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**THE EFFECTS OF TEACHING AND LEARNING EXPERIENCES OF
TEACHERS AND STUDENTS ON THE PERFORMANCE OF SCIENCES IN
SECONDARY SCHOOLS IN BARINGO CENTRAL DISTRICT, KENYA**

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**A RESEARCH THESIS SUBMITTED TO THE SCHOOL OF EDUCATION IN
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ABSTRACT

The government of Kenya attaches a lot of importance to education as exemplified by a good proportion of the allotment of the Government's expenditure on learning and teaching resources and in particular to Science education. Despite the funding and allocation of resources by the government to facilitate Science education, performance in science subjects has continued to decline. In view of this situation, questions remain unanswered as to why performance is not commensurate to the efforts so far made and this has glaringly raised concerns with regard to what happens in the learning process. This study aimed at finding out the effects of teaching and learning experiences of teachers and students on science education in secondary schools in Baringo Central District. The study sought to investigate how teachers and students' attitudes, the science curriculum, pedagogy and the instructional intervention strategies affect the teaching and learning processes. It is also concerned with establishing whether teachers' intervention in learning can boost science performance given the adequate instructional resources. An empirical study design which is a method of obtaining information and recording data by means of direct observation or experience was adapted for this investigation. The research instrument used was the questionnaire which was categorized into two: one for the students and another for the teachers. The questionnaire was divided into four sections based on the research questions. Respondents were divided into homogenous subgroups and stratified random sampling was used to identify three schools where three science teachers and a total of 36 students, 12 from each school were involved. The findings were analyzed using a descriptive approach for quantitative data while interpretative approach was employed for the qualitative data respectively. The study revealed that students held positive attitudes towards science subjects having been motivated mainly by careers that were science based. It was also found out that practical teaching techniques are perceived by science learners to be the most effective method but its utilization by teachers falls short of expectations. The researcher recommended that effective teaching and learning methods should be encouraged for use and should be implemented in science education.