

Assessment of School Factors Related to Academic Achievement in Mathematics among Secondary School Students of Masaba South Sub County, Kenya

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Abstract

Performance in mathematics in Masaba Sub-County, Kenya has been poor for many years. In 2010 the mean score was 3.2282, while in 2011 it had a mean score of 3.9528 and in 2012 it had a mean of 4.0660 which is far below the maximum mean of 12.00. The purpose of this study was to assess factors related to academic achievement in mathematics in Masaba South Sub County. The research objective of the study was to; establish the relationship between school factors and academic achievement in mathematics. Students of Masaba South Sub County miss out in joining lucrative careers because of persistent poor performance in mathematics. Masaba was chosen because no similar study has been done there and performance in mathematics has been poor compared to other sub counties. The research employed correlation design in which the dependent variable was academic achievement in mathematics and the independent variables were school factors. A conceptual framework was used to show the interaction between the dependent variables and independent variables. The population used was 40 schools in Masaba South Sub County, 4000 students and 40 Principals. Saturated and stratified sampling techniques was used to select 6 school Principals, 6 mathematics teachers and 400 students in secondary schools in Masaba South Sub County, Kenya. Student questionnaire, mathematics test, document analysis guide, and interview schedules for head teachers were used to collect data. Qualitative data was analyzed using Thematic Analysis by coding and identifying themes per response. Cross tabulation of responses and calculation of percentages was done for quantitative data using statistical packages for social sciences version 20.0. Reliability of the instruments was established through piloting of the instruments. Validity of instruments was established through discussion with experts from Jaramogi Oginga Odinga University of Science and Technology school of education. The study might be useful to the ministry of education in improving the education system. The study found that poor performance in mathematics was due to, lack of mathematics policy in Masaba south sub county schools. Based on the results a model was developed to guide appropriate relationships between the variables that influence performance in mathematics. The researcher recommended that schools should set up mathematics policies in their schools and guide students on mathematics issues.

Keywords: Academic achievement, School factors.

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