

ABSTRAK

Catharina Dwi, Asih: “Pemahaman dan miskonsepsi Siswa Kelas XI IPA SMA Stella Duce Bantul tentang Kalor”. Program Studi Pendidikan Fisika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Universitas Sanata Dharma Yogyakarta, 2008.

Tujuan penelitian ini adalah untuk mengetahui pemahaman siswa, mengetahui apakah terjadi miskonsepsi yang dialami siswa dalam memahami kalor, dan jika terjadi dalam hal apa saja miskonsepsi tersebut.

Subyek penelitian yaitu siswa kelas XI IPA SMA Stella Duce Bantul yang berjumlah 15 siswa. Data diperoleh melalui 2 tahap yaitu tes esai dengan alasan yang disertai dengan CRI (Certainty of Response Index) yang telah dimodifikasi dan wawancara. Tes esai digunakan untuk mengetahui pemahaman dan miskonsepsi yang ada sedangkan wawancara digunakan untuk mengetahui pemahaman dan miskonsepsi siswa secara lebih mendalam.

Hasil penelitian menunjukkan bahwa secara keseluruhan pemahaman siswa tentang kalor masih kurang. Pemahaman siswa masih bersifat hafalan artinya siswa tidak memahami tentang kalor. Siswa juga tidak dapat menghubungkan konsep yang satu dengan konsep yang lain. Pemahaman siswa juga tidak konsisten. Miskonsepsi banyak dijumpai pada bahasan energi panas, Asas Black, kesetimbangan termal, benda melepas kalor dan benda menerima kalor.

ABSTRACT

Catharina Dwi, Asih, The Comprehension and Misconception of Grade XI Natural Sciences Students of Stella Duce Senior High School at Bantul on the Instructional Topic of Black Principles. Physics Education Study Program, Department of Mathematics and Natural Sciences Education, Faculty of Teacher Training and Education, Sanata Dharma University, 2008.

This research aimed at discovering students' comprehension and misconception in studying calorie and at identifying what such misconception could be.

The subjects of the research were grade XI natural sciences students of Stella Duce Senior High School at Bantul, who were 15 in number. The data were obtained in two steps: an essay-type test requiring reasons and equipped with a modified Certainty of Response Index and an interview. The essay-type test was to discover the students' comprehension and misconception, while the interview was to deeply analyze their comprehension and misconception.

The research results show that in general the students' comprehension on calorie was inadequate. Their comprehension was limited to rote-learning, which means they did not really understand the concepts of the principles. The students were not able to relate one concept with another. Their comprehension was also inconsistent. A lot of misconception was found on the topics of heat, Black Principles, thermal balance, and substances releasing and absorbing calorie.