

Syarifatul Muslimah. 2020. *Analisis Tingkat Pemahaman Konsep Siswa pada Materi Sistem Pernapasan Manusia Menggunakan Aplikasi Rasch Model*. Skripsi, Program Studi Pendidikan IPA, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing 1: Fatimatul Munawaroh, S.Si., M.Si 2: Irsad Rosidi, S.Pd.,M.Pd

ABSTRAK

Pemahaman konsep sangat dibutuhkan dalam proses belajar agar siswa mampu menghubungkan konsep antar materi pelajaran dan dapat menerapkan pada kehidupan sehari-hari. Penelitian ini bertujuan untuk mengetahui tingkat pemahaman konsep siswa pada materi sistem pernapasan manusia dan faktor yang mempengaruhi pemahaman konsep dan nilai siswa rendah. Penelitian dilakukan menggunakan *mix design* dan dilaksanakan di Kecamatan Socah Kabupaten Bangkalan dengan populasi semua siswa kelas VIII Tahun Ajaran 2019/2020. Teknik pengambilan sampel menggunakan *simple random sampling*. Sampel penelitian sebanyak 4 desa. Pengumpulan data menggunakan *google form* untuk tingkat pemahaman konsep siswa. Teknik analisis data menggunakan aplikasi *Rasch* model dan secara manual. Hasil dari penelitian dapat disimpulkan bahwa: (1) tingkat pemahaman konsep siswa pada materi sistem pernapasan manusia terdapat 50% siswa memahami konsep, 23% siswa mengalami miskonsepsi, dan 27% siswa tidak memahami konsep, (2) faktor yang mempengaruhi kemampuan dan nilai siswa rendah diantaranya dasar kemampuan siswa dibawah rata-rata, pola respon siswa saat menjawab tidak konsisten, terdapat miskonsepsi yang belum diperbaiki, tidak memahami penjelasan yang telah diberikan saat pembelajaran dan penerapan metode pembelajaran yang kurang cocok pada beberapa kemampuan siswa.

Kata kunci : pemahaman konsep, Rasch model, sistem pernapasan manusia

Syarifatul Muslimah. 2020. *Analysis of Students' Understanding Level on Concepts of Human Respiratory System Using the Rasch Model Application*. Thesis. Natural Science Education, Education Faculty, University of Trunojoyo Madura. 1st Advisor : Fatimatul Munawaroh, S.Si., M.Si and 2nd Advisor : Irsad Rosidi, S.Pd., M.Pd.

ABSTRACT

Understanding concepts is needed in the learning process so that students are able to connect concepts between subject matter and can apply it in everyday life. This study aims to determine the level of understanding of students' concepts on the material of the human respiratory system and the factors that influence understanding of concepts and concepts low student grades. Research was conducted using the mix design and implemented in the District Socah Regency Bangkalan with a population of all students class VIII Year Doctrine 2019/2020. Sample was chosen using simple random sampling. The research sample was from 4 villages. The collection of data was used a Google form to know the level of understanding of the concept of the students. Analysis of data used application Rasch model. According the results of the research, it can be concluded that : (1) level understanding of the concept of the students on the material human respiratory system was 50% of students understand the concept , 23% of students experiencing misconceptions , and 27% of students do not understand the concept, (2) factors that affect where about the ability and grades students low among the basic ability of students below average, the pattern of response to students when fill the test was not consistent, there is a misconception that has not been solved, did not understand the explanation that was given when the learning and application of methods of learning that are less suited to the multiple capabilities of students.

Keywords : human respiratory system, Rasch models, understanding the concept