

ABSTRAK

Vincentia Melati Widya Prasanti. 2015. “Analisis Kesalahan Siswa Kelas VII A SMP Kanisius Kalasan Tahun Ajaran 2014/2015 dalam Menyelesaikan Soal - Soal Persamaan Linear Satu Variabel”. Skripsi. Program Studi Pendidikan Matematika. Jurusan Pendidikan dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma Yogyakarta.

Penelitian ini bertujuan untuk mengetahui jenis-jenis kesalahan yang dilakukan siswa kelas VII A SMP Kanisius Kalasan tahun ajaran 2014/2015 dalam menyelesaikan soal matematika terkait materi Persamaan Linear Satu Variabel dan menyelidiki faktor penyebab kesalahan tersebut. Subyek penelitian ini adalah 30 siswa kelas VII A SMP Kanisius Kalasan tahun ajaran 2014/2015.

Penelitian ini menggunakan metode deskriptif kualitatif, yang dilengkapi dengan metode kuantitatif. Data diperoleh dari hasil tes tertulis terkait materi Persamaan Linear Satu Variabel dan wawancara. Tes tertulis diikuti oleh 30 siswa kelas VII A, sedangkan untuk kepentingan wawancara, peneliti memilih 7 siswa kelas VII A. Objek penelitian ini adalah kesalahan siswa kelas VII dalam menyelesaikan soal-soal Persamaan Linear Satu Variabel.

Hasil penelitian ini menunjukkan bahwa terdapat 6 jenis kesalahan yang ditemukan dalam tes tertulis penelitian, yaitu: Kesalahan dalam Operasi Hitung, Kesalahan Data, Kesalahan dalam Mengintepretasikan Bahasa, Kesalahan Ketiadaan Struktur, Kesalahan dalam Menggunakan Teorema atau Definisi, dan Kesalahan Teknis. Penyebab kesalahan-kesalahan tersebut adalah: kurangnya pemahaman siswa terhadap materi-materi sebagai prasyarat materi persamaan linear satu variabel, seperti operasi hitung bilangan dan operasi aljabar; meskipun siswa telah memahami materi-materi prasyarat tersebut, siswa kurang mampu menggunakan pemahamannya dalam menyelesaikan soal-soal Persamaan Linear Satu Variabel; kurangnya pemahaman siswa terhadap langkah-langkah penyelesaian persamaan dan kurang mampunya siswa dalam mengidentifikasi setiap suku persamaan; siswa kurang berlatih menyelesaikan soal-soal terkait materi Persamaan Linear Satu Variabel, terlebih soal-soal dengan bermacam-macam bentuk; suasana kelas yang kurang kondusif sehingga sulitnya siswa untuk memahami penjelasan guru saat guru menjelaskan materi ini di kelas; dan siswa tidak mengoreksi kembali setiap langkah penyelesaian yang dilakukan.

Kata Kunci: persamaan linear satu variabel, jenis-jenis kesalahan, faktor penyebab kesalahan, pembelajaran matematika

ABSTRACT

Vincentia Melati Widya Prasanti. 2015. "Error Analysis of Students in Class 7A of Kanisius Kalasan Junior High School in The Academic Year 2014/2015 in Solving Problems of Linear Equations of One Variable". Undergraduate Thesis. Mathematics Education Study Program, Faculty of Teacher Training and Education, Sanata Dharma University Yogyakarta.

This research was aimed to know the kinds of errors made by students in class 7A of Kanisius Kalasan Junior High School in the academic year 2014/2015 in solving the problems about Linear Equations of One Variable and factors causing errors made by students in class 7A of Kanisius Kalasan Junior High School in the academic year 2014/2015 in solving the problems about Linear Equations of One Variable. The subjects of this research were thirty students in class 7A of Kanisius Kalasan Junior High School in the academic year 2014/2015.

This research used the qualitative descriptive method, supported by quantitative method. The data were collected from the results of a mathematics test of Linear Equations of One Variable and the results of a interviews. The test of mathematics was done by thirty students in class 7A, and the interviews were conducted for seven students in class 7A. The object of this research was the set of errors of students in class 7A in solving the problems about Linear Equations of One Variable.

The results of this research showed that there were six kinds of errors which were found on the results of the mathematics test, they were: errors in arithmetic operations, misused data, misinterpreted language, absence of structure, distorted theorem of definition, and technical error. Factors which caused students mistakes were: lack of understanding about materials which were prerequisite of Linear Equations of One Variable material, like arithmetic operation and algebraic operation; even though the students had understood those materials, the students weren't able to use their comprehensions in solving problems about Linear Equations of One Variable; lack of understanding on the steps to solve the equation and weren't able to identify each equation sequence; students had a lack of practice in solving problems about Linear Equations of One Variable, especially problems with many types of Linear Equations of One Variable; class circumstances which weren't conducive made students difficult in understanding teacher's explanation in class; and the students didn't recheck each step in the process of solving the equations.

Key words: linear equations of one variable, kinds of errors, factors causing errors, mathematics learning and teaching.