

Evaluation of Strengthening of Mathematics and Science in Secondary Education (Smasse) Program. A Case Study of Murang'a South District, Kenya

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Abstract

The purpose of the study was to assess the extent to which the SMASSE INSET program has been effective since it was started in 1998 in Kenyan schools. SMASSE came into being when the consistently poor performance in Mathematics and Science (Biology, Chemistry and Physics) became a matter of serious concern. Although dismal performance in these subjects had almost been accepted as the norm in some schools, the Ministry of Education and other stakeholders felt there had to be an intervention, hence the Strengthening of Mathematics and Science in Secondary schools. The INSET Curriculum was thus developed to upgrade and strengthen teacher competent in the teaching of Science and Mathematics subjects. The program activities are centered on the ASEI (Activity, Student, Experiment, and Improvisation) & PDSI (Plan, Do, See and Improve) approach, which emphasize on learner – centered preparation and presentation of lessons. The study targeted the teachers of Science and Mathematics, learners, SMASSE trainers, Principals, District Quality Assurance and Standards Officer Murang'a South District and the training program itself. The study involved five schools in Murang'a South District which were selected through convenience method. The study adopted the Kirk Patrick model of training evaluation. Questionnaires and observation schedule were used to collect data. Although there was some significant improvement in performance of Science and Mathematics subjects, a lot need to be done to improve the attitude of teachers. It clearly emerged that, majority of teachers are coerced to attend the inset training. Few teachers are willing to be observed by others during teaching and learning while the modern technology using ICT is rarely used.

Keywords: Curriculum, Attitudinal change, Team teaching, Academic performance, Pedagogy

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