

ABSTRAK

SRI MULIATI. Perbedaan Kemampuan Penalaran dan Disposisi Matematis Siswa dengan Menggunakan Pembelajaran Berbasis Masalah. Program Pascasarjana Universitas Negeri Medan 2013.

Tujuan penelitian ini untuk mengetahui : (1) perbedaan kemampuan penalaran dan disposisi matematis siswa yang diberi model pembelajaran berbasis masalah dan siswa yang diberi model pembelajaran langsung, (2) interaksi antara model pembelajaran dengan kemampuan awal matematika siswa terhadap kemampuan penalaran dan disposisi matematis siswa, (3) proses penyelesaian jawaban yang dibuat siswa dalam menyelesaikan masalah pada model pembelajaran berbasis masalah dan model pembelajaran langsung. Jenis penelitian ini adalah kuasi eksperimen dengan populasi siswa kelas XI SMAN di kota Langsa. Secara acak, dipilih dua sekolah sebagai subjek penelitian yaitu SMAN 1 dan SMAN 3 Langsa. Kemudian secara acak dipilih dua kelas dari tujuh kelas. Instrumen yang digunakan terdiri dari : (1) tes kemampuan penalaran, dan (2) skala disposisi matematis. Analisis data dilakukan dengan analisis kovarians (ANACOVA) dan analisis varians (ANAVA). Hasil penelitian menunjukkan bahwa : (1) terdapat perbedaan kemampuan penalaran dan disposisi matematis antara siswa yang diberi model pembelajaran berbasis masalah dengan siswa yang diberi model pembelajaran langsung, (2) tidak terdapat interaksi antara model pembelajaran dan kemampuan awal matematika siswa terhadap kemampuan penalaran dan disposisi matematis siswa, (3) proses penyelesaian jawaban siswa yang pembelajarannya dengan menggunakan model pembelajaran berbasis masalah lebih baik dibandingkan dengan model pembelajaran langsung. Peneliti menyarankan: (1) agar model pembelajaran berbasis masalah menjadi alternatif bagi guru untuk mengetahui perbedaan kemampuan penalaran dan disposisi matematis siswa (2) perangkat pembelajaran dipersiapkan secara matang serta disesuaikan dengan indikator kemampuan dan alokasi waktu yang harus dicapai (3) agar selektif dalam memilih materi yang diajarkan dengan pembelajaran berbasis masalah karena tidak semua materi cocok diterapkan dengan pembelajaran berbasis masalah.

Kata Kunci : Model Pembelajaran Berbasis Masalah, Kemampuan Penalaran dan Disposisi Matematis Siswa.



ABSTRACT

Sri Muliati. Differences Mathematical Reasoning Ability and Disposition Students' through Problem-Based Learning Model. Thesis. Medan: Mathematics Education Study Program Postgraduate, School of University of Medan, 2013.

The purpose of this study to determine : (1) differences in mathematical reasoning skills among students' who are given problem-based learning model with students' who were given direct learning model, (2) differences in mathematical disposition among students' who are given problem-based learning model with students' who were given direct learning model, (3) the interaction between learning model and early math skills of students' to reasoning abilities of students', (4) the interaction between learning model and early math skills of students' to mathematical disposition of students', (5) the settlement of the answers that the students' in problems solving in problem-based learning model and direct learning model. This study is a semi-experimental study with population is a class XI students' in Langsa. Randomly selected two schools as research subjects, which is SMAN 1 and SMAN 3 Langsa. Then randomly selected two classes of eleventh grade. The instrument used consisted of : (1) test the ability of mathematical reasoning, and (2) mathematical disposition questionnaire. Data analysis was performed by analysis of covariance (ANACOVA) and analysis of variance (ANAVA). The result show that (1) there are differences in mathematical reasoning skills and disposition among students' who are given problem-based learning model with students' who were direct instruction model, (2) there is no interaction between the learning model and early math skills of students' to mathematical reasoning abilities and disposition of students', (5) the process of settlement of the students' answers with problem-based learning model is better than direct learning model. Researcher suggested: (1) to kind of problem based learning model into alternative for teachers to know differences the mathematical reasoning and disposition of students, (2) device learning prepared carefully and adapted to indicators ability and allocation time to be achieved, and (3) to selective in choosing the materials given by problem-based learning of not all matter match is applied by problem-based learning.

Keywords : Problem-Based Learning Model, Mathematical Reasoning and Disposition.

