

ABSTRAK

SHOLIHA PRATIWI SIREGAR. Peningkatan Kemampuan Penalaran Matematis dan Kemandirian Belajar Siswa melalui Pendekatan Matematika Realistik Terhadap Siswa SMP Swasta Esa Prakarsa Selesai. Tesis. Medan: Program Studi Pendidikan Matematika Pasca Sarjana Universitas Negeri Medan. 2016.

Tujuan dari penelitian ini adalah untuk mengetahui: (1) peningkatan kemampuan penalaran matematis siswa yang diajarkan dengan pendekatan matematika realistik lebih tinggi daripada siswa yang diajarkan dengan pembelajaran ekspositori, (2) peningkatan kemandirian belajar siswa yang diajarkan dengan pendekatan matematika realistik lebih baik daripada dengan siswa yang diajarkan dengan pembelajaran ekspositori, (3) interaksi antara pembelajaran dengan kemampuan awal matematika siswa (tinggi, sedang, rendah) terhadap peningkatan penalaran matematis siswa, (4) interaksi antara pembelajaran dengan kemampuan awal matematika siswa (tinggi, sedang, rendah) terhadap peningkatan kemandirian belajar siswa, (5) proses jawaban siswa pada tes kemampuan penalaran matematis siswa yang mendapatkan pendekatan matematika realistik dan pembelajaran ekspositori. Penelitian ini merupakan penelitian quasi eksperimen. Populasi penelitian ini adalah siswa kelas VIII SMP Negeri Swasta Esa Prakarsa. Sampel penelitian ini terdiri dari dua kelas. Kelas eksperimen diberi perlakuan pendekatan matematika realistik dan kelas kontrol dengan pembelajaran ekspositori. Instrumen yang digunakan terdiri dari: (1) test kemampuan penalaran matematis, (2) angket kemandirian. Instrumen tersebut telah memenuhi syarat validasi isi. Analisis data dilakukan dengan analisis varians (ANAVA) dua jalur. Hasil penelitian menunjukkan (1) kemampuan penalaran matematis siswa SMP melalui pendekatan matematika realistik lebih tinggi daripada peningkatan kemampuan penalaran matematis siswa dengan pembelajaran ekspositori. (2) kemandirian belajar siswa SMP melalui pendekatan matematika realistik lebih baik daripada peningkatan kemandirian belajar siswa dengan pembelajaran ekspositori. (3) Tidak terdapat interaksi antara pembelajaran dengan kemampuan awal siswa terhadap peningkatan kemampuan penalaran matematis siswa. (4) Tidak terdapat interaksi antara pembelajaran dengan kemampuan awal siswa terhadap peningkatan kemandirian belajar siswa. (5) Proses penyelesaian jawaban siswa menggunakan pendekatan matematika realistik lebih baik daripada pembelajaran ekspositori.

Kata Kunci: Pendekatan, Realistik, Kemampuan, Penalaran, Matematis, Kemandirian Belajar.



ABSTRACT

SHOLIHA PRATIWI SIREGAR. Upgrades of Mathematical reasoning ability and Self-Regulated Learning Students Through Realistic Mathematics Approach In SMP Swasta Esa Prakarsa Selesai. Thesis. Terrain: Mathematics Education Graduate University of Medan. 2016.

The purpose of this study is to determine: (1) the increasing of students mathematical reasoning ability through realistic mathematics approach is higher than through expository learning, (2) the increasing of students Self-Regulated Learning through realistic mathematics approach is better than through expository learning, (3) the interaction between the learning and prior mathematics knowledge of students (high, middle, low) toward increasing of students reasoning ability of mathematics, (4) the interaction between the learning and prior knowledge of mathematics students (high, middle, low) toward increasing of students Self-Regulated Learning, (5) the answers process of students in test of students mathematical resasoning ability which is used realislisic mathematics approach and expository learning. This research is a quasi experiment. Population is the eighth grade students of SMP Swasta Esa Prakarsa Selesai. Sample consist of two classes. Experimental class which is used treated realistic mathematics approach and control classes use expository learning. The instrument is used such as: (1) test the mathematical reasoning ability, (2) Self-Regulated Learning questionnaire. The instrument has a qualified validation of the content. Data were analysis using variance (ANOVA) two part. Results showed (1) Improving the mathematical reasoning ability in junior high school students through realistic mathematics approach higher than the increasing of students mathematical reasoning ability using expository learning. (2) Increasing of Self-Regulated Learning for junior high school students through a realistic mathematics approach is better than students is Self-Regulated Learning using expository learning. (3) There is no interaction between the students learning ability with students prior knowledge ability toward improvment ot students mathematical reasoning ability. (4) There is no interaction between the learning and students prior knowledge ability toward students' Self-Regulated Learning. (5) The answers process of the students' using realistic mathematics approach is better than the expository learning.

Keywords: Approach, Realistic, Ability, Reasoning, Mathematical, Self-Regulated, Learning.

