

School Factors as Correlates of Secondary Students' Achievement in Mathematics in Bungoma County, Kenya

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Abstract

There is abundant research evidence to support the view that when Mathematics is taught in an enabling environment, a lot of enjoyable learning takes place. But in reality this is not always so, the implication is that students' achievement in this subject still continue to dwindle. This study therefore aimed at finding the extent to which school factors predict secondary school students' achievement in Mathematics. The study adopted the descriptive survey research design of the ex-post facto type and made use of a sample of 206 Mathematics teachers and 206 principals selected through a multi-stage sampling procedure. Instruments were developed and validated for the study. The two validated instruments used were School-based Inventory ($r = 0.89$) and School-Based Factor Questionnaire ($r = 0.92$). Three hypotheses were tested at 0.05 level of significance. Data collected were analyzed using means, standard deviation and multiple regressions. Out of the nine variables, the two variables that contributed significantly to student's achievement in Mathematics are conveniences and instructional materials ($\beta = 0.130$, $t = 2.381$, $P < 0.05$), ($\beta = 0.134$, $t = 2.470$; $P < 0.05$) respectively. Findings from the study showed that instructional materials and conveniences (toilets) have been adjudged to have contributed significantly to students' achievement in Mathematics. Therefore, ministry of education and other stakeholders should ensure that schools are provided with effective and adequate toilet facilities. It is also recommended that instructional resources should be provided in schools as the conditions accrued to school factors improve, the performance of students in Mathematics improves. Recommendations were made based on these findings.

Keywords: Leadership, School factors, Supervision, Instructional materials, Quality of Instruction

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