

ABSTRACT

The teaching of Agriculture in Kenyan schools is dominated by teacher centered methods such as lecture and class demonstration. Consequently, students perform poorly in Agriculture tests and examinations. This calls for a re-examination of the current teaching methods in order to incorporate more practical learner centered methods in the teaching learning process. This study therefore aimed to assess the effect of video instruction as a complement to conventional teaching approaches on performance in Agriculture tests by students in secondary schools in Molo Sub-county. The study adopted a pretest-posttest experimental design where four schools were selected purposively from the list of public secondary schools in the Sub-County, and randomly assigned to either the control and intervention group (two schools per group). Form-one agriculture students in the schools that formed the intervention group (n=89) were taught a topic on Water Supply Irrigation and Drainage using a combination of video instruction and conventional method, while form one students in the schools that formed the control group (n=83) were taught using conventional teaching method only. Participants in the two schools were subjected to an achievement test before and after the six periods each lasting for forty minutes for comparison of the test results. The experimental group was further subjected to a semi-structured questionnaire to obtain information on their motivation. The validity of the test was ascertained by the two experts to ensure that the items adequately represent concepts being taught. The test was piloted in a school in Njoro Sub-County which had similar characteristics to the schools involved in the study so as to assess its reliability. The collected data was analyzed using both descriptive and inferential statistics with the aid of Statistical Package for Social Sciences version 25. Inferential statistics were tested at the 0.05 level of significance. Descriptive analysis showed that students in the intervention group had higher mean scores in the post-test in both theoretical and practical tests. The t-tests showed that the use of video instruction had a statistically significant and positive effect on students' performance in both the Agriculture theoretical test ($t= 8.981$, $p= .000$) and practical test ($t=4.077$, $p= .000$). Students in both the intervention and control group performed better in the practical test than in the theoretical test. Video instruction was also found to have a positive effect on students' motivation based on observed responses from the student's questionnaire. The study recommends that schools within the study area as well as other parts of the country should embrace the use of video instruction in the teaching of Agriculture in order to boost students understanding of both theoretical and practical aspects of the subject.

