

INFLUENCE OF COST SHARING ON STUDENTS' ACADEMIC PERFORMANCE IN SECONDARY SCHOOLS IN KENYA: A CASE OF KITUI COUNTY.

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# INFLUENCE OF COST SHARING ON STUDENTS' ACADEMIC PERFORMANCE IN SECONDARY SCHOOLS IN KENYA: A CASE OF KITUI COUNTY 

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#### Abstract

Cost of education remains an impediment to access and academic performance in public secondary schools in Kenya. To mitigate this, the government introduced cost sharing where by the government through free secondary education caters for the tuition fees while the parents and other stakeholders takes care of the other costs including provision of infrastructure and other services for the boarding schools. The purpose of this study was to analyze the influence of cost sharing on student's academic performance in secondary schools in Kenya a case study of Kitui County. The objectives of the study were: to analyze the influence of government policy on students academic performance in secondary schools to assess the influence of hidden costs on students academic performance in secondary schools, The study was based in Kitui County and it targeted head teachers in public secondary schools, the PTA chairpersons in these schools and the sub-county education officers. The study used stratified sampling and simple random sampling techniques to select the respondents. The data was collected using questionnaire and interview guide. The data was analyzed using SPSS version 21 and presented through percentages, means, standard deviation and frequencies. The study established that all the variables had a significant effect on the dependent variable (Student's academic performance). The study also found that there was a positive relationship between Student's academic performance and Government policies as shown by a coefficient of 0.305 , there was a negative relationship between Student's academic performance and hidden costs. This study concludes that improvements on government policies will enhance student's academic performance in secondary schools in Kenya and that hidden costs had a negative influence on student's academic performance in secondary schools in Kenya. The study recommends that policy makers, managers and other educational stakeholders should embark on rigorous context specific cost benefit and social analysis on fee abolition policy options that are feasible and could yield results for different regions/counties as problems experienced by parents on indirect costs of secondary are context/regional base. Proper measures need to be put in place to ensure consistent learning of students in schools.


Key Words: Cost Sharing, Academic Performance

## INTRODUCTION

Education is rightly considered as an important component for enhancing the lives of deprived and disadvantaged groups of the populations in developing countries, it is also part of antipoverty programs (Joshi, K.M 2010). Human capital is considered as the engine of economic growth (Azid T. 2009). Also the positive effects of literacy and school education on poverty reduction and other aspects of social and human development such as infant mortality and life expectancy have been identified (Joshi, K.M.2010). According to Nyakunga (2011) knowledge is an important factor for economic development.

Besides such direct benefits of education, there are also some indirect benefits of education on poverty that have been established such as its fulfillment of basic needs like better utilization of health facilities, shelter, water and sanitation, and its effects on the behavior of women on decisions relating to fertility, family welfare and health (Joshi, K.M.2010). These benefits among others have led to the acknowledgement of education as an important contributor to economic growth as it creates more skilled labor force (Nyakunga 2011).

The goal of making basic education free was to ensure that poor children got the opportunity to attend school. This is why education was prioritized in the Millennium Development Goals (MDGs). The MDGs promised every child will have basic education by 2015. As we enter the post MDGs era, the world's most disadvantaged children have not yet benefited from this promise due to their state of deprivation. Karemesi (2010) observed that costs such as examination fees, salary top ups, textbooks, teaching materials, school uniforms, feeding, transportation and sports are major
constraints to achieving universal basic education especially for the poor. While enrolment in higher education has expanded in many African countries, public funding in secondary schools in many of the African countries has dropped (World Bank 2008). The world bank, which provides financial and technical support for the development of poor countries has recognized the importance of investment in education and has been providing this support since the 60s (World Bank 2008). Various studies have shown that there is a growing problem over entire education systems in the world today. Over the past few years (Tobyehatch, 2013) education costs have been rising at a rate that out paces consumer price indices. In the USA for instance, education endowments and state appropriations have been declining while school expenses and enrolments increase (Wamalwa M. \& Odebero S. 2014).

World Bank Studies have shown countries like China, El Salvador, Malaysia and Indonesia as having communities that engaged in school financing as a result of demand for alternative forms of education that related to cultural and religious needs of the groups. Similar systems exists in parts of Asia for instance in Laos People's Republic, chairmen of village community associations usually oversaw construction of rural schools where levies were imposed with allowances for substitution with labor; recurrent needs of community schools in Singapore were raised through central provident deductions for racial based associations, while levies on purchases made at village shops are used to raise funds for local schools in parts of India (World Bank 2008). Other mechanisms for raising money for capital works include festivals, cultural and harvest shows and sponsored walks. In some countries such as Chad, Nepal, Mali and Myanmar,
government resources were found inadequate even for providing teachers to schools, and communities had to employ their own (Wamalwa M. \& Odebero S. 2014).

## Statement of the Problem

The implementation of cost sharing in education, which was nessecited by rising poverty in the country, led to adverse effects on retention rates, access to and quality of education and ultimately on academic performance (Martin, 2008). Various governments have acknowledged the importance of education and have put mechanisms in place to ensure that all have access to basic education. For instance both the constitution of Kenya 2010 and the basic education act 2013 guarantees and provides legal mechanisms of ensuring that every Kenyan citizen access to basic education. It also guarantees other economic and social rights that hinge upon the citizen's access to and performance in education (Sara L. and John Aliko 2014).

On average, households' contribution to the funding of secondary education amount to $60 \%$, while government's financing constitutes 40\% of the aggregate however, some schools charge far beyond $60 \%$ which becomes unaffordable especially to most poor parents (Orodho, 2003). As a result, the financing of secondary education, has become problematic as parents have to shoulder an increasingly larger portion of the costs, thus, creating a negative impact on poor and vulnerable households (Njeru and Orodho, 2009).

The academic performance of secondary schools in Kitui County has remained low in the last six years this is seen in their KCSE performance during this period, this has been attributed to various factors like school based
factors (Nambuya 2013), household characteristics, the number of students against the available human and physical facilities (Wamukuru, 2006) however few researchers have looked at the influence of cost sharing on the academic performance in secondary schools in Kenya. Therefore this study sought to find out the influence of cost sharing on student's academic performance in Kitui County.

## The Overall Objective

The overall objective of the study was to analyze the influence of cost sharing on student's academic performance in secondary schools in Kenya. This was suppored by the specific objectives which are to Analyze the influence of government policies and hidden costs on student's academic performance in secondary schools in Kenya.

## Research Questions

The study was guided by the following research questions:
i. How do government policies influence academic performance of students in secondary schools in Kenya?
ii. How do hidden costs influence the academic performance of students in secondary schools in Kenya?

## The Scope of the Study

The study focused on secondary schools in Kitui County. The researcher appreciates that students' academic performance is an outcome of a complex combination of very many factors. However, this study was restricted to the influence of cost sharing on students' academic performance.

The study covered the period 2008-2013. In 2008 the government of Kenya introduced the
free secondary education fund. The fund allocates Ksh 10,265 per annum per student (KIPPRA 2013) this has been increased to Ksh 12,870 per student per year. The fund is channeled through the ministry of education, which distributes the money to the various public schools. The study was limited to the following variables: government policies on cost sharing and hidden costs of secondary education.

## theoretical frame work

## a) Education production Function theory

Education function represents mathematically the process of which a school transforms inputs (Stephen \&Eileen, 1990). An education production function is an application of the economic concept of a production function to the field of education. According to Ferguson (1991), socio economic indicators have a stronger effect on academic performance of students. This theory relates the various inputs affecting a student's learning and academic performance such as pupil-teacher ratio, instructional materials, physical facilities that affect the quality of education and the cost of education such as tuition fees, PTA funds, motivational fees, boarding fees and development fees (Dew et al., 2000).

The original study that eventually prompted interest in the idea of education production functions was by a sociologist, James $S$. Coleman (1996) in the study he concluded that the marginal effect of various school inputs on student achievement was small compared to the impact of families and friends. It was later improved by Eric A. Hanushek, Richard Murnane, and other economists introduced the structure of "production" to the consideration of student learning outcomes (Eric A, 1989). Initially this theory was referred to as input-
output analysis and it was used to reflect the direct policy importance of the analysis of inputs and output in education. Such information is critical not only to "school management," but also to such diverse policy issues as school integration, accountability in schools, and the finance of elementary and secondary schools. It was later changed into "educational production functions" instead of simply input-output analyses (Dew et al., 2000). The common inputs are school resources, teacher quality, and family attributes, and the outcome is student's achievement (Eric A, 2007).

## b) Class Conflict theory

Class conflict theory is most commonly associated with Karl Marx (1818-1883). According to this theory, educational system are seen as perpetuating the status quo that is it enhances inequality by training the lower classes into being obedient workers in that educational system practices sorting along distinct class and ethnic lines. Schools train those in the working classes to accept their position as lower-class members of society (Kainuwa A. et al 2013). This role of education is referred to as the "hidden curriculum" since it goes against the core function of education which is to enhance equity and equality in the society. According to this theory, teachers treat lower-class kids like less competent students, placing them in lower "tracks" because they have generally had fewer opportunities to develop language, critical thinking, and social skills prior to entering school than middle and upper class kids. Likewise children from low socio-economic status will be given equal treatment as lower class kids in the school and society at large compared with those from high socio-economic status. They point out that while private schools are expensive and generally reserved for the upper classes, public
schools, especially those that serve the poor, are underfunded, understaffed, and growing worse. Schools are also powerful agents of socialization that can be used as tools for one group to exert power over others (Kainuwa A. et al 2013).

## c) Social Exclusion Theory

The fact that many children are excluded from accessing their rights to, within and through education demonstrates the continuous and massive violation of education as a right (Njagi W. 2012). Social exclusion is a critical social development concern, as it prevents certain segments of the population from participating fully in development (Awortwi and Okwany 2010). Sen (2000) differentiates between active and passive exclusion, and describes active exclusion as exclusion that is experienced through open and deliberate policies, programs and laws that discriminate and exclude certain groups in a population. Passive exclusion on the other hand is subtle and could be unintentional and sometimes caused by lack of awareness of needs. Social exclusion results in diminished quality of life and life chances as well as reduced choices, socio-economic opportunities and unequal citizenships (Awortwi and Okwany 2010).

Extreme inequalities in opportunities and life chances have a direct bearing on human capabilities, that is, what people can be and what they can become (UNDP 2005). The social exclusion theory is used in this study as an analytical tool to explore how and why certain categories of children are left out of accessing opportunities in development due to their performance in education in secondary schools. The theory further provides a framework for analyzing the implications of socio- economic disadvantage (Njagi W. 2012) and multiple deprivations.

Conceptual Framework
INDEPENDENT VARIABLES DEPENDENT VARIABLE


Figure 1: Conceptual Framework

## a) Government policies

The implementation of the cost-sharing policy officially marked the end of "free" and highly subsidized education by government. However, the government would still be responsible for the remuneration of teachers and education administrators and fund some limited school facilities. (Orodho,2002). With reduced government spending on schools, as part of the cost-sharing strategy in education, government expenditure on education dropped to $40 \%$ and the parents had to finance the remaining $60 \%$ (Wambugu, 2013). Under the secondary schooling program, authorities pay schools kshs. 10,265 per pupil annually, this is expected to cover tuition and administration costs, school maintenance and improvements, and class activities Parents are still responsible for uniforms and lunches - and the subsidy does not cover residence costs for children at boarding school (KIPPRA, 2013).

## b) Hidden Costs

With reduced government spending on schools, as part of the cost-sharing strategy in education, the current government policy on how schools should raise funds gives a lot of leeway to secondary school head-teachers to decide on the type of educational levies to impose on parents (Wambugu J., 2013). These levies which come in terms of development fees, PTA fees, transportation fees, activity fees, boarding and meals, personnel emoluments are always hidden and never consisted schools charge then arbitrarily and they vary from school to school this leads to an increase in the school fees and it denies the needy a chance to perform well in the national exams.

## c) Academic Performance

Academic performance is the outcome of education. It is the extent to which student, teacher or institution has achieved their educational goals. Performance in education is usually evaluated based on examinations (Mbatia, 2014). Examinations have been accepted by educationists as an aspect of any education system (Onyara 2013) it is the measure that is used to measure students academic performance. There are several factors that influence academic performance in secondary schools in Kenya and more particularly in Kitui County. They include; household characteristics, child labor, school based factors such as infrastructure, learning materials and the cost of education (Sava, L., Orodho, J., 2014). Due to the importance of examinations in measuring academic performance, stakeholders in the education system have come up with strategies aimed at improving students' performance in examinations (Juma, 2011).

## Empirical Review

## a) Government Policy

Financing secondary education is a great challenge to both governments and households. Secondary education in most African countries tends to be the most neglected, receiving on average $15-20 \%$ of state resources (World Bank, 2005). Household burden in financing secondary education is also high. In Kenya, whereas households meet only $20 \%$ of primary and $8 \%$ of university education costs, they shoulder 60\% of secondary education costs. Thus, cost is a key barrier to transitioning to secondary school for the poor, who form the majority in sub-Saharan Africa (KIPPRA, 2013).

On financing education, (UNESCO 2010) proposed the following; Strengthening partnerships in the development of secondary schools, encourage establishment of day schools with the aim of increasing access to secondary education at a reduced and affordable cost, strengthen special bursary scheme for the needy, expanding the nonformal sector to Secondary Education Division of the MOE and enhancing capacity building for curriculum developers at K.I.E and Inspectorate Section of the MOE. This was in response to the cost sharing policy which had raised the expenditure on education from $30 \%$ to $44 \%$ of parent's annual incomes. Most parents became overburdened and unable to raise such fees. Those who could not afford the money to pay for their children's school fees often had their children drop out of school (Njoroge 2013).

Under the secondary schooling program, authorities pay schools kshs.10,265 per pupil annually, an amount that is to be allocated in lump sums at the start of each of the three school terms, and which is expected to cover tuition and administration costs, school
maintenance and improvements, and class activities (KIPPRA, 2013). Parents are still responsible for uniforms and lunches - and the subsidy does not cover residence costs for children at boarding school.

The financing of secondary school education in Kenya is based on cost-sharing policy. Cost sharing, which was introduced in Kenya in 1988, has led to an increase in school fees and a high dropout rate among learners at secondary school level (Wambugu J., 2013). In 1988, the Presidential Working Party on Education emphasized the need for cost sharing in education between the government, parents and communities due to a decline in available government funds (IPAR, 2003). In this arrangement the government finances 40\% while the household finances 60\% (Wambugu, 2013). The implementation of cost sharing in education, in context of rising poverty in the country, has led to adverse effects with regard to retention rates, access to and quality of education (Martin, 2008). Children from poor backgrounds continue to be marginalized as some national schools charge exorbitant school fees. Most parents view cost sharing as a burden, because not all of them are able to educate their children beyond the primary school level. In addition, some children are not able to register at the schools of their choice and they end up at district secondary schools (Wambugu J., 2013).

The implementation of the cost-sharing policy officially marked the end of "free" and highly subsidised education by government. However, the government would still be responsible for the remuneration of teachers and education administrators and fund some limited school facilities. (Orodho,2002). With reduced government spending on schools, as part of the cost-sharing strategy in education, the current
government policy on how schools should raise funds gives a lot of leeway to secondary school head-teachers to decide on the type of educational levies to impose on parents (Wambugu J., 2013).

## b) Hidden costs

The cost sharing policy in Kenya which was introduced in 1988 requires that most costs in education are met through partnership between the public sector (government) and the parent (Wambugu, 2013). The government's role includes financing professional development, teacher's remuneration and provision of basic infrastructure (Ngware, 2006). The role of the parent is to provide the physical infrastructure, tuition, public examinations, catering and accommodation in boarding schools (Wambugu, 2013).

The government finances $40 \%$ while the household finances 60\% (Wambugu, 2013). However schools charges far beyond the 60\% in extra school levies such as PTA fund, motivational fees, transportation fees and development fees (Njeru and Orodho, 2003). This leads to difficulties in financing secondary education since the parents have to shoulder the increased costs. This creates a negative impact on the academic performance of the students (Wambugu, 2013).

## Critique of the literature review

Majority of the authors that I have come across in the literature review have focused mainly on free secondary education in Kenya. However they have not come out clearly on the fact that the government, through this policy only caters for a fraction of the cost of secondary education and that the parents are left with the bigger share of providing for the infrastructure and other costs which are referred to as extra levies. Where else households spend more on
secondary education that is 60\% compared to what they spend on primary and university education $20 \%$ and $8 \%$ respectively, KIPPRA, (2013), few studies have been carried out to evaluate the influence of this on students academic performance.

They also focus more on the other factors that influence academic performance in greater details. These factors include teaching and learning materials, teacher's availability, training and motivation. These researchers also focus on physical facilities such as class rooms, toilets, desks and writing materials and how all these influence academic performance. However, little attention is given on the influence of the cost of secondary education.

## Research Gaps

A lot of research work has been done on the question of the factors that influence academic performance in secondary schools in Kenya. For instance the influence of school infrastructure on academic performance, the effect of household characteristics on students academic performance (Ngware, M., Ezeh., Okech,M., Mudenge, N. 2009), the influence of the availability of trained staff or teachers on students academic performance, the influence of the bursary program on students academic performance, the influence of insecurity (Mudege, 2008) the impact and challenges of school feeding programme (Aila B., O. 2012) and the role of the academic background of the parents on students academic performance. However, little focus has been given on the influence of the cost of education on student's academic performance and more particularly the influence of cost sharing on student's academic performance in Kitui County. Therefore the research gaps are the influence of cost sharing, the role of the parents and non-
governmental organizations in the cost sharing strategy in Kenya.

## RESEARCH METHODOLOGY

## Research design

The study used the descriptive research design. According to (Kothari 2009) a descriptive research study is one that is concerned with describing the characteristics of a particular individual or a group. This research design is mostly used for collecting information about people's attitude, opinions and habits and also in education and social science issues (Orodho 2009). According to Mugenda, 2003 this kind of design would fall in the classification of qualitative research. A qualitative research is one which generates data in the form of words rather than numbers.

## Target Population

The target population for the study included all the head teachers from the public schools in Kitui County, the PTA chairpersons from these schools and the sub-county education officers. There are 188 secondary schools in Kitui County. Therefore the target population was composed of 188 head teachers, 188 PTA chairpersons and 16 sub-county education officers making a total of 392.

## Sample and Sampling Technique

During the study a smaller number of units were chosen in order to represent the attributes of the target population this is referred to as a sample. The study used stratified random sampling techniques to select the study respondents from the target population. This method was used because the target population was not homogeneous.

Table 1 sampling frame

| Strata | population | sample <br> ratio | sample |
| :--- | :---: | :---: | :---: |
| Head <br> teachers | 188 | 0.2 | 38 |
| PTA chair <br> persons <br> Sub county <br> education <br> officers <br> Total | 188 | 0.2 | 38 |

## Data collection

The research used questionnaires as the main data collection tool. The questionnaires were used to collect mainly quantitative data. However some qualitative data was collected from the open ended questions. Secondary data involved the collection and analysis of published material and information from other sources such as annual reports and published data.

## Data Collection Instrument

The research administered a questionnaire to each member of the sample. The questionnaire were designed and tested with a few members of the population for further improvements. This was done in order to enhance validity and accuracy of data to be collected.

Secondary data was collected to generate additional information for the study from the documented data or available reports.

## Data Collection Procedure

The researcher administered the questionnaire individually to selected sample and also conducted the interviews personally. The researcher exercised care and control to ensure all questionnaires issued to the respondents were received.

## Data Processing and Analysis

The researcher perused completed questionnaires and document analysis recording sheets. Quantitative data collected was - 474 - $\mid$ P a g e
analyzed using SPSS and presented through percentages, means, standard deviations and frequencies. The information was displayed by use of bar charts, graphs and pie charts and in prose-form. This involved tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions through use of SPSS. Content analysis was used to test data that is qualitative nature or aspect of the data collected from the open ended questions. According to Baulcomb, (2003), content analysis uses a set of categorization for making valid and replicable inferences from data to their context.

A multivariate regression model was applied to determine the relative importance of each of the four variables with respect to the influence Student's academic performance. This was done to establish the extent to which each independent variable affect the dependent variable as shown by the size of the beta coefficients. The regression model was:
$Y=\beta_{0}+\beta_{1} X_{1}+\beta_{2} X_{2}+\varepsilon$

## Where:

$\mathbf{Y}=$ Student's academic performance
$\boldsymbol{\beta}_{\mathbf{0}}=$ Constant Term
$\boldsymbol{\beta}_{1}=$ Beta coefficients
$X_{1}=$ Government Policy
$X_{\mathbf{2}}=$ Hidden costs
$\boldsymbol{\varepsilon}=$ Error Term

## FINDINGS AND DISCUSSIONS

## Response Rate

The study targeted a sample size of 79 respondents from which 75 filled in and returned the questionnaires making a response rate of $94.9 \%$.

## Reliability Analysis

A pilot study was carried out to determine reliability of the questionnaires. Reliability analysis was subsequently done using Cronbach's Alpha which measured the internal consistency by establishing if certain item within a scale measures the same construct. Gliem and Gliem (2003) established the Alpha value threshold at 0.6, thus forming the study's benchmark. Cronbach Alpha was established for every objective which formed a scale. Table shows that Hidden costs ( $\alpha=0$. 815), and Government policies ( $\alpha=0$. 715) . This illustrates that all the two variables were reliable as their reliability values exceeded the prescribed threshold of 0.6.

Table 2: Reliability Analysis

| Scale | Cronbach's Alpha | Number of Items |
| :--- | :---: | :---: |
| Government policies | 0.715 | 5 |
| Hidden costs | 0.815 | 7 |

## Demographic information

## Gender distribution

The study required the respondents to indicate their gender and from the findings, the study established that, majority of the respondent's that is $58 \%$ were males whereas $48 \%$ of the respondents were females, this is an indication that both genders were fairly involved in this research and thus the findings of this study did not suffer from gender biasness.

## Age of the respondent

Respondents were requested to indicate their age category, from the study findings it revealed that, most of the respondents that is $33.8 \%$ were aged between 40 to 49 years, $27.8 \%$ of the respondents were aged between 30 to 39 years, $20.2 \%$ of the respondents were aged above 50 years whereas $18.2 \%$ of the respondents were - 475 - $\mid \mathrm{P}$ a g e
aged between 21 to 29 years. There was no respondent who indicated to be aged below twenty years; this implies that respondents were fairly distributed in terms of age.

## Length of service

The study requested the respondent to indicate the number of years they had worked in the organization. From the findings, majority of the respondents as shown by $44.5 \%$ indicated to have worked for a period exceeding 11 years, $33.4 \%$ of the respondents had worked for a period of 6 to 10 years, whereas $22.1 \%$ of the respondents had worked for a period 0 to 5 years. This implies that majority of the respondents had worked with the institution for a considerable period of time and that they were in a position to give credible information relating to this study.

## Level of education

The respondents were asked to indicate their highest level of education, from the findings, most of the respondents that is $47.8 \%$ held bachelor's degrees, $35.5 \%$ of the respondents held college diploma certificates whereas $16.7 \%$ of the respondents held masters degree certificates, the study deduces that respondents were well educated and therefore they were in a position to respond to research questions with ease.

## Study Vatriable

## a) Government policies

Table 3: Effects of government policies on student's academic performance

| Opinion | Frequency | Percentage |
| :--- | :---: | :---: |
| Yes | 68 | 90.7 |
| No | $\mathbf{7}$ | 9.3 |
| Total | $\mathbf{7 5}$ | $\mathbf{1 0 0}$ |

The study sought to analyze the influence of government polices on student's academic performance in secondary schools in Kenya, from the findings, majority of the respondents as shown by $90.7 \%$ agreed that government policies influenced student's academic performance in secondary schools whereas $9.3 \%$ of the respondents were of the contrary opinion. This shows that government policies influenced student's academic performance in secondary schools in Kenya.

Table 4: Extent to which government polices influence student's academic performance

| Extent |  | Frequency | Percentage |
| :--- | :---: | :---: | :---: |
| Very <br> extent | great | 28 |  |
| Great | extent | 40 | 37.3 |
| Moderate | 7 | 53.3 |  |
| extent | $\mathbf{7 5}$ | 9.3 |  |
| Total |  | $\mathbf{1 0 0}$ |  |

The study analyzed the extent to which government polices influenced student's academic performance in secondary schools in Kenya, from the research, majority of the respondents as shown by $53.3 \%$ were of the opinion that government polices influence student's academic performance in secondary schools in Kenya to a great extent, $37.3 \%$ of the respondents indicated to a very great extent whereas $9.3 \%$ of the respondents indicated to a moderate extent. This implies that government policies influences student's academic performance in secondary schools to a great extent.

Table 5: Effect of government policies on student's academic performance

Statements
Lack of proper policies addressing
ever changing economic trends
presents economic challenges to
school management which
impedes students performance

The study sought to determine the extent to which respondents agreed with the above statements relating to strategy implementation, from the research findings majority of the respondents agreed that; lack of sufficient resources is a primary problem facing public schools and thus student's performance as shown by a mean of 4.24 . Lack of proper policies addressing ever changing economic trends presents economic challenges to school management which impedes students performance, some government guidelines seems to favor some schools by allowing them to levy higher charges than others which affect student's performance as shown by a mean of 4.19, clear policies need to be put in place in order to ensure provision of universal and free or affordable education in Kenya as shown by a mean of 4.03, there is need to amend policies governing release of funds by the government to schools so as to ensure consistent learning process across public schools as shown by a mean of 4.01, the study also established that, discrimination brought about by government
policies created un-even play ground which adversely affects students performance, failure by the government to institute policies especially those governing public schools in marginalized areas adversely affects students performance, further, the study revealed that the government have not implemented some of the proposed policies proposed by various committees. These findings concurs with the study findings by World Bank, (2005) that Lack of proper policies addressing ever changing economic trends presents economic challenges to school management which impedes students performance.
b) Hidden Costs

Table 6: Effects of Hidden Costs on student's academic performance

| Opinion | Frequency | Percentage |
| :--- | :---: | :---: |
| Yes | 55 | 73.3 |
| No | 20 | 26.7 |
| Total | $\mathbf{7 5}$ | $\mathbf{1 0 0}$ |

The study sought to establish whether hidden costs influence student's academic performance in secondary schools in Kenya, from the research findings, majority of the respondents as shown by $73.3 \%$ were of the opinion that hidden costs influenced student's academic performance in secondary schools whereas $26.7 \%$ of the respondents were of the contrary opinion. This finding indicates that hidden costs influenced student's academic performance in secondary schools in Kenya.

Table 7: Extent to which hidden costs influence student's academic performance

| Extent | Frequency | Percentage |
| :--- | :---: | :---: |
| Very great extent | 21 | 28 |
| Great | 48 |  |
|  |  | 64 |
| Moderate extent | 6 | 8 |
| Total | $\mathbf{7 5}$ | $\mathbf{1 0 0}$ |

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The study sought to determine the extent to which hidden costs influence student's academic performance in secondary schools in Kenya, from the research, majority of the respondents as shown by 64\% were of the opinion that hidden costs influence student's academic performance in secondary schools in Kenya to a great extent, $28 \%$ of the respondents indicated to a very great extent whereas $8 \%$ of the respondents indicated to a moderate extent, these findings implies that hidden costs influenced student's academic performance in secondary schools to a great extent.

Table 8: Influence of hidden costs on student's academic performance

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Statements} \& \& \& \& \& \& \& <br>
\hline \&  \& $$
\begin{aligned}
& \ddot{0} \\
& \stackrel{y}{00} \\
& \stackrel{H}{0} \\
& \hline
\end{aligned}
$$ \& 或 \&  \&  \&  \&  <br>
\hline Hidden cost has led to an increase in school fees and a high dropout rate among learners at secondary school level \& 2 \& 2 \& 1 \& 44 \& 26 \& 4.20 \& 0.28 <br>
\hline High cost of living, hinder parents ability in meeting the hidden costs of secondary education \& 1 \& 0 \& 3 \& 54 \& 17 \& 4.15 \& 0.33 <br>
\hline Lack of employment opportunities, hinder parent's ability in meeting the hidden costs of secondary education. \& 0 \& 1 \& 2 \& 51 \& 21 \& 4.23 \& 0.31 <br>
\hline Large families hinder parent's ability in meeting the hidden costs of secondary education. most parents are unable to meet the hidden costs of secondary education \& 2
1 \& 2
2 \& 1
2 \& 44

50 \& 26
20 \& 4.20

4.15 \& 0.28
0.30 <br>
\hline
\end{tabular}

The study analyzed the extent to which respondents agreed with the above statements relating to effects of hidden costs on student's academic performance in secondary schools. From the findings majority of the respondents agreed that; lack of employment opportunities,
hinder parent's ability in meeting the hidden costs of secondary education as shown by a mean of 4.23, large families hinder parent's ability in meeting the hidden costs of secondary education, hidden cost has led to an increase in school fees and a high dropout rate among learners at secondary school level as shown by a mean of 4.20. The study also established that parents were reluctant in paying hidden costs due to lack of transparency in the utilization of the funds which negatively affected students' performance. The study established that lack of explanation to parents on financial scope to be met by the government and that to be covered by parents brought in an aspect of reluctance by parents in paying hidden costs which adversely affected student's time in class. These findings go hand in hand with the findings by (Njeru and Orodho, 2003) that extra school levies such as PTA fund, motivational fees, transportation fees and development fees leads to difficulties in financing secondary education since the parents have to shoulder the increased costs which creates a negative impact on the academic performance of the students.
c) Student's Academic Performance

Table 9: Student's academic performance

| Statements |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | in | 0 | $z$ | 4 | $\pi$ |  | $$ |
| Social economic status |  |  |  |  |  |  |  |
| is the indicator |  |  |  |  |  |  |  |
| contributing towards |  |  |  |  |  |  |  |
| the quality of students' | 1 | 3 | 4 | 48 | 19 | 4.00 | 0.26 |
| achievement. |  |  |  |  |  |  |  |
| Family characteristics |  |  |  |  |  |  |  |
| like socio economic |  |  |  |  |  |  |  |
| status (SES) are |  |  |  |  |  |  |  |
| significant predictors for students' | 1 | 2 | 3 | 47 | 22 | 4.11 | 0.27 |
| performance at school |  |  |  |  |  |  |  |
| Parental education |  |  |  |  |  |  |  |
| also has effects on |  |  |  |  |  |  |  |
| performance |  |  |  |  |  |  |  |
| Parental occupation |  |  |  |  |  |  |  |
| has little effect on their child's |  |  |  |  |  |  |  |
| performance in studies | 1 | 1 | 1 | 49 | 23 | 4.20 | 0.28 |
| than their education |  |  |  |  |  |  |  |

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Student's gender
strongly affects their
academic
performance,
It is very important to
have comprehensible
understanding of the
factors that benefit
and hinder the
academic progress of
an individual's
anducation

The study sought to establish the extent to which respondents agreed with the above statements relating to student's academic performance, from the research findings majority of the respondents agreed that parental occupation has little effect on their child's performance in their education as shown by a mean of 4.20, Parental education also has effects on students' academic performance as shown by a mean of 4.17 . It is very important to have comprehensible understanding of the factors that benefit and hinder the academic progress of an individual's education. Student's gender strongly affects their academic performance, as shown by a mean of 4.16. Family characteristics like socio economic status (SES) are significant predictors for students' performance at school as shown by a mean of 4.11, social economic status is the an indicator contributing towards the quality of students' achievement As shown by a mean of 4.00 .

## Regression analysis

In this study, a multiple regression analysis was conducted to test the influence among predictor variables. The research used statistical package for social sciences (SPSS V 21.0) to code, enter and compute the measurements of the multiple regressions. The model summary is presented in table 10 :

Table 10: Model Summary

| Mo <br> del | R | R <br> Squ <br> are | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .8 <br> 73 <br> a | .762 | .721 | .12225 |
|  |  |  |  |  |

Adjusted $R$ squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the table above the value of adjusted $R$ squared was 0.721 an indication that there was variation of 72.1\% on the Student's academic performance due to changes in holding government policies and hidden costs, at $95 \%$ confidence interval. This shows that 72.1 \% changes in Student's academic performance could be accounted to changes in holding government policies and hidden costs, R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table above there was a strong positive relationship between the study variables as shown by 0.873 .

The study further tested the significance of the model by use of ANOVA technique.
Table 11: ANOVA

| Model |  | Sum of <br> Squares | d <br> f | Mean <br> Square | F | Sig. |
| :--- | :--- | ---: | :---: | :---: | :---: | :---: |
| 1 | Regress | 35.488 | 2 | 8.872 | 4.0 | $.001^{\text {b }}$ |
|  | ion |  |  |  | 31 |  |
|  |  |  |  |  |  |  |
|  | Residua | 154.07 | 7 | 2.201 |  |  |
|  | I |  | 2 |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

From the ANOVA statistics in table 11, the processed data, which is the population parameters, had a significance level of $0.001 \%$ which shows that the data is ideal for making a conclusion on the population parameters as the value of significance ( $p$-value) is less than $5 \%$. - 479 - $\mid$ P a g e

The calculated value was greater than the critical value (4.031>2.5252) an indication that there were significant difference between Student's academic performance and government policies , and hidden costs. The significance value was less than 0.05 indicating that the model was significant.

In addition, the study used the coefficient table to determine the study model. The findings are presented in table 12,

Table 12: Coefficients


The established regression equation was
$\mathbf{Y}=\mathbf{0 . 8 7 8}+\mathbf{0 . 3 0 5} \mathrm{X}_{\mathbf{1}}+\left(-0.375 \mathrm{X}_{\mathbf{2}}\right)$
From the regression equation, it was revealed that holding government policies and hidden costs to a constant zero, Student's academic performance would stand at 0.878, a unit increase in government policies would lead to increased Student's academic performance by a factor of 0.305 . A unit increase in hidden costs would lead to decrease in Student's academic performance by factors of -0.375 . The study further revealed that government policies and hidden costs were statistically significant to affect students academic performance, as all the $p$ value (sig) were less than $0.05 \%$. The study also found that there was a positive relationship between Student's academic performance and Government policies and hidden costs. The analysis was undertaken at 5\% significance
level. The criteria for comparing whether the predictor variables were significant in the model was through comparing the obtained probability value and $\alpha=0.05$. If the probability value was less than $\alpha$, then the predictor variable was significant otherwise it wasn't. All the predictor variables were significant in the model as their probability values were less than $\alpha=0.05$.

## SUMMARY OF FINDINGS

a) Effects of Government policies on student's academic performance

On effects of government policies on academic performance of students, the study revealed that government policies influenced student's academic performance in secondary schools to a great extent the study also noted that lack of sufficient resources is a primary problem facing public schools and thus student's performance. Lack of proper policies addressing ever changing economic trends presents economic challenges to school management which impedes students performance, some government guidelines seems to favor some schools by allowing them to levy higher charges than others which affects student's performance, clear policies need to be put in place in order to ensure provision of universal and free or affordable secondary education in Kenya, there is need to amend policies governing release of funds by the government to schools so as to ensure consistent learning process across public secondary schools, the study also established that, discrimination brought about by government policies created un-even play ground which adversely affects students academic performance, failure for the government to institute policies especially those governing public schools in marginalized areas adversely affects students performance, further, the study revealed that the government has not
implemented some of the proposed policies proposed by various committees.

## b) Effects of Hidden Costs on student's academic performance

On effects of hidden costs on academic performance of students, the study revealed that hidden costs influences student's academic performance in secondary schools to a great extent, that lack of employment opportunities, hinder parent's ability in meeting the hidden costs of secondary education, large families hinder parent's ability in meeting the hidden costs of secondary education. Hidden costs has led to an increase in school fees and a high dropout rate among learners at secondary school level, economic problems which affect parents ability in meeting the hidden costs of secondary education, high cost of living, hinder parents ability in meeting the hidden costs of secondary education, unreliable sources of income, hinder parents ability in meeting the hidden costs of secondary education, the study also established that parent were reluctant in paying hidden costs due to lack of transparency in the utilization of the funds which negatively affected students performance, lack of clear communication by school administration on matters relating to additional costs in respect to purpose and procedures of settling hidden costs affected students time in class which affected their overall performance.

## Conclusions

From the research findings the study established that clear policies need to be put in place in order to ensure provision of universal and free or affordable education in Kenya and that there is need to amend policies governing release of funds by the government to schools so as to ensure consistent learning process across public schools. Therefore the study

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concludes that improvements on government policies will enhance student's academic performance in secondary schools in Kenya.

The study revealed that hidden cost had led to an increase in school fees and a high dropout rate among learners at secondary school level and that unreliable sources of income, hindered parent's ability in meeting the hidden costs of secondary education, thus the study concludes that hidden costs had a negative effect on student's academic performance in secondary schools in Kenya.

## Recommendations

The study recommends that policy makers, managers and other educational stakeholders should embark on rigorous context specific cost benefit and social analysis on fee abolition policy options that are feasible and could yield results for different regions/counties as
problems experienced by parents on indirect costs of secondary are context/regional based.

In view to enhance student's performance, the study recommends that; the government should increase the level of funding per student as hidden cost was found to be a great burden to parents.

## Recommendations for further studies

The study investigated the effects of influence of cost sharing on student's academic performance in secondary schools in Kenya. The variables under study (government policies and hidden costs) contributed to $72.1 \%$ of the variations in students' academic performance. The study recommends that other studies be conducted to establish the factors attributed to the remaining 27.9\% variation in students' academic performance.

## References

Azid, T., Khan, R..,(2011). Who are the children going to School in Urban Punjab(Pakistan)? International Journal of Social Economics 37, 6.

Eric A. \& Hanushek, W (1999). The Journal of Human. Resources, Volume 14, Issue 3 (Summer,), 351-388.

Ferguson, D, \& Ronald, F.(1991). "Paying for Public Education: New Evidence on How and WhyMoney Matters," Harvard Journal on Legislation, 28 (Summer):465-97.

Institute of Policy Analysis and Research (IPAR) Policy Brief Volume 9, Issue 3, 2003
Joshi K. (2010). Indigenous children of India: enrolment, gender parity and drop-out in school education International Journal of Sociology and Social Policy Vol. 30 No. 9/10, 2010 pp. 545-558.

Juma F. (2011), The Relationship Between mode of Teacher Motivation and students academic performance in Public Secondary Schools in Bungoma North District. Unpublished M.Ed. Project Report, Moi University, Kenya

Karanja J. (2013). Influence of intellectual capital on the growth of small and medium enterprises in Kenya. International Journal of Arts and Entrepreneurship, special issue.

Kiveu, N., \& Maiyo, J. (2009). The impact of cost-sharing on internal efficiency of public secondary schools in Ndivisi division of Bungoma district

Karemesi, J. (2010). Universalising Primary Education in Kenya, Is it Sustainable? Surfing the Web: http://usbec.wordpress.com

Kothari C. (2009). Research Methodology: An Introduction. New Age International Publishers New Delhi.

Martin, E. (2008). Inequalities in education: poor still marginalized. Daily Nation, 8 May, 14:5.
Ngware, N.N., Onsomu, E.N., \& Muthaka, D.I. (2007). Financing secondary education in Kenya: Cost reduction and financing options. Education Policy Analysis Archives, 15(24).
Moses W., Ngware S., Eldah N., Onsomu R., David I., Muthaka, F., Damiano K.,\& Manda, F,(2006). "Improving access to secondary education in Kenya: what can be done?", Equal Opportunities International, Vol. 25 Iss: 7, pp.523-543.

Mudege, N., Zulu, E., Izugbara, C. (2008) How insecurity impacts on school attendance and school dropout among urban slum children in Nairobi, international journal of conflict and violence 2(1) 98-112.

Muthei, R (2001). The impact of Cost Sharing in Health and Education NBB. Action Publishers.

Macmillan, H., \& Schumacher, S. (2006). Research in education: evidence-based inquiry. 6th Edition. Boston: Pearson Education Inc.

- 482 - $\mid$ P a g e

Mugenda, M.O. (2003) Research methods, qualitative and Quantitative Aprroaches. Africa Center for technology Nairobi-Kenya.

Nyaga,B. (2005): Effects of Delayed Fees Payments on the Teaching and Learning Process in Public Secondary Schools in Mbeere District,Kenya; Unpublished Med Thesis, Kenyatta University.

Nelson Claudia (2013) Do not forget the children of Sodom and Gomorrah: examining the convergence of poverty and social exclusion in lives of Ghanaian children living in a slum called Home. International journal of humanities and social science 3 (10) special issue.

Njeru, E. \& Orodho O. (2003). Education Financing In Kenya: Secondary School Bursary Scheme Implementation and Challenges, IPAR DP/035/2003, Nairobi: Institute Of Policy Analysis and Research.

Ngware, M., Ezeh., Okech, M., Mudenge, N. (2009) Do household characteristics matter in schooling decision in urban Kenya? Equal opportunities international 28 (7) 591-608.

Njagi, W. (2012). Leveling the playing field or Exacerbating Exclusion?: Analysing provision of Education For the Urban Poor in Kenya. International Institute of Social Studies.

Oketch, M. \& Mutisya, M. (2012). Education, Training and Work Amongst Youth Living In Slums of Nairobi Kenya. United Nations Educational, Scientific and Cultural Organization.

Okwany, A. (2010) 'Free Primary Education and Social Exclusion' in N. Awortwi and A. Okwany, Issues in Social Development and Local Governance in Uganda, pp.131-156. Shaker Publishers.

Onsomu, E., Muthaka, D., Ngware, M., \& Kosimbei G. (2006). Financing of secondary education in Kenya: costs and options. Nairobi: Kenya Institute for Public Policy Research and Analysis (KIPPRA).

Onyara, B. (2013), School Based Factors Influencing Student's Academic Performance At Kenya Certificate of Secondary Education in Teso South District. Unpublished M. Ed. Thesis, University of Nairobi.

Orodho, A., Waweru, N., Getange, K., \& Miriti, J. (2013) Progress towards attainment of education for all (EFA) among nomadic pastoralist: do home-based variables make a difference in Kenya? Research on Humanities and Social Science Vol. 3. No. 21.

Orodho, J. (2002). Enhancing access and participation in secondary education among the poor and vulnerable through bursaries in Kenya. A consultancy paper submitted to the Institute of Policy Analysis and Research (IPAR) for Publication.

Samwel, W. \& Stephen O, (2014). The Influence of Education Costs on Students' Academic Performance in Kenya: An Empirical Study of Bungoma County Secondary Schools. Asian Journal of Educational Research Vol. 2, No. 1.

- 483 - $\mid \mathrm{P}$ a g e

Sava, L., \& Orodho, J., (2014). Social-economic factors influencing pupils' access to education in informal settlements; a case study of Kibera, Nairobi county Kenya. International journal of education and research 2 (3).

Tobyehatch, H. (2013). Mastery of the Cost of Education With Hyperion Profitability and Cost Management. Available at http://blogs.oracle.com/epm

UNICEF. (2004).Comprehensive education sector analysis report. Nairobi. UNICEF Country Office.
Wambugu J. \& Mokoena S. (2013): Education financing in Kenya; Parents perception about the implementation of the cost sharing policy in secondary school education, Mediterranean Journal of Social Sciences Vol. 4 No. 13,

Wambugu, J, (2012) The impact of the policy of cost sharing: A case study of selected Kenyan secondary schools. Unpublished Masters Dissertation. University of South Africa.

World Bank (2012). World Development Indicators. Available at www.worldbank.org/en/country/keya.
World Bank. (2008). Expanding opportunities and building competencies for young People: new agenda for secondary education.

