

ABSTRAK

PUTRI ANGGRAINI PURBA. Perbedaan Kemampuan Pemahaman Konsep Matematika dan Kemandirian Belajar Siswa yang Diajar dengan Model Pembelajaran *Discovery* dan *Group Investigation* Di SMK Multi Karya. Tesis. Medan: Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2022.

Penelitian ini bertujuan untuk mengetahui: (1) Perbedaan kemampuan pemahaman konsep matematika berdasarkan kemampuan awal matematika siswa, (2) Perbedaan kemandirian belajar matematika siswa berdasarkan kemampuan awal matematika siswa, (3) Perbedaan kemampuan pemahaman konsep matematika siswa yang diajar dengan model pembelajaran *discovery* dan model pembelajaran *group investigation* (4) Perbedaan kemandirian belajar siswa yang diajar dengan model pembelajaran *discovery* dan model pembelajaran *group investigation* (5) Interaksi antara kemampuan awal matematika dan model pembelajaran terhadap kemampuan pemahaman konsep matematika (6) Interaksi antara kemampuan awal matematika dan model pembelajaran terhadap kemandirian belajar matematika. Penelitian ini merupakan penelitian kuantitatif dengan metode eksperimen semu. Populasi penelitian ini adalah siswa kelas XI TKJ 3 dan XI MM 2, dengan analisis ANAVA dua jalur. Hasil penelitian menunjukkan bahwa (1) Terdapat perbedaan kemampuan pemahaman konsep matematika berdasarkan kemampuan awal matematika siswa, (2) Terdapat perbedaan kemandirian belajar matematika berdasarkan kemampuan awal matematika siswa, (3) Terdapat perbedaan kemampuan pemahaman konsep matematika siswa yang diajar dengan model pembelajaran *discovery* dan model pembelajaran *group investigation*, (4) Terdapat perbedaan kemandirian belajar siswa yang diajar dengan model pembelajaran *discovery* dan model pembelajaran *group investigation*, (5) Tidak terdapat interaksi antara kemampuan awal matematika dan model pembelajaran terhadap kemampuan pemahaman konsep matematika (6) Tidak terdapat interaksi antara kemampuan awal matematika dan model pembelajaran terhadap kemandirian belajar matematika.

Kata Kunci: Model Pembelajaran *Discovery*, *Group Investigation*, Kemampuan Awal Matematika, Pemahaman Konsep Matematika, Kemandirian Belajar Matematika.

ABSTRACT

Putri Anggraini Purba. Differences in the Ability of Understanding Mathematical Concepts and Self-Regulated Learning of Students Taught by the Discovery Learning Model and Group Investigation at SMK Multi Karya. Thesis. Medan: Postgraduate Mathematics Education Study Program, Medan State University, 2022.

This study aimed to determine: (1) differences in the ability to understand mathematical concepts based on students' early mathematical abilities, (2) differences in students' mathematics self-regulated learning based on students' early mathematical abilities, (3) differences in students' ability to understand mathematical concepts taught by discovery learning models and group investigation learning models (4) differences self-regulated learning of students who are taught with discovery learning model and group investigation learning model (5) interaction between early mathematics ability and learning model on ability to understand mathematical concepts (6) interaction between early mathematics ability and learning model on self-regulated learning mathematics. This research is a quantitative-research with quasi-experimental method. The population of this study were students of class XI TKJ 3 and XI MM 2, with two-way ANOVA analysis. The results showed that (1) differences in the ability to understand mathematical concepts based on students' early mathematical abilities, (2) differences in self-regulated learning mathematics based on students' early mathematical abilities, (3) there were differences in the ability to understand mathematical concepts of students who were taught with discovery learning models and learning models. group investigation, (4) There is a difference in the self-regulated learning of students who are taught by the discovery learning model and the group investigation learning model, (5) There is no interaction between the early ability of mathematics and the learning model on the ability to understand mathematical concepts (6) There is no interaction between the early ability mathematics and learning models on the self-regulated learning mathematics.

Key Words: Discovery, Group Investigation Learning Model, Early Mathematics Ability, Understanding Mathematical Concepts, Self-Regulated Learning Mathematics.