OF MATHEMATICS IN KENYA CERTIFICATE OF SECONDARY EDUCATION IN TIGANIA WEST DISTRICT OF MERU COUNTY

 \mathbf{BY}^{t}

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ABSTRACT

Leadership is a fundamental aspect of management because it has an important bearing on a range of activities that can lead to the attainment of organizational outcomes. Mathematics is recognized widely as being of great importance internationally both for economic well being of nations and because of the need for scientifically literate citizenry. Poor academic performance in key subjects in the curriculum like Mathematics and Sciences at the Kenya Certificate of Secondary Education (K.C.S.E) examinations has not been satisfactory for last two years. The best performing secondary school mean grade registered in mathematics in Tigania West for the year 2009 and 2010 was 5.26 (C-) and 5.43 (C-), respectively. The purpose of this study was to find out the effect of the principal's leadership styles on performance of mathematics in K.C.S.E in Tigania West District of Meru County. The study adopted descriptive survey design. This is because the researcher was only interested in determining the influence of the independent variables on the dependent variable without manipulating any of the variables. The target population for this study constituted of all the 18 principals and 42 mathematics teachers from the 18 public secondary schools and 1842 students in Tigania West. 15 schools from Tigania West were purposively selected on the basis of having presented candidates in 2009 and 2010 in K.C.S.E. All the 15 principals formed the sample size. All the 36 mathematics teachers from 15 secondary and 322 students were randomly selected according to Krejcie and Morgan table 1970. The study had a total sample size of 373 respondents. The tools of data collection for this study were the interview for principals and questionnaires for students and mathematics teachers. The researcher conducted a pilot study in two public secondary schools in Tigania East District on the basis of having presented candidate for K.C.S.E in 2009 and 2010. This enabled the researcher to make necessary adjustments on the items found wanting, thereby improving the validity and reliability of the instruments. To verify the validity of the instruments to be used in this study, the research instruments were presented to three experts in the department of education of Kenya Methodist University who are conversant with the topic of study to verify the validity of research instruments used. In this study, Split-half method together with the Spearman Brown Prophecy Formula was applied to calculate to determine the reliability of the instruments. The study established a reliability value of 0.76 for students' questionnaires, 0.82 for teachers' questionnaires and 0.84 for principals' interview schedule. The researcher obtained a letter from Kenya Methodist University to help the researcher secure research permit from the National Council for Science and Technology (NCST). Thereafter, the researcher informed the District Education Officer (DEO), Tigania West. Appointments were booked with targeted schools' administrators, who were also requested to assist in the organization of the entire study in the respective schools. It was observed that there is a positive moderate (0.56) relationship between the democratic leadership style and KCSE Mathematic performance in secondary schools in Tigania West. There is negative (0.76) relationship between laissez-faire leadership and mathematic performance in secondary schools in Tigania west District. From the analysis it is clear that autocratic principal negatively influence (-0.983) mathematics performance in secondary schools in Tigania West. The study would shed light on the factors affecting performance in mathematic in Tigania West District of Meru County, thus helping the principals in understanding the importance of good leadership style. This study recommends that the principals of secondary schools in particular be encouraged to use democratic style of leadership in the management of secondary schools