World Academy of Science, Engineering and Technology International Journal of Educational and Pedagogical Sciences Vol:10, No:01, 2016

The Effect of Multimedia Use on Students' Academic Achievement and Course-Oriented Self-Efficacy

Authors: Hasan Coruk, Recep Cakir

Abstract : This study aimed at investigating the effect of multimedia containing 'the structure and properties of matter' unit on students' academic achievement level and self-efficacy relating to science and technology course. The study used an experimental design with pre-test and post-test groups. The data collection tools were 'Science and Technology Course Achievement Test' and 'Science and Technology Self-Efficacy Scale'. The sample of the study consisted of 8th grade students at a primary school in Tokat Province. The study was carried out with 42 students from two classes, 21 (8 males, 13 females) from experimental group and 21 (13 males and 8 females) from control group. The data were analyzed in SPSS.18 software. The findings of the study indicated that the use of multimedia increased the students' academic achievement in science and technology course in comparison with traditional teaching methods. It was also determined that there was not a significant difference in students' course-oriented self-efficacy levels regarding the two methods. Necessary and feasible suggestions were put forward for whom it concerns.

Keywords: multimedia learning, science and technology, the structure-properties of matter, self-efficacy, academic achievement

Conference Title: ICELDL 2016: International Conference on E-Learning and Distance Learning

Conference Location : Jeddah, Saudi Arabia **Conference Dates :** January 26-27, 2016