

ABSTRAK

AZIZAH YUSRA AMALIYAH HARAHAHAP. Perbedaan Kemampuan Representasi Matematis dan Self-Efficacy Siswa Melalui Model Learning Cycle 7E dan Model Discovery Learning Berbasis Budaya Batak Angkola. Tesis. Medan : Program Studi Pendidikan Matematika Pasca Sarjana Universitas Negeri Medan. 2018

Tujuan dari penelitian ini adalah untuk : (1) menganalisis perbedaan kemampuan representasi matematis siswa melalui model learning cycle 7E dan model discovery learning berbasis budaya Batak Angkola, (2) menganalisis perbedaan self-efficacy siswa melalui model learning cycle 7E dan model discovery learning berbasis budaya Batak Angkola, (3) mengetahui kadar aktivitas aktif siswa selama proses penerapan model learning cycle 7E dan discovery learning, (4) menganalisis proses penyelesaian jawaban tes kemampuan representasi matematis siswa pada melalui model pembelajaran learning cycle 7E dan model discovery learning berbasis budaya Batak Angkola. Instrumen yang digunakan terdiri dari : (1) tes kemampuan representasi matematis, (2) angket self-efficacy. Analisis data dilakukan dengan analisis varians (ANOVA) dua jalur. Hasil penelitian menunjukkan : (1) terdapat perbedaan kemampuan representasi matematis siswa melalui model learning cycle 7E dan model discovery learning berbasis Budaya Batak Angkola, (2) terdapat perbedaan self-efficacy siswa melalui model learning cycle 7E dan model discovery learning berbasis budaya Batak Angkola, (3) prosentase aktivitas aktif siswa terhadap kegiatan pembelajaran menggunakan model learning cycle 7E dan discovery learning berada dalam waktu ideal yang ditetapkan, (4) proses penyelesaian jawaban siswa kelas model learning cycle 7E lebih baik dan lebih sistematis dibandingkan kelas model discovery learning.

Kata Kunci: Model learning cycle 7E, Model discovery learning, Representasi matematis, Self-Efficacy.

ABSTRACT

AZIZAH YUSRA AMALIYAH HARAHAHAP. Differences in Mathematical Representing Capabilities and Self-Efficacy of Students Through the 7E Learning Cycle Model and Discovery Learning Model Based on Angkola Batak Culture. Thesis. Medan: Postgraduate Mathematics Education Study Program, Medan State University. 2018

The purpose of this study is to: (1) analyze the differences in students' mathematical representation abilities through the learning cycle 7E model and discovery learning model based on Angkola Batak culture, (2) analyze the differences in student self-efficacy through learning cycle 7E model and discovery learning model based Angkola Batak culture, (3) know the level of active activity during the process of applying the learning cycle 7E and discovery learning, (4) analyzing the process of resolving the answers to students' mathematical representation ability tests through the learning cycle 7E model and discovery learning models based on Angkola Batak culture. The instruments used consisted of: (1) tests of mathematical representation ability, (2) questionnaire self-efficacy. Data analysis was performed by analysis of two-way variance (ANAVA). The results of the study show: (1) there are differences in students' mathematical representation abilities through the learning cycle 7E model and discovery learning models based on Angkola Batak Culture, (2) there are differences in student self-efficacy through the learning cycle 7E model and discovery learning models based on Angkola Batak culture, (3) percentage of students' active activities towards learning activities using 7E learning cycle models and discovery learning being in the ideal time set, (4) the process of solving the answers of students in the learning cycle 7E model is better and more systematic than the class of discovery learning models.

Keywords: Learning cycle 7E model, Discovery learning model, Mathematical representation, Self-Efficacy.