

## ABSTRAK

**ROSAULI NOVALINA SAMOSIR. Perbedaan Kemampuan Pemahaman Konsep dan Disposisi Matematika Siswa yang Diajar dengan Menggunakan Model *Guided Discovery Learning* dan *Contextual Teaching and Learning* (CTL) Berbantuan *Software Autograph* Ditinjau dari Gaya Belajar Siswa.**  
Tesis. Medan:Program Pascasarjana Universitas Negeri Medan, November 2019.

Penelitian ini bertujuan untuk mengetahui (1) apakah kemampuan pemahaman konsep matematika siswa yang diajar dengan *Guided Discovery Learning* (GDL) berbantuan *Software Autograph* lebih tinggi dibandingkan dengan siswa yang diajar dengan *Contextual Teaching and Learning* (CTL) berbantuan *Software Autograph*, (2) apakah kemampuan pemahaman konsep matematika siswa pada kelompok gaya belajar konvergen lebih tinggi dibandingkan dengan kelompok gaya belajar divergen, (3) apakah disposisi matematika siswa yang diajar dengan *Guided Discovery Learning* (GDL) berbantuan *Software Autograph* lebih tinggi dibandingkan dengan siswa yang diajar dengan *Contextual Teaching and Learning* (CTL) berbantuan *Software Autograph*, (4) apakah disposisi matematika siswa pada kelompok gaya belajar konvergen lebih tinggi dibandingkan dengan kelompok gaya belajar divergen. Jenis penelitian ini adalah penelitian *quasi* eksperimen dengan populasi penelitian seluruh siswa kelas X SMA Swasta Parulian 1 Medan. Penelitian ini menggunakan ANAVA dua jalur 2x2. Kemudian dilanjutkan dengan uji t untuk melihat apakah kedua kelompok berbeda secara signifikan. Berdasarkan perhitungan uji statistik t dan dikonfirmasi dengan spss, dapat disimpulkan bahwa (1) Kemampuan pemahaman konsep matematika siswa yang diajar dengan *Guided Discovery Learning* (GDL) berbantuan *Software Autograph* lebih tinggi dibandingkan dengan siswa yang diajar dengan *Contextual Teaching and Learning* (CTL) berbantuan *Software Autograph*, (2) Kemampuan pemahaman konsep matematika siswa pada kelompok gaya belajar konvergen lebih tinggi dibandingkan dengan kelompok gaya belajar divergen, (3) Disposisi matematika siswa yang diajar dengan *Guided Discovery Learning* (GDL) berbantuan *Software Autograph* lebih tinggi dibandingkan dengan siswa yang diajar dengan *Contextual Teaching and Learning* (CTL) berbantuan *Software Autograph* dan (4) Disposisi matematika siswa pada kelompok gaya belajar konvergen lebih tinggi dibandingkan dengan kelompok gaya belajar divergen.

Keyword: *Contextual Teaching and Learning*, Disposisi Matematika, *Guided Discovery Learning*, Kemampuan Pemahaman Konsep, *Software Autograph*

## ABSTRACT

**ROSAULI NOVALINA SAMOSIR. Differences in the Ability to Understand Students' Mathematical Concepts and Dispositions Taught by Using Guided Discovery Learning and Contextual Teaching and Learning (CTL) Models Assisted by Autograph Software Viewed from Student Learning Styles.** Thesis. Medan: Postgraduate Program, State University of Medan, November 2019.

This study aims to determine (1) whether the ability to understand mathematical concepts of students taught by Guided Discovery Learning (GDL) assisted by Autograph Software is higher than students taught by Contextual Teaching and Learning (CTL) assisted by Autograph Software, (2) whether the ability students' understanding of mathematical concepts in the convergent learning style group is higher than that of the divergent learning style group, (3) whether the mathematical disposition of students taught with Guided Discovery Learning (GDL) assisted by Autograph Software is higher than that of students taught with Contextual Teaching and Learning (CTL) assisted by Autograph Software, (4) whether the mathematical disposition of students in the convergent learning style group is higher than that of the divergent learning style group. This type of research is a quasi-experimental study with a research population of all grade X students of Parulian 1 Medan Private High School. This study uses 2x2 two-way ANAVA. Then proceed with the t test to see whether the two groups differ significantly. Based on the calculation of the statistical test t and confirmed with spss, it can be concluded that (1) The ability to understand mathematical concepts of students taught by Guided Discovery Learning (GDL) assisted by Autograph Software is higher than students taught by Contextual Teaching and Learning (CTL) assisted by Software Autograph, (2) The ability to understand students' mathematical concepts in the convergent learning style group is higher than that of the divergent learning style group, (3) The mathematical disposition of students taught with Guided Discovery Learning (GDL) assisted by Autograph Software is higher than that of students taught with Contextual Teaching and Learning (CTL) assisted by Autograph Software and (4) Mathematical disposition of students in the convergent learning style group is higher than the divergent learning style group.

Keyword: Contextual Teaching and Learning, Mathematical Disposition, Guided Discovery Learning, Concept Understanding Ability, Autograph Software