

ABSTRAK

Djumpyati Rusman 2024. “Keefektifan Model *Problem Based Learning* Terhadap Kemampuan Pemecahan Masalah Matematis dan Sikap Belajar Siswa pada Materi Sistem Persamaan Linear Dua Variabel” Di Bawah Bimbingan **Nurma Angkotasan, S.Pd., M.Pd. dan Dr. Hasriani Ishak, S.Si., M.Sc.**

Penelitian ini bertujuan untuk mengetahui (1) Kemampuan pemecahan masalah matematis dan sikap belajar siswa sebelum diterapkan model *problem based learning* pada materi sistem persamaan linear dua variabel, (2) Kemampuan pemecahan masalah matematis dan sikap belajar siswa setelah diterapkan model *problem based learning* pada materi sistem persamaan linear dua variabel dan (3) Model *problem based learning* efektif terhadap kemampuan pemecahan masalah matematis dan sikap belajar siswa pada materi sistem persamaan linear dua variabel. Jenis penelitian ini kuantitatif dengan pendekatan *Pre-Experimental Design*. Adapun desain penelitian *one Group Pretest-Posttest* dengan satu kelompok sampel yaitu kelompok eksperimen. Sampel dalam penelitian ini adalah siswa kelas VIII-2 SMP Negeri 4 Kota Ternate. Hasil penelitian ini menunjukkan (1) Kemampuan pemecahan masalah matematis kelas VIII-2 di SMP Negeri 4 Kota Ternate sebelum diterapkan model *problem based learning* terdapat siswa dengan kriteria rendah. Sikap belajar siswa terdapat 5 siswa dengan kriteria cukup baik dan 25 siswa kriteria kurang baik, (2) Kemampuan pemecahan masalah matematis siswa di kelas VIII-2 SMP Negeri 4 Kota Ternate setelah diterapkan model *problem based learning* dapat dilihat kriteria tinggi sebanyak 10 siswa (33,3%), kriteria sedang sebanyak 6 siswa (20%) dan kriteria rendah sebanyak 14 siswa (46,7%) memperoleh nilai rata-rata 66,94. Sikap belajar siswa diperoleh 1 siswa (3,3%) kriteria sangat baik, 26 siswa (86,7%) kriteria baik, 3 siswa (10%) kriteria cukup baik diperoleh nilai rata-rata 68,80. dan (3) Peningkatan kemampuan pemecahan masalah matematis dan sikap belajar siswa setelah penerapan model *problem based learning* dalam kriteria sedang, sehingga dapat dikatakan efektif terhadap kemampuan pemecahan masalah matematis dan sikap belajar siswa. Pengujian hipotesis pada penelitian ini menunjukkan bahwa nilai signifikansi kemampuan pemecahan masalah matematis dan sikap belajar siswa $0,000 < \alpha = 0,05$ maka hipotesis diterima berarti bahwa terdapat keefektifan model *problem based learning* terhadap kemampuan pemecahan masalah matematis dan sikap belajar siswa pada materi sistem persamaan linear dua variabel kelas VIII-2 SMP Negeri 4 Kota Ternate.

Kata kunci: *Problem Based Learning*, Kemampuan Pemecahan Masalah Matematis, Sikap Belajar Siswa, Sistem Persamaan Linear Dua Variabel.

ABSTRACT

Djummyati Rusman 2024. "The Effectiveness of the Problem Based Learning Model on Mathematical Problem Solving Ability and Students' Learning Attitudes on Two-Variable Linear Equation System Material" Under the guidance of **Nurma Angkotasari, S.Pd., M.Pd. and Dr. Hasriani Ishak, S.Si., M.Sc.**

This study aims to find out (1) Students' mathematical problem-solving ability and learning attitude before applying the problem-based learning model to the two-variable linear equation system material, (2) Mathematical problem-solving ability and students' learning attitude after applying the problem-based learning model to the two-variable linear equation system material and (3) The problem-based learning model is effective on the mathematical problem-solving ability and students' learning attitude on the material two-variable linear equation system. This type of research is quantitative with a Pre-Experimental Design approach. The research design is one Group Pretest-Posttest with one sample group, namely the experimental group. The sample in this study is students in grades VIII-2 of SMP Negeri 4 Ternate City. The results of this study show (1) The ability to solve mathematical problems in grades VIII-2 at SMP Negeri 4 Ternate City before the implementation of the problem-based learning model there are students with low criteria. There were 5 students with good criteria and 25 students with poor criteria, (2) The mathematical problem-solving ability of students in grades VIII-2 of SMP Negeri 4 Ternate City after the implementation of the problem-based learning model can be seen as high criteria as many as 10 students (33.3%), medium criteria as many as 6 students (20%) and low criteria as many as 14 students (46.7%) obtained an average score of 66.94. The students' learning attitude was obtained by 1 student (3.3%) with very good criteria, 26 students (86.7%) with good criteria, 3 students (10%) with good criteria with an average score of 68.80, and (3) Improvement of mathematical problem-solving ability and student learning attitude after the application of the problem-based learning model in moderate criteria, so that it can be said to be effective on mathematical problem-solving ability and student learning attitude. The hypothesis testing in this study shows that the significance value of mathematical problem-solving ability and student learning attitude is $0.000 < \alpha = 0.05$, then the hypothesis is accepted means that there is an effectiveness of the problem-based learning model on the mathematical problem-solving ability and student learning attitude on the material of the two-variable linear equation system class VIII-2 SMP Negeri 4 Ternate City.

Keywords: Problem Based Learning, Mathematical Problem Solving Ability, Student Learning Attitudes, Two-Variable Linear Equation System.