

## ABSTRAK

**Sarah Marilin Nasution.** Pengaruh Model Pembelajaran dan Lokasi Sekolah Terhadap Kemampuan Penalaran Matematis Siswa. Program Studi Pendidikan Matematika, Pascasarjana Universitas Negeri Medan. 2021.

Penelitian ini bertujuan untuk menganalisis: (1) Untuk mengetahui pengaruh model pembelajaran terhadap kemampuan penalaran matematis siswa, (2) Untuk mengetahui pengaruh lokasi sekolah terhadap kemampuan penalaran matematis siswa, (3) Untuk mengetahui interaksi antara model pembelajaran dan lokasi sekolah terhadap kemampuan penalaran. Penelitian ini merupakan penelitian kuantitatif dengan metode eksperimen semu. Populasi dalam penelitian ini adalah seluruh siswa kelas VII Tsanawiyah Hifzil Qur'an Medan dan Madrasah Tsanawiyah Al-Jam'iyatul Tembung. Teknik pengambilan sampel dalam penelitian ini menggunakan teknik Probability Sampling. Jenis pengambilan sampel adalah Simple Random Sampling. Sampel penelitian dipilih dari dua kelas dari masing-masing sekolah, yaitu kelas Tsanawiyah Hifzil Qur'an Medan yaitu kelas kelas VII-2 memperoleh model *Problem Based Learning* terdiri dari 30 siswa dan VII-3 sebagai kelas yang memperoleh Pembelajaran Konvensional yang terdiri dari 30 siswa. Dan Madrasah Tsanawiyah Al-Jam'iyatul Tembung VII-1 sebagai kelas yang memperoleh model *Problem Based Learning* yang terdiri dari 28 siswa dan VII-6 sebagai kelas yang memperoleh Pembelajaran Konvensional yang terdiri dari 28 siswa penelitian menggunakan tes kemampuan penalaran matematis. Uji statistik data menggunakan Uji ANAVA dua jalur. Hasil penelitian menunjukkan bahwa: (1) terdapat pengaruh model pembelajaran terhadap kemampuan penalaran matematis siswa, (2) terdapat pengaruh lokasi sekolah terhadap kemampuan penalaran matematis siswa, (3) tidak terdapat pengaruh interaksi antara model pembelajaran dan lokasi sekolah terhadap kemampuan penalaran matematis siswa.

**Kata Kunci:** Model *Problem Based Learning*, Pembelajaran Konvensional, Lokasi Sekolah, Kemampuan Penalaran Matematis.

## ABSTRACT

**Sarah Marilin Nasution.** Differences in The Mathematical Critical Thinking Skills and Self-Efficacy of Students Who Get the Discovery Learning Models With Ordinary Learning in Junior High School. Thesis. Medan: Mathematics Education Study Postgraduate Program State University of Medan. 2021

This study aims to analyze: (1) differences in the mathematical critical thinking skills of students who get discovery learning models with ordinary learning, (2) differences in the mathematical critical thinking skills of students who have high, medium and low early mathematical ability, (3) the effect of the interaction between the learning model and early mathematical ability on students' mathematical critical thinking skills. This research is a quantitative study a quasi-experimental method. This study's population were all SMP Negeri 1 Tambangan in the odd semester of the 2019/2020 school year, totaling 160 students in 6 classes. The sampling technique in this study uses Probability Sampling techniques. The type of sampling is Simple Random Sampling. The sample in this study was selected by students from two classes, namely VIII-1 which consisted of 26 students who obtained the discovery learning model and clas VIII-2 which consisted of 26 students who obtained ordinary learning. The research instrument used a mathematical critical thinking skills test and questionnaire of self-efficacy. Statistical test of data using Two-Way ANOVA Test. The results showed that: (1) there is a differences in the mathematical critical thinking skills of students who get the discovery learning model with students who get ordinary learning, (2) there is a differences in the mathematical critical thinking skills of students who had high, medium and low early mathematical ability, (3) ) there is no interaction effect between the learning models and early mathematical ability on students' mathematical critical thinking skills, (4) there is a difference in the self-efficacy of students who get discovery learning model with students who get ordinary learning, (5) there is a differences in the self-efficacy of students who have high, medium and low early mathematical ability, (6) there is no interaction effect between the learning models and early mathematical ability on students' self-efficacy.

**Keyword :** *Problem Based Learning* Model, conventional learning, Lokasi school locstion, students' mathematical reasoning ability