

ABSTRAK

Fausi Setiawan. 121414061. 2018. "ANALISIS KESALAHAN SISWA KELAS VII B SMP PANGUDI LUHUR MOYUDAN DALAM MENYELESAIKAN SOAL PERSAMAAN DAN PERTIDAKSAMAAN LINEAR SATU VARIABEL Tahun Ajaran 2017/2018"

Tujuan dari penelitian yang telah dilakukan ini adalah untuk : 1) mengidentifikasi jenis-jenis kesalahan siswa menurut teori Newman dalam persamaan dan pertidaksamaan linear satu variabel; 2) mengetahui faktor penyebab kesalahan yang dilakukan oleh siswa; 3) mendeskripsikan rancangan program remedial yang dapat dilakukan untuk mengatasi kesalahan yang dilakukan siswa materi persamaan dan pertidaksamaan linear satu variabel.

Subjek penelitian ini adalah 38 siswa kelas VII B SMP Pangudi Luhur Moyudan tahun ajaran 2017/2018. Jenis penelitian ini adalah penelitian deskriptif kualitatif. Metode pengumpulan data yang digunakan ialah observasi(pengamatan), tes, dan wawancara. Instrumen penelitian berupa lembar observasi, lembar tes tertulis dan pedoman wawancara. Analisis data pada penelitian ini secara kuantitatif dan kualitatif. Penelitian ini menggunakan teori analisis kesalahan menurut Newman.

Hasil penelitian menunjukkan jenis-jenis kesalahan yang dilakukan siswa yaitu: a) kesalahan membaca sebanyak 2 kesalahan, b) kesalahan memahami sebanyak 8 kesalahan, c) kesalahan transformasi sebanyak 17 kesalahan, d) kesalahan ketrampilan proses 8 kesalahan, e) kesalahan menuliskan jawaban 7 kesalahan, f) kecerobohan 1 kesalahan. Banyaknya siswa yang tidak menuliskan jawaban nomor 4 adalah 3 siswa, yang tidak menuliskan jawaban nomor 5 adalah 7 siswa.

Faktor yang menyebabkan kesalahan terjadi: a) siswa kurang tenang dan terburu-buru dalam mengerjakan soal, b) kurang teliti, c) tidak mengerti hal yang diketahui dan ditanyakan, d) kurang menguasai menuliskan model matematika, e) lupa rumus-rumus bangun datar, f) tidak terbiasa menuliskan kesimpulan dalam jawaban, g) kurang teliti dalam operasi hitung, h) belum paham sifat distributif perkalian terhadap penjumlahan.

Rancangan program remedial terdiri dari: a) membiasakan siswa tenang dalam mengerjakan, b) memperbanyak referensi soal latihan siswa, c) menekankan dan menegaskan pengubahan ke dalam bentuk matematika, d) memperkuat operasi bilangan, e) membiasakan menuliskan kesimpulan dari awal.

Kata kunci : analisis kesalahan, persamaan dan pertidaksamaan linear satu variabel

ABSTRACT

Fausi Setiawan. 121414061. 2018. "Error Analysis of Students Grade VII Pangudi Luhur Moyudan Junior High School in solving Equation and Inequality Linear of One Variable Academic Year 2017/2018"

The purposes of this research were to: 1) identify the kinds of students' errors according to Newman in Equation and Inequality Linear of One Variable; 2) to know the factors of the student's errors; 3) to describe the design of remedial programs that could be used to solve the errors by the students in equation and inequality linear of one variable material.

The subjects of this research were 38 students from VII B Class Pangudi Luhur Moyudan Junior High School academic year 2017/2018. The kind of this research was a qualitative descriptive research. The methods of the data collecting used were observation, written test and interview. The research instruments were observation sheet, written test sheet and interview guideline. The data analysis of this research were quantitative and qualitative. This research used analysis theory according to Newman.

This research showed the kinds of the errors by the students which are : a) reading error were 2 errors, b) comprehension error were 8 errors, c) transformation error were 17 errors, d) process skill error were 8 errors, e) encoding error were 7 errors, f) careless was 1 error. The amount of the students who did not answer number 4 were 3 students, meanwhile the students who did not answer number 5 were 5 students.

The factor which caused the errors were : a) the students were less calm and in hurry in answering the tasks, b) did not carefully answer the tasks, c) did not understand what was known and asked, d) less master in writing mathematic models, e) forgot the formulas of plane, f) were not accustomed to write the conclusion of the answers, g) less careful on the counting operations, h) did not understand the multiply distribution character to sum.

The design of remedial program consists of: 1) accustoming the students to calm in doing it, b) increasing the exercise references of the students, c) emphasizing the conversion to mathematic form, d) reinforcing the number operation, e) accustoming to write the conclusion earlier.

Key words: Error analysis, equation and inequality linear of one variable