

**ASSESSMENT OF SMASSE INSET EFFECTIVENESS ON MATHEMATICS AND
SCIENCE TEACHERS' PERFORMANCE IN KIAMBU COUNTY: A CASE OF
GATUNDU NORTH DISTRICT.**

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ABSTRACT

Poor performance in mathematics and sciences (Biology, Chemistry and Physics) has been consistently a matter of great concern. There is growing evidence that the teacher education, teaching of mathematics and sciences in secondary school presents the greatest challenges towards attainment of good grades and performance in the form four examinations, Kenya Certificate of Secondary Education (KCSE). In the Kenyan context the quality of grades is heavily dependent on the teachers' pedagogy skills being used, teachers' motivation, attitude towards their students and the leadership they experience. The quality of teaching heavily depends on the quality of the teachers which in turn depends to some extent on the quality of their professional development. To counter these challenges the Government of Kenya (GOK) in conjunction with Japan International Cooperation Agencies (JICA) has invested substantial amounts of financial and human resources towards in-service training programmes towards mathematics and science teachers in both secondary and primary level in an attempt to improve performance of the subjects at these two levels. The purpose of the study was to carry out an assessment of SMASSE INSET on Mathematics and Science teacher's performance in Kiambu County. A case of Gatundu North District. The study dwelt on four main objectives. First, to investigate the teachers' perception towards SMASSE INSET. Second, to find out whether the teachers are applying the new skills learnt during the SMASSE INSET course while teaching the subjects. Third, to analyze the performance in Mathematics and Sciences in the study District. Fourth, to determine whether there has been significant improvement in performance of teachers compared to previous performance before undergoing the training. There are a total of 28 District schools in the District. The schools were divided into five categories; Boys Boarding (2), Girls Boarding (3), Mixed Boarding (1), Mixed Day (21), Girls Day (1). A total of 8 principals, 24 Head of Departments (HOD'S), 48 teachers and 192 students were selected in twelve public district secondary schools in Gatundu North District to participate in the study. Stratified Sampling Design was used to pick the twelve schools. In this study 248 subjects were studied. The study employed questionnaire, interview guide and document analysis method of data collection. Piloting of the instruments was done in one of the schools two weeks before the main study. Validity and reliability tests were done and instruments were found to be valid and reliable for the study. Descriptive Statistics, including frequency count and percentages was used to analyze the data on the assessment of SMASSE INSET effectiveness on Mathematics and Science teachers' performance. Data obtained was analyzed using both Descriptive and Inferential statistics. Results of the study were presented using frequency tables, tables and pie chart. Finally, a summary of the findings, conclusion and recommendation was done. The study found that there has been no significant improvement on teachers' performance even after undergoing the training. For the teachers to become more effective, they need to apply all the skills learnt during the training.