

EFFECT OF CONCEPT MAPPING ON THE ACHIEVEMENT OF BIOLOGY STUDENTS AT THE SENIOR HIGH SCHOOL LEVEL IN GHANA

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Quality education for all is one of the most powerful and proven vehicles for achieving the Sustainable Development Goals. The purpose of this study was to compare the concept mapping approach which is based on constructivist theory to the traditional method of teaching biology in Senior High Schools. Two intact classes were randomly selected from five Co-educational Senior High Schools offering elective biology in the New Juaben Municipality. The design used was the pretest and post-test nonequivalent quasi design. The sample size was 105 students. The experimental group consisted of 51 students while the control group consisted of 54 students. The students in the experimental group were instructed with concept mapping while the control group were instructed with the traditional method. Both groups were taught the same content which was on photosynthesis and internal respiration. Means, standard deviations, frequencies, Mann Whitney U, independent sample t-test, paired sample t-test were the statistical tools used to analyse the data. The results indicated that those instructed with concept mapping did better than those instructed with traditional method. The study recommends that concept mapping method should be encouraged in many biology classes at the Senior High School

Keywords: Concept mapping, Senior High School Students' Achievement, Photosynthesis, Internal Respiration, New Juaben Municipality, Ghana.