

ABSTRAK

Armanila. 2016. Penerapan Model pembelajaran Process Oriented Guided Inquiry learning (POGIL) Untuk Meningkatkan Berpikir Kritis Matematis dan Self Efficacy Pada Siswa SMP. Tesis, Pendidikan Matematika Sekolah Pasca Sarjana Universitas Pendidikan Indonesia

Kemampuan berpikir kritis matematis dan *self-efficacy* harus dibangun sendiri oleh peserta didik melalui keterlibatan aktif dalam belajar dan interaksi dengan guru atau peserta didik lain. *POGIL* adalah model pembelajaran yang didesain dengan kelompok kecil yang berinteraksi dengan guru sebagai fasilitator. *POGIL* membimbing peserta didik melalui kegiatan eksplorasi agar peserta didik membangun pemahaman sendiri (inkuiri terbimbing). Tujuan penelitian ini adalah untuk mengetahui keefektifan model pembelajaran *POGIL* terhadap kemampuan berpikir kritis matematis dan *self-efficacy* pada siswa SMP. Penelitian ini merupakan suatu kuasi eksperimen. Sampel pada penelitian ini adalah kelas VIII sebanyak dua kelas pada salah satu SMP negeri di Sumatera Utara. Data penelitian diperoleh dengan metode tes. Analisis data akhir meliputi uji normalitas, uji homogenitas, uji proporsi, dan uji perbedaan rata-rata. Hasil penelitian menunjukkan bahwa: (1) kemampuan berpikir kritis siswa yang menggunakan model pembelajaran *POGIL* lebih baik dari siswa yang memperoleh pelajaran konvensional, (2) Terdapat perbedaan kemampuan berpikir kritis matematis siswa yang menggunakan model pembelajaran *POGIL* dilihat dari kategori kemampuan awal matematis (KAM), (3) *Self-efficacy* siswa yang menggunakan model pembelajaran *POGIL* lebih baik dari siswa yang memperoleh pembelajaran konvensional.

Kata kunci: Kemampuan berpikir kritis matematis, *Self-Efficacy*, *Process Oriented Guided Inquiry Learning (POGIL)*.

ABSTRACT

Armanila. 2016. Application of Learning Model Process Oriented Guided Inquiry Learning (POGIL) To Improve Critical Thinking Mathematically and Self Efficacy In junior high school students. Thesis, Mathematics Education Graduate School of Education University of Indonesia

Mathematically critical thinking skills and self-efficacy must be built by the students through active involvement in learning and interaction with teachers or other learners. POGIL is a learning model that is designed with small groups to interact with the teacher as a facilitator. POGIL guiding learners through exploration activities so that learners construct their own understanding (guided inquiry). The purpose of this study was to determine the effectiveness of the learning model POGIL against critical thinking skills and self-efficacy mathematical junior high school students. This study is a quasi-experiment. Samples are as many as two eighth grade class at one junior high school in North Sumatra. The research data obtained with test method. Final data analysis including normality test, homogeneity test, the proportion of test, and test the average difference. The results showed that: (1) the critical thinking ability of students to apply learning model POGIL better than students who received lessons conventional, (2) There are differences in the ability of critical thinking mathematical students using model POGIL from the category of initial ability mathematically (KAM) , (3) Self-efficacy of students using model POGIL better than students who received conventional learning.

Keywords: critical thinking skills mathematically, Self-Efficacy, Process Oriented Guided Inquiry Learning (POGIL).