



THE EFFECT OF PREDICT-OBSERVE-EXPLAIN TECHNIQUE ON THE UNDERSTANDINGS OF GRADE 11 STUDENTS ABOUT THE GASES

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Abstract

The purpose of the present study is to investigate the effect of the activities based on Predict-Observe-Explain (POE) technique on grade 11 students' conceptual understanding and alternative conceptions of the gases. The study was conducted in an Anatolian high school in Trabzon and used the quasi-experimental design. Two classes at the school were randomly selected for the study. While one of the classes was randomly assigned as experimental group (N=36), the other was determined as control group (N=37). Gases Concept Test (GCT) consisting of 20 multiple choice items was used. The test' reliability coefficient (KR-20) was found 0.84. Eight activities based on POE technique were developed and applied to the experimental group students. On the other hand, the control group students were taught by traditional approach. The results indicated that the experimental group students taught with the POE technique showed a higher success than the control group students.

Keywords: Chemistry education, POE technique, Gases.