UNIVERSITY OF NAIROBI

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SCHOOL OF MATHEMATICS

Use of logistic regression model to identify the key determinants of academic performance in primary school on the basis of school supply

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Abstract

There is a general consensus that student performance at primary school has been deteriorating. This study examines the determinants of academic performance in public primary schools in kenya from the schools side. While most of the studies done on performance determinants rely on the school expenditures. Family background and the stability of the community, this paper looks at the factors that determine performance from the school supply as the government does allocations per pupil. The data used in this study comes from the Impact of instructional material and in-service teacher training study in 2006 by the ministry of education. While the data lacks information on family background. the poverty index and province were used. A Logistic regression was estimated based on this data with the perfomance (that is those who perform and those who do not perform) as the dependent variable and a set of school variables as the explanatory variables. The results presented in this paper suggest that the province, class size, availability of feeding programme and who recommends the books for the student determines the perfomance in primary schools. The data suggest that head teachers and subject teacher should be give a chance to be deciding on books to be bought. It also suggests that permanent classroom and small class size should be considered inorder to improve academic achievements.