

Enhancement of Science Performance through Computer Assisted Instruction among Selected Secondary School Learners in Kenya

Samuel N. Jesse, Nicholas W. Twoli and John N. Maundu

Abstract

The performance of learners in Science in Kenyan secondary schools has been consistently low over the years. Many factors contribute to this poor performance and among them is the inappropriate teaching approaches that are teacher-centered rather than learner-centered. The purpose of the present study was to investigate the influence of instructional methods on efficiency of content delivery to the learner and eventually the learner's improved performance in science. Quasi-experimental design was used, based on the performance in science when the Conventional Instructional Techniques (CIT) are used and when a combination of computer-assisted instruction (CAI) and conventional instructional methods are used. Biology, Chemistry and Physics teachers and Form Two learners from six provincial secondary schools situated in the greater Embu district were involved the research. Data collected using Standard Students Assessment Tests (SSAT) was analyzed in order to uncover whether there was a significant difference in learners' science performance before and after the treatment. The study found out that learners taught through CAI performed significantly better than learners taught through CIT in science. Based on this study, it was concluded that use of computer-assisted instruction improves secondary school learners' performance in science. This paper ends with some recommendations for further research.

Keywords: Computer-assisted instruction, Conventional instruction techniques, Science, Performance, Teaching approach

Full text: <https://encompass.eku.edu/cgi/viewcontent.cgi?article=1069&context=kjectl>