

**AN INVESTIGATION INTO THE EFFECTS OF PRE-SCIENTIFIC
METHODS OF TEACHING AND LEARNING ON ACADEMIC
PERFORMANCE OF STUDENTS IN SCIENCE SUBJECTS
IN SECONDARY SCHOOLS IN KINYONA LOCATION,
MURANG'A COUNTY**

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ABSTRACT

This study examines pre-scientific methods employed by teachers and their effects on the academic performance of students in science subjects in form four in their K.C.S.E exams using Kinyona location, Kigumo sub county Murang'a County as case study. The study is likely to assist educational administrators in enhancing the use of scientific methods in the teaching of science subjects in order to improve performance. Descriptive research design was adopted in carrying out the study. Purposive sampling technique was used to select eight secondary schools and proportionate sampling technique was used to select teachers and students to take part in the research. Questionnaires for teachers and students were developed. Data collected was presented in form of tables, charts and graphs and analyzed using descriptive and inferential statistics. The research showed that lack of adequate resources, lack of enough teachers, teachers' unpreparedness, large population in class and low intelligence quotient in class limited the use of scientific methods of learning thus affecting learning and performance of science subjects. Certain pre-established beliefs and lack of training in education psychology has also led to poor performance in science subjects. Use of poor teaching methods and especially pre-scientific methods has greatly contributed to poor performance in science subjects in secondary schools in Kinyona zone, Kigumo Sub County. Lack of proper preparation and the choice of instructional resources also lead to use of poor teaching methods hence affecting performance. The government should employ enough qualified teachers and the schools should aim at having enough resources to minimize the use of pre-scientific methods of learning. Teachers should always have and use professional records to assist them to prepare their lessons well. Science teachers should endeavor to use scientific methods of teaching since science is learnt through discovery method.