ABSTRAK

Nuraini Sribina. Perbedaan Kemampuan Komunikasi Matematis Siswa SMA Melalui Pembelajaran Kooperatif Tipe Think-Pair-Square Menggunakan Autograph Dengan Pembelajaran Kooperatif Tipe Think-Pair-Square Tanpa Autograph. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, Juli 2011.

Penelitian ini bertujuan untuk : (1) mengetahui apakah kemampuan komunikasi matematis siswa yang mengikuti pembelajaran kooperatif tipe Think-Pair-Square menggunakan Autograph lebih baik dari kemampuan komunikasi matematis siswa yang mengikuti pembelajaran kooperatif tipe Think-Pair-Square tanpa Autograph dengan analisis statistik inferensial (2) mendeskripsikan ketuntasan belajar siswa secara klasikal dalam pembelajaran kooperatif tipe Think-Pair-Square menggunakan Autograph, (3) mendeskripsikan aktivitas siswa dalam pembelajaran kooperatif tipe Think-Pair-Square menggunakan Autograph, (4) mendeskripsikan respon siswa terhadap pembelajaran kooperatif tipe Think-Pair-Square menggunakan Autograph, (5) mendeskripsikan variasi jawaban siswa di kedua pembelajaran.

Penelitian ini merupakan penelitian eksperimen di SMA Negeri 1 Tebing Tinggi. Pemilihan sampel dilakukan secara random. Penelitian ini diawali dengan tes ujicoba perangkat dan instrumen penelitian. Data dalam penelitian ini dianalisis dengan menggunakan analisis statistik deskriptif dan analisis inferensial. Analisis deskriptif ditujukan untuk mendeskripsikan ketuntasan, aktifitas, respon, dan variasi jawaban siswa. Analisis inferensial yang digunakan adalah analisis dengan uji-t satu pihak.

Hasil penelitian menunjukkan bahwa : (1) kemampuan komunikasi matematis siswa yang mengikuti pembelajaran kooperatif tipe Think-Pair-Square menggunakan Autograph lebih baik yaitu dengan persentase ketuntasan belajar sebesar 80% sedangkan kelompok siswa yang mengikuti pembelajaran kooperatif tipe Think-Pair-Square tanpa Autograph memperoleh ketuntasan belajar sebesar 30,3% (2) ketuntasan belajar secara klasikal adalah tercapai, (3) aktivitas siswa dengan pembelajaran kooperatif tipe Think-Pair-Square menggunakan Autograph adalah baik, (4) respon siswa terhadap pembelajaran kooperatif tipe Think-Pair-Square menggunakan Autograph positif ,(5) pola jawaban siswa lebih bervariasi.

Pembelajaran kooperatif tipe Think-Pair-Square menggunakan Autograph baik digunakan untuk meningkatkan kemampuan komunikasi matematis dalam pembelajaran matematika di sekolah yang memiliki fasilitas laboratorium komputer. Di era teknologi dan informasi ini sudah selayaknya pembelajaran matematika berbasis teknologi disosialisasikan penggunaanya dilembaga unit masing-masing sekolah yang memiliki fasilitas laboratorium komputer. Penerapan pembelajaran kooperatif tipe Think-Pair-Square menggunakan Autograph hendaknya disesuaikan dengan materi dimana siswa sulit untuk menyampaikan idenya seperti menyajikan sebuah fungsi kedalam bentuk grafik.

ABSTRACT

Sribina Nuraini. The Differences of Mathematical Communication Ability of Senior High School Students through Think-Pair-Square Cooperative Learning using Autograph and without Autograph. Thesis. Medan: Graduate Program State University of Medan , July 2011.

This research is aimed 1) to find out whether the students' mathematical communication ability taught by Think-pair-square cooperative learning using autograph is better than students who were taught by Think-pair-square cooperative learning without autograph using the inferential statistic analysis (2) to describe students' learning comprehensiveness classically in think-pair-square cooperative learning using autograph (3) to describe students' activities on the think-pair-square cooperative learning using autograph (4) to describe students' responses on the think-pair-square cooperative learning using autograph (5) to describe students' varied answers in both learning

This research is an experimental research which was conducted in SMAN 1 Tebing Tinggi The samples were chosen randomly. This research was started by testing the research instruments. Data collected from the experiment was analyzed using descriptive statistic analysis and inferential analysis. The descriptive analysis is aimed to describe the comprehensiveness, activities, responses and the variations of the students' answers. The inferential analysis used is the analysis using t-test.

The results of the research shows that (1) Students' mathematic communication ability using the think-pair-square cooperative learning using autograph is better which has the learning comprehensiveness percentage is 80 % while a group of students which taught by Think-Pair-Square cooperative learning without Autograph got comprehensiveness classically as much 30,3% (2) learning comprehensiveness classically was achieved (3) the student activities taught by Think-pair-square cooperative learning using autograph was good, (4) the student response toward Think-pair-square cooperative learning using autograph was positive. (5) the students' varied answer were varied.

Think-pair-square cooperative learning using autograph was good for raise up the mathematical communication ability in learning mathematic on school's who have computer laboratory facilities. In technology and information era, it was proper that math learning based technology were socialized its using in the unit of each schools which have computer laboratory facilities. The application of Think-Pair-Square cooperative learning using autograph is hope proper with the material where the students felt difficult to deliver their ideas such as in delivering a function into graph.