Effect of Collaborative Concept Mapping Teaching Strategy on Students’ Attitudes Towards Chemistry in Selected Secondary Schools in Kenya

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Abstract

In Kenya, the fundamental challenge facing teaching of chemistry as a science subject in secondary schools is how to enhance students’ conceptual understanding as well as affective characteristics associated with teaching/learning process. The challenge has impeded students’ attainment of meaningful learning. Based on this challenge, the present study was designed to determine the effect of Collaborative Concept Mapping (CCM) teaching strategy on secondary school students’ attitude towards Chemistry learning. A Solomon-Four Group quasi-experimental research design was used in the study. Four co-educational secondary schools were randomly selected for the study from secondary schools in Bomet District. Students in the experimental groups were taught using CCM teaching strategy for 8 weeks while the rest were taught using conventional teaching methods. Students’ Attitude Towards Chemistry Questionnaire (ATCQ) was used for data collection. The research instrument was pilot-tested for validity and reliability before being used in the study. Descriptive as well as inferential statistics were used in data analyses. These statistics included frequencies, mean, t-Test and ANOVA. All the statistical tests were subjected to a test of significance at alpha (α) level of 0.05. Results of the study showed that CCM as a teaching strategy had no significant effect on students’ ATC.

Keywords: Collaborative learning, Concept maps and Attitude towards Chemistry