



## Effect of Concept Map Use on Attitudes Regarding General Biology Course

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### Abstract

Concept mapping is a learning strategy that students find useful in understanding complex ideas and clarifying ambiguous relationships. It is a two-dimensional representation of the relationship between key ideas in a topic. The aim of the present study is to examine the effects of concept maps on students' attitudes towards general biology course. Hence the courses were conducted both using traditional methods and employing concept maps in biology classes.

The present study was conducted as an experimental study with pre-test and post-test control groups. The participants of the study were impartially chosen second grade science teacher students (81 female, 22 male pre-service science teacher) from Department of Science Education of Education Faculty in Çanakkale Onsekiz Mart University (Turkey). In this study, the experimental group was taught using concept map based teaching technique while the control group was taught traditionally. Data was collected using attitude scale towards general biology. In order to identify the differences among the groups, general biology attitude scale was used as pre and post test. Data obtained to determine the achievement of both groups were analyzed using t-test analysis model of the SPSS 17.0 package program.

At the end of the study, a statistically significant difference ( $p < .05$ ) between emerged traditional teaching method and using concept map while teaching. Significant differences were detected in the experimental group according to comparisons of experimental and control groups' attitudes pretest / posttest results.