

## ABSTRAK

**ARIANTO.** Peningkatan Kemampuan Pemecahan Masalah dan Disposisi Matematis Siswa Melalui Model Pembelajaran *Discovery Learning* Berbantuan *Software Autograph* di SMA Negeri 1 Aceh Barat Daya. Tesis. Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2016.

Kata Kunci: Model Pembelajaran *Discovery Learning*, *Software Autograph*, Pemecahan Masalah, dan Disposisi Matematis

Tujuan penelitian ini adalah: (1) Menganalisis peningkatan kemampuan pemecahan masalah matematik siswa yang memperoleh pembelajaran *discovery learning* berbantuan *software Autograph* dan tanpa berbantuan *software Autograph*, (2) Menganalisis peningkatan disposisi matematis siswa yang memperoleh pembelajaran *discovery learning* berbantuan *software Autograph* dan tanpa berbantuan *software Autograph*, (3) Menganalisis adanya interaksi antara pembelajaran dengan jenis kelamin siswa terhadap peningkatan kemampuan pemecahan masalah matematik siswa, (4) Menganalisis adanya interaksi antara pembelajaran dengan jenis kelamin siswa terhadap peningkatan disposisi matematis siswa. Penelitian ini merupakan penelitian kuasi eksperimen. Populasi dalam penelitian ini adalah seluruh siswa kelas X MIA SMA Negeri 1 Aceh Barat Daya Kabupaten Aceh Barat Daya Provinsi Aceh yang berjumlah 131 siswa, dengan mengambil sampel dua kelas berjumlah 60 siswa melalui teknik *cluster random sampling*. Analisis data dilakukan dengan ANOVA dua jalur. Hasil penelitian ini menunjukkan bahwa (1) Peningkatan kemampuan pemecahan masalah matematik siswa yang memperoleh pembelajaran *discovery learning* berbantuan *software Autograph* lebih tinggi daripada siswa yang memperoleh pembelajaran *discovery learning* tanpa berbantuan *software Autograph*, (2) Peningkatan disposisi matematis siswa yang memperoleh pembelajaran *discovery learning* berbantuan *software Autograph* lebih baik daripada siswa yang memperoleh pembelajaran *discovery learning* tanpa berbantuan *software Autograph*, (3) Tidak terdapat interaksi antara pembelajaran dengan jenis kelamin siswa terhadap peningkatan kemampuan pemecahan masalah matematik siswa, (4) Tidak terdapat interaksi antara pembelajaran dengan jenis kelamin siswa terhadap peningkatan disposisi matematis siswa.

## ABSTRACT

**ARIANTO.** The increasment of Students' Problem Solving Skills and Mathematical Disposition Through Discovery Learning Model Assisted by Software Autograph in SMA Negeri 1 Aceh Barat Daya. A Thesis: Department of Educational Mathematics Program Postgraduate, State University of Medan, 2016.

Keywords: Discovery Learning Model, Software Autograph, Problem Solving and Mathematical Disposition

The purposes of this study were to: (1) Analyze the increasment of students' mathematical problem solving ability who obtained discovery learning model assisted by software Autograph higher than students who received discovery learning model without assisted by software Autograph, (2) Analyze the increasment of students' disposition of mathematical who obtained discovery learning model assisted software Autograph and without assisted by software Autograph, (3) Analyze the interaction between the instruction with gender toward the increasment of students' problem solving ability mathematics, (4) Analyze the interaction between the instruction with gender toward the increasment of students' the mathematical disposition. This study is a quasi-experimental research. The population in this study consisted of all students in grade X MIA SMA Negeri 1 Aceh Barat Daya totaling 131 students, by taking samples of two classes of 60 students through a random cluster sampling technique. Data was analyzed two-way ANOVA. The results of this study indicate that (1) Increasment problem-solving ability mathematics students who obtained discovery learning model assisted by software Autograph is higher than students who received discovery learning model without assisted software Autograph, (2) Increasment in the disposition of mathematical students who obtained discovery learning model assisted by software Autograph is higher than students who received discovery learning model without assisted software Autograph, (3) There is no interaction between the learning with the gender of students to increase problem-solving ability mathematics student, (4) There is no interaction between the learning with the gender of students to increase disposition mathematical students.