

ABSTRAK

Tanti Jumaisyaroh Siregar, (2014). Peningkatan Kemampuan Berpikir Kritis Matematis dan Kemandirian Belajar Siswa SMP Swasta Ar-rahman Percut Melalui Pembelajaran Berbasis Masalah. Tesis Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2014.

Tujuan penelitian ini untuk mengetahui: (1) perbedaan peningkatan kemampuan berpikir kritis matematis antara siswa yang diberi pembelajaran berbasis masalah dengan siswa yang diberi pembelajaran langsung; (2) interaksi antara pembelajaran dengan kemampuan awal matematika siswa terhadap peningkatan kemampuan berpikir kritis matematis siswa; (3) perbedaan peningkatan kemandirian belajar antara siswa yang diberi pembelajaran berbasis masalah dengan siswa yang diberi pembelajaran langsung; (4) interaksi antara pembelajaran dengan kemampuan awal matematika siswa terhadap peningkatan kemandirian belajar siswa. Populasi dalam penelitian ini adalah seluruh siswa SMP Swasta Ar-rahman Percut dan sampel dalam penelitian ini adalah siswa kelas VIII dengan mengambil dua kelas (kelas eksperimen dan kelas kontrol) sebanyak 60 orang siswa. Instrumen yang digunakan terdiri dari tes kemampuan berpikir kritis matematis dan skala kemandirian belajar. Data dianalisis dengan uji ANAVA dua jalur. Berdasarkan hasil analisis tersebut diperoleh yaitu: (1) peningkatan kemampuan berpikir kritis matematis siswa yang diberi pembelajaran berbasis masalah lebih tinggi daripada siswa yang diberi pembelajaran langsung; (2) tidak terdapat interaksi antara pembelajaran dengan kemampuan awal matematika siswa terhadap peningkatan kemampuan berpikir kritis matematis siswa; (3) peningkatan kemandirian belajar siswa yang diberi pembelajaran berbasis masalah lebih tinggi daripada siswa yang diberi pembelajaran langsung (4) tidak terdapat interaksi antara pembelajaran dengan kemampuan awal matematika siswa terhadap peningkatan kemandirian belajar siswa. Berdasarkan hasil penelitian ini, disarankan agar pembelajaran berbasis masalah dijadikan alternatif bagi guru untuk meningkatkan kemampuan berpikir kritis matematis dan kemandirian belajar siswa.

Kata Kunci: Berpikir Kritis, Kemandirian Belajar, Pembelajaran Berbasis Masalah.

ABSTRACT

Tanti Jumaisyaroh Siregar, (2014). The Improvement of the Mathematical Critical Thinking Ability and Self-Regulated Students in SMP Swasta Ar-rahman Percut through Problem-Based Learning. Thesis. Medan: Posgraduate of Study Mathematics Education University of Negeri Medan, 2014.

The purposes of this research were to know: (1) The difference of improvement in mathematical critical thinking ability of students that given problem-based learning with students that given direct learning; (2) The interaction between the model of learning with students' mathematical previous knowledge toward the improvement in mathematical critical thinking ability; (3) The difference of improvement in self-regulated learning of students that given problem-based learning with students that given direct learning; (4) The interaction between the model of learning with students' mathematical previous knowledge toward the improvement in self-regulated learning. The population of this research is all students of SMP Swasta Ar-rahman Percut and the sample of this research is grade eight with taken sample two classes (experiment and control) with total 60 students. The instrument of this research were: test of mathematical critical thinking and scale of self-regulated learning. The analysis data was done by using two-way ANAVA test. Based of the results analysis, it showed that: (1) Improvement of the students' ability in mathematical critical thinking that given problem-based learning was higher than the students' ability that given direct learning; (2) There did not exist interaction between model of learning and students' mathematical previous knowledge toward the improvement ability mathematical critical thinking; (3) Improvment of the students' self-regulated learning that given problem-based learning was higher than the students' ability that given direct learning; (4) There did not exist interaction between model of learning and students' mathematical previous knowledge toward the improvement self-regulated learning. His then, suggested that problem-based learning be used as an alternative for mathematic teacher to improved students' ability in mathematical critical thinking and self-regulated learning.

Keywords: Critical Thinking, Self-Regulated Learning, Problem- Based Learning.