ABSTRAK

MAHADI. Peningkatan Kemampuan Pemecahan Masalah Matematis dan Kemandirian Belajar Siswa SMP Ar-Rahman Percut melalui Pembelajaran Berdasarkan Masalah. Program Pascasarjana Universitas Negeri Medan, 2016.

Penelitian ini bertujuan untuk mengetahui (1) peningkatan kemampuan pemecahan masalah matematis siswa yang diajar dengan pembelajaran berdasarkan masalah dan yang diajar dengan pembelajaran biasa, (2) peningkatan kemandirian belajar siswa yang diajar dengan pembelajaran berdasarkan masalah dan yang diajar dengan pembelajaran biasa, (3) interaksi antara kemampuan awal matematika siswa dan pembelajaran terhadap peningkatan kemampuan pemecahan masalah matematis siswa, dan (4) interaksi antara kemampuan awal matematika siswa dan pembelajaran terhadap peningkatan kemandirian belajar siswa. Jenis penelitian yang digunakan adalah kuasi eksperimen dengan desain kelompok kontrol non-ekivalen. Populasi dalam penelitian ini terdiri dari seluruh siswa SMP Ar-Rahman Percut yang berjumlah 337 siswa, sedangkan sampelnya terdiri 30 siswa pada kelas VII-C dan 30 siswa pada kelas VII-D. Instrumen penelitian yang digunakan adalah tes kemampuan awal matematika, pretes dan postes kemampuan pemecahan masalah matematis, serta pretes dan postes skala kemandirian belajar. Pengujian hipotesis statistik dalam penelitian ini menggunakan rumus Anava Dua Jalan. Hasil penelitian menunjukkan bahwa (1) peningkatan kemampuan pemecahan masalah matematis siswa yang diajar dengan pembelajaran berdasarkan masalah lebih tinggi daripada yang diajar dengan pembelajaran biasa, (2) peningkatan kemandirian belajar siswa yang diajar dengan pembelajaran berdasarkan masalah lebih tinggi daripada yang diajar dengan pembelajaran biasa, (3) tidak terdapat interaksi antara kemampuan awal matematika siswa dan pembelajaran terhadap peningkatan kemampuan pemecahan masalah matematis siswa, dan (4) tidak terdapat interaksi antara kemampuan awal matematika siswa dan pembelajaran terhadap peningkatan kemandirian belajar siswa.

Kata Kunci: Kemampuan Pemecahan Masalah Matematis, Kemandirian Belajar, Pembelajaran Berdasarkan Masalah

ABSTRACT

MAHADI. Improved the Abilities of Mathematical Problem Solving and Self Regulated Learning Students' the SMP Ar-Rahman Percut through Problem Based Learning. Postgraduate School of the State University of Medan, 2016.

The aims of this study were to know (1) improved the abilites of students' mathematical problem solving who were taught by problem based learning and who were taught by regular learning, (2) improved the students' self regulated learning who were taught by problem based learning and who were taught by regular learning, (3) interaction between the students' mathematical initial abilities and learnings to improvement the abilities of students' mathematical problem solving, and (4) interaction between the students' mathematical initial abilities and learnings to improvement the students' self regulated learning. The type of research was used quasi experimental with design of non-equivalent control group. The population in this study consists of all students of SMP Ar-Rahman Percut amounts to 337 students, while the sample consists of 30 students in class VII-C and 30 students in class VII-D. The research instruments were used test of mathematical initial ability, pretest and posttest of mathematical problem solving ability, as well pretest and posttest of scales self regulated learning. The Statistical hypothesis testing in this study used formula of Anova Two Way. The results were showed that (1) improved the abilities of students' mathematical problem solving who were taught by problem based learning higher than who were taught by regular learning, (2) improved the students' self regulated learning who were taught by problem based learning higher than who were taught by regular learning, (3) there was no interaction between the students' mathematical initial abilities and learnings to improvement the abilities of students' mathematical problem solving, dan (4) there was no interaction between the students' mathematical initial abilities and learnings to improvement the students' self regulated learning.

Key Words: Ability of Mathematical Problem Solving, Self Regulated Learning, Problem Based Learning

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