

Rina Yunita. 2021. Analisis Miskonsepsi Siswa SMP Menggunakan Tes Diagnostik 3TMCT. Skripsi. Program Studi Pendidikan IPA, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing : Fatimatul Munawaroh S.Si., M.Si

ABSTRAK

Miskonsepsi siswa terjadi karena pemahaman konsep siswa yang tidak sesuai dengan konsep yang relevan. Maka dari itu, penelitian ini bertujuan untuk mengetahui persentase miskonsepsi dan faktor yang menyebabkan siswa mengalami miskonsepsi pada konsep Suhu dan Kalor. Penelitian menggunakan metode *mix methods* dan dilaksanakan di SMPN 2 Sukodono dengan populasi siswa kelas VII tahun ajaran 2020/2021. Teknik pengambilan sampel menggunakan *purposive sampling*. Sampel penelitian sebanyak 25 siswa. Pengumpulan data menggunakan instrumen *three 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 suhu dan kalor sebesar 30,6% yang didominasi pada level sedang. Selanjutnya, Presentase miskonsepsi siswa tertinggi pada soal nomer 5 dan 11 sebesar 44%, sedangkan miskonsepsi siswa terendah pada soal 1, 10 dan 17 sebesar 12%. Kemudian untuk persentase miskonsepsi siswa tertinggi pada sub-konsep hubungan kalor dengan perubahan suhu sebesar 36%, disusul dengan sub-konsep hubungan kalor dengan perubahan wujud sebesar 32,7%, sub-konsep pemuaian sebesar 28%, dan sub-konsep perpindahan kalor sebesar 25,6%. Faktor penyebab miskonsepsi siswa SMPN 2 Sukodono berasal dari (1) siswa, (2) guru, (3) buku teks, dan (4) konteks.

Kata kunci : miskonsepsi, *three tier diagnostic test*, suhu dan kalor

Rina Yunita. 2021. *Analysis of Middle School Student's Misconceptions Using Three Tier Diagnostic Test*. Thesis. Natural Science Education. Education Faculty, University of Trunojoyo Madura. Advisor : Fatimatul Munawaroh, S.Si., M.Si

ABSTRACT

Student misconceptions occur because students understanding of concepts is not in accordance with the relevant concepts. Therefore, the aims of the research were to know of percentage misconceptions and factors that caused students to experience misconceptions about the concept of temperature and heat. The research used a mix method and was conducted at SMPN 2 Sukodono. The population was seven-grade students in the academy year of 2020/2021. The employed sampling technique was purposive sampling. The sampling consists of twenty five students. Technique of collecting data: (1) quantitative data uses a percentage formula, (2) qualitative data uses Miles and Huberman. The results showed students experienced misconceptions the concept of temperature and heat by 30,6% which were dominated at a moderate level. Furthermore, the highest percentage of student's misconception in question number 5 and 11 by 44%, while the lowest student's misconception in question number 1, 10, and 17 by 12%. Then, the highest percentage misconception student's in sub-conception relationship between heat and temperature change by 36%, followed by sub-conception relationship between heat and shape change by 32,7%, sub-conception expansion by 28%, and sub-conception heat transfer by 25,6%. Factors that cause misconceptions in SMPN 2 Sukodono students come from (1) student, (2) teachers, (3) textbooks, and (4) context.

Keywords : misconception, *three tier diagnostic test*, temperature and heat