INFLUENCE OF STRENGTHENING OF MATHEMATICS AND SCIENCES IN SECONDARY EDUCATION (SMASSE) TRAINING ON STUDENTS' PERFORMANCE IN MATHEMATICS IN KONOIN, BOMET COUNTY, KENYA

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ABSTRACT

Strengthening of Mathematics and Sciences in Secondary Education (SMASSE) training is an educational innovation and an initiative of the government of Kenya with support of the Japanese International Cooperation Agency (JICA). It was launched in1998 out of the need to improve performance in the crucial Mathematics and science subjects that had been hitherto unimpressive. Schools in Kenya have failed to adequately provide the needed scientific and technological manpower for development, subsequently, resulting into poor performance in Mathematics. It remained unclear whether SMASSE training of teachers affected the performance of students in Mathematics in secondary schools. The purpose of this study was to find out the influence of SMASSE training of teachers on performance of students in Mathematics. The study was guided by Kurt Lewin's Unfreezing -changing-Freezing model as its theoretical framework. The study was carried out in Konoin district secondary schools amongst the school head teachers and teachers. Ex-post-facto research design was adopted. To obtain the study sample, purposive and cluster sampling techniques were employed. A sample of 50 respondents made up of 25 head teachers and 25 Mathematics teachers was used. Data was collected using containing both structured and unstructured questions. Data was analyzed qualitatively and quantitatively using descriptive statistics (frequencies and percentages) with the aid of Statistical Package of Social Sciences. The results were presented in form of charts and tables. The findings showed that: students' performance in Mathematics had not improved despite the fact that teachers had undergone SMASSE training; Majority of Mathematics teachers of secondary schools Division in Konoin had a positive attitude towards SMASSE, since they attributed their ability to deal with the learner's problems more adequately to it; Most of the teachers believed that SMASSE training enhanced their ability to handle their learners and their difficulties better; The attitude of teachers towards the organization of SMASSE training was positive; and Majority of the teachers were willing to attend SMASSE Training. The main strategies suggested by the secondary school head teachers included; regular monitoring of student performance in Mathematics; the school needs to be careful in making the choice of trainers; and there should be promotion of favourable attitudes towards mathematics amongst students. It was therefore concluded that SMASSE training did not influence students' performance in mathematics in Konoin Division, despite the teachers positive attitude and effort put in to ensure that the ideals of SMASSE training are entrenched in the learning process. Following this the study recommended that: the School managers in liaison with the Ministry of Education should consider: organizing more in-service trainings and SMASSE training to train teachers in Mathematics; ensuring that professionalism is upheld in while making a choice of SMASSE trainers; carrying out regular monitoring of student performance in Mathematics; and organizing sensitization workshops to inform the teachers of the importance SMASSE training so as to promote teacher attitude to the organization of SMASSE training. The study findings provide monitoring and evaluation information about the SMASSE project implementation. Results of this study could be of use to the Ministry of Education and SMASSE Administrative Team, Policy makers, teachers, students and other stake holders in education.