

THE EFFECT OF WORKSHEETS ON STUDENTS' UNDERSTANDING OF THE CONCEPTS OF OXIDATION AND REDUCTION

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Abstract

The use of student-centered methods is recommended to achieve objectives set out in education. In these methods, it is essential to make students active with different teaching materials. The worksheets are one of these materials. The purpose of this study is to investigate the effect of worksheet on student' understanding of the concepts of oxidation and reduction. A pre-experimental research design (one group pretest/post-test design) was used. The sample consisted of 29 grade 9 students in an Anatolian high school. A test consisting of five open-ended questions and semi-structured interview were used as data collection tools. At the end of the treatment, the results showed that the worksheet was an effective material to remedy students' alternative conceptions and to increase their level of understanding about the concepts of oxidation and reduction. The worksheets are a material that attracts the attention of students and makes the course enjoyable and fun for them. Therefore, not only in chemistry education, they can be used in teaching concepts in many other courses and remedying alternative concepts.

Key Words: Chemistry teaching, worksheet, oxidation and reduction.