

## USING CONCEPT CARTOONS IN THE TEACHING OF ELECTROCHEMICAL CELLS SUBJECT

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### Abstract

Teaching materials that are used in the classroom environment appeal to many senses of students, learning will be more effective and permanent. The concept cartoons are one of these materials that contribute to this situation. The purpose of this study is to investigate the effect of concept cartoons that used in the teaching of electrochemical cells subject on student' achievement. A quasi-experimental design was used. The sample consisted of 28 first year students in a state university. A test consisting of three open-ended questions was used as data collection tools. After the treatment, in the post-test scores no significant differences were found between control and experimental group in terms of achievement ( $U=59.5$ ;  $p=0.077$ ). However, the concept cartoons were more effective in increasing experimental group students' levels of understanding and achievement (posttest mean = 36.57) than control group students (posttest mean = 27.50) taught with traditional approach. Lecturers can benefit from the concept cartoons to eliminate the students' prejudices that chemistry was difficult to understand, to ensure the active participation of students in course and to make the courses more entertaining.

**Keywords:** General Chemistry Course, Concept Cartoon, Electrochemical Cells.