

Effects of Cooperative Learning Approach on Biology Mean Achievement Scores of Secondary School Students' in Machakos District, Kenya

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Abstract

Performance in Biology at secondary school level in Kenya remains poor and one reason is the teaching approach adopted by teachers with teacher-centered approaches being pre-dominant. This study sought to determine the effect of cooperative learning approach on mean achievement scores in Biology of secondary school students. Solomon-four-non-equivalent-control-group design was used and the target population comprised 183 form two students in four secondary schools. Students were taught one Biology topic for five weeks and cooperative learning approach was used in experimental groups while the regular teaching method was used in control groups. Pre-test was administered before treatment and a post-test after treatment. A Biology Achievement Test was used to measure students' achievement and it attained a reliability coefficient of 0.84 (N=59) at pilot testing. Data was analyzed using t-tests, ANOVA and ANCOVA and hypotheses were accepted or rejected at significant level of $P \leq 0.05$. Cooperative learning approach resulted in significantly higher mean achievement scores compared to regular teaching method and gender had no significant influence on achievement. It was concluded that cooperative learning approach is an effective teaching approach which Biology teachers should be encouraged to use.

Key words: Cooperative learning approach, student achievement, Biology, effects.

Fulltext: <https://eric.ed.gov/?id=EJ959469>