative learning is higher than those who taken direct learning. (2) The increase of students' mathematical communication skills in through STAD cooperative learning is higher than those who taken direct learning. (3) There was not interaction between models of learning and trior knowledg the increase of students' understanding concept skills. (4) There was not interaction between models of learning and trior knowledg the increase of students' mathematical communication skills. (5) The process of students' answer through STAD cooperative learning type is higher than those who taken direct learning. Thus the suggestions were: (i) School stake holder or educational institution should socialize STAD cooperative learning type in improving students' mathematical learning results. (ii) The teachers should consider using STAD cooperative learning type as an alternative in implementing innovative mathematical learning. (iii) The other researchers may continue the research focusing on other subtheme and mathematical skills by using STAD cooperative learning.

Keywords: Understanding concept skills, Mathemathical communication skills, and STAD Cooperative Learning.

ABSTRACT

Rahmiyana. Understanding Capacity Communications Capskills Concept and the Mathematical High School Students / MA in District Simpang Ulim Through Cooperative Learning Type STAD. Thesis. Field: Mathematics Education Graduate Program UNIMED, 2012.

The purpose of the study was to determine whether increased communication skills and understanding of mathematical concepts students who take learning model koopertif type STAD higher than students who take regular learning model, there is interaction between models of learning and early math skills of students to increase communication skills and understanding of mathematical concepts students, and how the students' answers on each of the learning model. Form of quasi-experimental research design with pretest-posttest control group. Class X student population SMA / MA as Simpang District Ulim. Samples were selected at random to randomize the sample class with 104 students. The research instrument consisting of a test form of descriptions of concepts and test comprehension of mathematical communication skills. Statistical analysis of the data performed by ANOVA test and Maan Two Line Whitney. The results showed that (1) increase the skills of understanding the concept of students who take learning model koopertif type STAD higher than students who take direct learning model. (2) Improved communication skills of students who take mathematical learning model koopertif type STAD higher than students who take direct learning model. (3) There is no interaction between learning models and early math skills of students to increase students' skills of understanding the concept. (4) There is no interaction between learning models and early math skills of students to increase students' mathematical communication skills. (5) The process of students' answers on the model type STAD cooperative learning enough to meet the criteria and the learning model criteria are less common. Thus, the next suggestion: (i) To the relevant institutions can socialize type STAD cooperative learning model in improving students' mathematics learning outcomes, (ii) To the teachers can use STAD cooperative learning model type on the learning of mathematics as an alternative to applying mathematics learning innovative, (iii) To other researchers can continue his research on the subject and other mathematical skills using STAD cooperative learning model type. Keywords: Concept Comprehension Skills, Mathematical Skills Communications and type STAD Cooperative Learning Model