

**INFLUENCE OF SELECTED FACTORS ON TEACHERS' PERCEPTIONS ON THE
EFFECTIVENESS OF SMASSE PROGRAMME IN ENHANCING TEACHING OF
SCIENCE AND MATHEMATICS IN SECONDARY SCHOOL IN NYANDARUA
WEST SUB-COUNTY, KENYA**

NJERU PETER MWANGI

**A Thesis Report Submitted to Graduate School in Partial Fulfilment of the Requirements
for the Conferment of Masters Degree in Educational Management of Laikipia University**

LAIKIPIA UNIVERSITY

October, 2015

ABSTRACT

Science and mathematics are among the key subjects for any industrial and technological development. Strengthening of Mathematics and Science in Secondary Education (SMASSE) is a project which was started by the Ministry of Education Science and Technology in the year 1998 with the aim of improving the performance of mathematics and science in Kenya Certificate of Secondary Education (KCSE) examination. However, the extent to which SMASSE initiative has achieved its objectives has not been evaluated from the teachers' point of view. This is what informed the study. Thus, the core focus was to determine secondary school teachers' perceptions on SMASSE programme and the extent to which these perceptions were related to school type, teachers' gender, teaching experience and academic qualification. *Ex- post facto* research design was used. The instrument reliability coefficient was computed using spearman brown formula. The reliability coefficient of the instrument was 0.83 or 83%. The instrument was validated through piloting and assessment by Laikipia university experts. Data were collected through a questionnaire which was self-delivered to a sample of 30 Mathematics and Science, SMASSE trained teachers in Nyandarua West Sub-County. Data were analysed using descriptive statistics, specifically means and percentages while hypotheses were tested using t-test and ANOVA at $\alpha = 0.05$ level. The key finding of the study were that the programme was rated less favourably ($P > .05$) by teachers in co-educational schools and male teachers. Similarly, the programme's rating was lower ($P < .05$) among the more experienced teachers (>15 years of teaching experience) and those in the low academic qualification bracket. The study recommended that there is a need for the Ministry of Education Science and Technology to identify the misgiving about the programme by teachers in co-educational schools and those in the low academic qualification bracket. Such reservations should be addressed during future SMASSE training workshops.