

ABSTRAK

HAFNI SURYATIS. Peningkatan Kemampuan Pemecahan Masalah Matematik Siswa dan *Self-Regulated Learning* melalui Pendekatan *Open-Ended* di SMP Negeri 3 Padangsidimpuan. Tesis. Medan: Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan. 2016.

ABSTRAK

Penelitian ini bertujuan untuk mengetahui: 1) peningkatan kemampuan pemecahan masalah matematik siswa yang memperoleh pembelajaran dengan pendekatan *open-ended* lebih tinggi daripada pembelajaran dengan pendekatan ekspositori; 2) peningkatan *self-regulated learning* siswa yang memperoleh pembelajaran dengan pendekatan *open-ended* lebih tinggi daripada pembelajaran dengan pendekatan ekspositori; 3) interaksi antara model pembelajaran dengan kemampuan awal matematika siswa terhadap kemampuan pemecahan masalah matematik siswa; 4) interaksi antara model pembelajaran dengan kemampuan awal matematika siswa terhadap *self-regulated learning* siswa; 5) keragaman jawaban siswa dalam menyelesaikan soal-soal pemecahan masalah matematik pada masing-masing pembelajaran. Jenis penelitian ini *quasi eksperiment*. Populasi seluruh siswa kelas VII SMP Negeri 3 Padangsidimpuan. Sampel menggunakan *random sampling* terdiri dari kelas VII-1 diberi pendekatan *open-ended* dan kelas VIII-4 diberi pendekatan ekspositori. Instrumen penelitian yaitu tes kemampuan pemecahan masalah matematik dan angket *self-regulated learning*. Analisis data menggunakan ANAVA dua jalur. Hasil penelitian menunjukkan bahwa: 1) terdapat peningkatan kemampuan pemecahan masalah matematik siswa yang diajarkan dengan pendekatan *open-ended* dengan siswa yang diajarkan dengan pendekatan ekspositori, dengan nilai signifikan sebesar $0,010 < 0,05$; 2) terdapat peningkatan *self-regulated learning* siswa yang diajarkan dengan pendekatan *open-ended* dengan siswa yang diajarkan dengan pendekatan ekspositori, dengan nilai signifikan sebesar $0,022 < 0,05$; 3) tidak terdapat interaksi antara model pembelajaran dengan kemampuan awal matematika siswa terhadap kemampuan pemecahan masalah matematik siswa, dengan nilai signifikan sebesar $0,425 > 0,05$; 4) tidak terdapat interaksi antara model pembelajaran dengan kemampuan awal matematika siswa terhadap *self-regulated learning* siswa, dengan nilai signifikan sebesar $0,632 > 0,05$; 5) proses penyelesaian jawaban siswa yang diajarkan pendekatan *open-ended* lebih bervariasi dibandingkan dengan siswa yang diajarkan pendekatan ekspositori.

Kata Kunci: Kemampuan Pemecahan Masalah Matematik, *Self-Regulated Learning*, Pendekatan *Open-Ended*.

ABSTRACT

HAFNI SURYATIS. Upgrades of Mathematical Problem Solving Students and Self-Regulated Learning through Open-Ended Approach in SMP Negeri 3 Padangsidimpuan. Thesis. Medan: Mathematics Education Graduate Program, State University of Medan. 2016.

This study aims to determine: 1) the increase in mathematical problem solving ability of students who received study with open-ended approach is higher than the study with expository approach; 2) an increase in self-regulated learning of students who received study with open-ended approach is higher than the study with expository approach; 3) the interaction between the learning model with early mathematical ability of students to the mathematical problem solving abilities of students; 4) the interaction between the learning model with early mathematical ability of students to the students' self-regulated learning; 5) the diversity of responses of the students in solving problems solving mathematical problems in each lesson. This type of research is quasi experiment. Population entire seventh grade students of SMP Negeri 3 Padangsidimpuan. Sample using random sampling which consists of two classes, a class VII-1 was given an open-ended approach and VIII-4 by expository approach. The instrument used in this study consisted of a test of mathematical problem solving skills and self-regulated learning questionnaire. Analysis of data using ANOVA two paths. The results showed that: 1) there is an increase in mathematical problem solving ability of students taught with an open-ended approach to the students taught by expository approach. This is evident from the significant values obtained for $0.010 < 0.05$; 2) there is an increased self-regulated learning of students who are taught by open-ended approach to the students taught by expository approach, This is evident from the significant value gained $0.022 < 0.05$; 3) there is no interaction between the learning model with early mathematical ability of students to the mathematical problem solving ability of students. This is evident from the significant values obtained for $0.425 > 0.05$; 4) there is no interaction between the learning model with early mathematical ability of students to the students' self-regulated learning. This is evident from the significant values obtained for $0.632 > 0.05$; 5) the settlement process responses of the students are taught to use the open-ended approach is more varied than the students taught using expository approach.

Keywords: Mathematical Problem Solving Ability, Self-Regulated Learning Approach Open-Ended