

INTEGRATION OF INDIGENOUS KNOWLEDGE AND PRACTICES INTO CHEMISTRY TEACHING AND STUDENTS' ACADEMIC ACHIEVEMENT

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ABSTRACT

This study was designed to determine the influence of integration of indigenous knowledge and practices into chemistry teaching on students' academic achievement. Three research questions and three null hypotheses guided the study. A quasi-experimental research design was adopted for the study. Simple random sampling technique was used to select 115 senior secondary one (ss1) students from 4 intact classes as the sample size. A 25-item chemistry achievement test developed from the contents taught was used to collect data for the study. The instrument had a face and content validation by three specialists. Kuder-Richardson (K-R20) was used to determine the internal consistency of the test items and a coefficient of 0.89 was obtained. Mean and standard deviation was used to answer the research questions while ANCOVA was used to test the hypotheses at 0.05 level of significance. The findings show that there is a change as students taught with integration of indigenous knowledge and practices had higher mean achievement score than their counterpart and that gender had no significant influence on the achievement. Also there was no interaction between gender and method. It was recommended that indigenous knowledge and practices be integrated into chemistry teaching for effective teaching and learning of chemistry and for improved academic achievement.

Keywords: Integration, indigenous knowledge and practices, chemistry teaching and academic achievement.