

Eğitim ve Öğretim Araştırmaları Dergisi Journal of Research in Education and Teaching Ağustos 2016 Cilt:5 Sayı:3 Makale No: 07 ISSN: 2146-9199



UNDERSTANDING LEVELS OF LYCEE 10TH GRADE STUDENTS ON GASES TOPIC AND DETERMINED ALTERNATIVE CONCEPTIONS

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Abstract

As is known, students form their own opinions about main science concepts before they attain science classes. However these opinions contradict with scientifically accepted opinions. The more significant point is that these alternative opinions affect students' next state of learning in a negative way. Therefore, designating the students' alternative conceptions is crucial for meaningful learning. The aim of the study is to determine the understanding levels and alternative opinions of high school students in the 10th grade for the concepts about gases. The study was carried out with, in total, 57 students in the 10th grade from 2 classes (28 female, 29 male). In order to determine the students' understanding levels and alternative conceptions, a test consisting of 25 multiple choice questions was utilized. The reliability of the test was calculated 0,80 via KR-20 method. The results indicate that the students gave correct answers at changing ratios between %10,5 - %96,5 and obtained %49,3 average value. Furthermore, it is determined that the students have alternative conceptions at changing ratios concerning gas concepts. Based on the results, some suggestions were offered.

Keywords: Chemistry Teaching, Gases, High School Students.