

Gilang Dwi Nugroho. 2020. Analisis Miskonsepsi Siswa pada Konsep Gerak Menggunakan *Four Tier Diagnostic Test* di SMPN 1 Prambon. Skripsi. Program Studi Pendidikan IPA, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing 1: Fatimatul Munawaroh dan Pembimbing 2: Irsad Rosidi

ABSTRAK

Penelitian ini bertujuan untuk mengetahui persentase dan faktor yang menyebabkan siswa mengalami miskonsepsi pada konsep gerak. Penelitian menggunakan metode *mix methods* dan dilaksanakan di SMPN 1 Prambon dengan populasi siswa kelas VIII tahun ajaran 2019/2020. Teknik pengambilan sampel menggunakan *purposive sampling*. Sampel penelitian sebanyak 3 kelas. Pengumpulan data menggunakan instrumen *four tier diagnostic test*. Teknik analisis data : (1) data kuantitatif menggunakan rumus persentase, (2) data kualitatif menggunakan Miles and Huberman. Hasil penelitian menunjukkan siswa mengalami miskonsepsi pada konsep gerak sebesar 38%, paham konsep 16%, kurang pengetahuan 37% dan error 9%. Miskonsepsi siswa terjadi dikarenakan (1) Kemampuan siswa rendah, (2) Minat belajar dan literasi rendah, (3) Sumber belajar tidak akurat, (4) Intuisi siswa kurang tepat, (5) Guru mengajar tidak sesuai bidangnya, dan (6) Rendahnya kemampuan matematis siswa dan terdapat bahasa asing pada materi.

Kata kunci : miskonsepsi, *four tier diagnostic test*, gerak

Gilang Dwi Nugroho. 2020. *Analysis of Student's Misconceptions On the Motion Concept Using Four Tier Diagnostic Test at SMPN 1 Prambon*. Thesis. Natural Science Education. Education Faculty. University of Trunojoyo Madura. 1st Advisor : Fatimatul Munawaroh and 2nd Advisor : Irsad Rosidi

ABSTRACT

The aims of the research were to know of percentages and factors that caused students to experience misconceptions about the concept of motion. The research used a mix method and was conducted at SMPN 1 Prambon. The population was eight-grade students in the academy year of 2019/2020. The employed sampling technique was purposive sampling. The sampling consists of 3 classes. Technique of collecting data: (1) quantitative data uses a percentage formula, (2) qualitative data uses Miles and Huberman. The results showed students experienced misconceptions o the concept of motion by 38%, scientific conception 16%, lack of Knowledge 37% and mistake 9%. The misconceptions occurred because some factors, they were (1) Students had low ability, (2) low interest in learning and literacy, (3) student's had wrong preconceptions (4) student intuition was not right, (5) teachers that didn't teach in their field, and (6) low mathematical ability of students and there is a foreign language in the material

Keywords : misconception, four tier diagnostic test, motion