ABSTRAK

Novita Andriani, Mira 2021. *Analisis Kesalahan Siswa SMP Dalam Menyelesaikan Soal Cerita Berdasarkan Teori Newman.* Skripsi. Program Studi Pendidikan Matematika. Fakultas Sains dan Teknologi. Universitas PGRI Adi Buana Surabaya. Pembimbing Ninik Mutianingsih, S.Pd., M.Si.

Kata kunci : *Analisis Kesalahan, Soal Cerita Matematika, Sistem Persamaan Linear Dua Variabel, Teori Newman*

Penelitian ini bertujuan untuk mengetahui jenis kesalahan siswa dan faktor penyebab kesalahan siswa dalam menyelesaikan soal cerita matematika materi Sistem Persamaan Linear Dua Variabel (SPLDV) berdasarkan teori Newman. Pendekatan yang digunakan adalah kualitatif dengan jenis penelitian deskriptif. Pengumpulan data dilakukan menggunakan tes tertulis sebanyak 2 tahap dan wawancara. Penelitian ini melibatkan siswa kelas VIII-I SMPN 3 Waru Sidoarjo yang berjumlah 22 siswa. Subjek penelitian diambil 3 siswa dengan kriteria siswa dengan kesalahan terbanyak pada tes tahap 1 dan pada setiap nomor soalnya, subjek penelitian kemudian diberikan tes tahap 2. Setiap subjek penelitian diwawancarai terkait hasil pekerjaannya pada tes tahap 1 dan tes tahap 2. Setiap 1 soal diambil 1 subjek penelitian yang berbeda untuk kemudian dianalisis hasil tes tahap 1 dan 2 serta hasil wawancara. Uji keabsahan data dilakukan dengan triangulasi waktu. Hasil dari penelitian menunjukan bahwa adanya kesalahan yang dilakukan oleh subjek penelitian. Kesalahan yang dilakukan subjek penelitian adalah kesalahan pada semua tahapan indikator Newman. Dimana subjek penelitian RPHSP (S14) dan subjek penelitian MSPR (S9) mewakili siswa yang melakukan kesalahan pada 5 tahap kesalahan. Subjek penelitian IMA (S4) mewakili siswa yang melakukan kesalahan pada 4 tahap kesalahan. Faktor penyebab kesalahan subjek penelitian diantaranya yakni : (1) lupa dan terburu-buru dalam membaca dan menuliskan informasi soal, (2) tidak teliti dalam proses perhitungan, (3) kurang memahami konsep model matematika dan penggunaan metode SPLDV.

ABSTRACT

Novita Andriani, Mira 2021. *Error Analysis of Junior High School Students in Solving Story Questions Based on Newman's Theory*. Essay. Mathematics Education Study Program. Faculty of Science and Technology. PGRI Adi Buana University Surabaya. Advisor Ninik Mutianingsih, S.Pd., M.Si.

Keywords : Error Analysis, Mathematical Problem Questions, Newman's Theory, Two Variable Linear Equations System.

This study aims to determine the kinds of students' errors and the factors that cause students' errors in solving math problem questions on the Two-Variable Linear Equation System (SPLDV) material based on Newman's theory. The approach of the study was qualitative with a descriptive research method. The data was collected by written test in 2 stages and interview. Furthermore, this study involved 22 students of class VIII-I SMPN 3 Waru Sidoarjo. The research subjects were taken by 3 students with the student criteria of the most errors in the first stage test and for each number of questions and then they were given a stage 2. Each research subjects' were interviewed regarding the results of their work on stage 1 and stage 2 tests. Every 1 question that taken by 1 different subjects' were analyzed based on the result of the test stages 1 and 2, also the results of the interview. The data validity used time triangulation. The results of the study indicate that there were errors made by the research subjects. The mistakes of the research subjects were errors at all stages of the Newman indicator. Where the RPHSP research subject (S14) and the MSPR research subject (S9) represent students' who made mistakes in 5 stages of error. IMA research subjects (S4) represent students who made mistakes in 4 stages of error. Factors that cause errors in research subjects include: (1) forgetting and rashly in reading and writing question information, (2) didn't being careful in the calculation process, (3) didn't understand the concept of mathematical models and using the SPLDV method.