



INFLUENCE OF COST OF EDUCATION ON TRANSITION RATES FROM PRIMARY TO SECONDARY SCHOOLS IN KENYA: A CASE OF MACHAKOS SUB-COUNTY

Veronica Nduku Mwikya 

Masters Student, South Eastern Kenya University P.O BOX 69489-00400, Kenya
ndukuveronica2015@gmail.com

Selpher K. Cheloti

Lecturer, South Eastern Kenya University, P.O BOX 69489-00400, Kenya
scheloti@seku.ac.ke

David Mulwa

Lecturer, Machakos University, P.O BOX 69489-00400, Kenya
scheloti@seku.ac.ke

Abstract

The purpose of this study was to investigate the influence of cost of education on transition rates from primary to secondary schools in Kenya; a case of Machakos sub-county. The study was guided by the following objectives; to determine the average cost of putting a learner in school; asses the rate at which cost of education affect retention rates in schools and determine the rate at which cost of education influence transition rate from primary to secondary school in Machakos sub-county. The study used descriptive survey design. The target population was 135 public primary school head teachers and 145 class 8 class teachers. Simple random and purposive sampling techniques were used to identify 40 head teachers and 40 class teachers as respondents for the study. The sample size was. Questionnaires were used to collect data. Validity and reliability of the instruments was ascertained. The study found that cost of education, significantly influence the transition rate from primary school to secondary schools in Machakos Sub-County. The study concluded that cost of education had the greatest influence

on the transition rates from primary to secondary schools in Machakos. The study recommended that government should increase education subsidies to cushion parents from extra levies charged by schools. Sub county education office should come up with practical measures to sensitize the parents on the importance of education in order to change their attitude. Parents should be taught various income generating activities so as to make them financially stable as this will reduce dependency syndrome and enable them cater for both family basic needs and education of their children.

Keywords: Transition rate, cost of Education, Free Day Secondary Education, Kenya

INTRODUCTION

Education is any act of experience that has a formation effect on the mind, character or physical ability of an individual. It is a process by which society transmits knowledge, skills and values from one generation to another. It is the most valuable thing that society can bequeath its membership (Fanuel, 2010). It helps fight ignorance and acquisition of knowledge creating a better citizen in terms of prospects in life (Fanuel, 2010). According to Hueblar (2011), Education transition rate can be defined as the percentage of learners advancing from one level of schooling to the next. It is calculated as the percentage of learners enrolling in secondary school for the upcoming year divided by the number of learners in class eight in the preceding year.

According to Acheampong (2002) transition rate is thought to be a good indicator of balanced or unbalanced development of education between two levels. There are various transitions in the education system from pre-school to primary school, from primary to secondary school, from secondary to university or tertiary institutions. The low transition rates has been a concern in many countries as secondary education all over the world is emphasized because of its important role in empowering individuals socially and economically. It has been reported that many pupils at primary level consider education as a means of occupational mobility (Akinkunle, 2003).

According to the UNESCO Institute of statistics (UIS) 2015, Worldwide 85% of children in the last grade of primary school go on to attend secondary school. Only two regions have transitions rate below this global average. Eastern and Southern Africa (67.1%) and west and Central Africa (52.4%). Transition rates are highest in the industrialized countries (98.2%) and in Eastern Europe and CIS Countries (96.1%). However even in the Sub-Saharan Africa some countries have transition rates above 80%. The UNESCO Report (2011) indicated that transition

from Primary level progress to secondary was very high in developed countries and almost all children from the primary level progress to secondary school level. Bruns and Mingat, A. (2003) stated that countries of Africa, Latin America, Caribbean and Oceania, the transition rate was low because attendance to secondary school was not compulsory as in developed countries such as Finland, Japan, Germany and Russia where secondary education was open.

Kenya Vision 2030 is looking upon the education sector to deliver the necessary skills and build adequate human capital to achieve and sustain the country as a middle income economy. Education has been proven to substantially improve earning potential and help individuals lift themselves out of poverty. In Chile, the principal barrier in transiting from primary to secondary education is in institutional funding, the admission process and the quality of education at secondary level. In Latin America, for instance the playing field on which individuals and groups compete for their share of limited resources is far from level. The inequalities of education are related to children's home background status, cost of education, household vulnerability and low levels of parental education often resulting in early desertion and high rates of repetition at school affecting transition rates (Ali, C. 2007).

Many countries have not yet abandoned the practice of selection in favor of certification and transition through academic performance. The form of selecting primary graduates based on norms rather than on academic performance has taken place in Asia and Latin America. Majority of Africa youth fail their junior examination while their counterparts elsewhere succeed at the rate of 60 – 70%. Most of these failures therefore fail to transit to secondary cycle. The situation is similar in West and South Asia where high population countries such as Bangladesh, India and Pakistan have Net Enrolment Ratios (NER) ranging from 20% and 24% respectively (ADEA, 2004).

Education in most parts of Africa receives only 15% of total public spending on education. With gross enrolment rate (GER) of 26.8% compared to 56.6% for developing countries, so as a whole Africa secondary education lags behind (ADEA, 2004). Studies on transition from primary to secondary education in Ghana show that although the FCUBE made an overall enrolment increase, children from poor households continue to be underrepresented in enrolments (Acheampong, 2002). A study of transition patterns in Malawi concludes that access to secondary education in the country continues to reflect household wealth (Chimombo, 2009). Despite direct fees being abolished, these studies clarify that abolition of fees is not enough to ensure transition from primary to secondary education. Access to education in Kenya has not been evenly distributed across sexes, regions and social groups (Ali, 2007).

Kenya began a campaign for free primary education after independence in 1963. In 1967, Kenya, Uganda and Tanzania formed the east African Community and adopted a single

system of education, the 7-4-2-3, which consisted of 7 years of primary education, 4 years of secondary education, 2 years of high school and 3 – 5 years of university education. In 1977 the East Africa community collapsed but Kenya continued with the same system but changed the examinations names. The East African Certificate of Primary Education became the Certificate of Primary Education (CPE), the East African Certificate of Education became the Kenya Certificate of Education (KCE) and the East African Advanced Certificate of Education became the Kenya Advanced Certificate of Education (KACE).

In 1985 President Daniel Arap Moi, introduced the 8-4-4 system of education. With introduction of 8-4-4 system CPE became KCPE (Kenya Certificate of Primary Education) while KCE became the Kenya Certificate of Secondary Education (KCSE). Out of all children in Kenya about 85 percent attend primary school. 75 percent of those who complete primary education proceed to secondary schools and 60 percent of those who complete secondary school proceed to higher institution of education which include business and vocational institutions, national polytechnics, public and private universities within the country.

In the early 1970s primary school fees were abolished but in the mid 1980 cost-sharing measures between the government and its citizens led to the re-introduction of minor fee charges by primary schools. As the trend continued with schools requiring parents to pay fees, such as PTA, harambee, textbooks, uniforms, caution fees, exam fees and extra-curricular activity fees. 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 dropout of school. Many children were also forced to drop out of school when teachers would not allow to take exams (Eshiwani, 1990) .

With the introduction of FDSE in secondary schools in Kenya, it was envisaged by policy makers that transition from primary to secondary schools could increase to 100% percent. However studies show that the country is yet to achieve the objective since the average national transition rate is 84%. The transition rates in Machakos sub-county are 75% which is way below the national transition rate. Although studies show that culture, level of parents level of education and cost of education contribute to lower transition rates, their influence on transition rates especially in Machakos Sub-County is yet to be known.

The Kenyan policy on transition rate from primary to secondary school is 100% transition to high school by 2021. The government has scrapped the Kshs. 9,374 school fees which each student in public day secondary school has been paying per year. The parents are expected to only buy uniform and pay for lunch for day scholars. The MOE has stated that no girl should be denied access to secondary education due to pregnancy. All children regardless of their backgrounds, cultural or economic should not be discriminated in allocation of form one places.

Fairness should be the guiding principal in all educational institutions. Bursaries are given to needy students who cannot afford secondary education through the Constituency Development Funds (CDF) and also through the County Government. Chege and Sifuna (2006) attributes low transition from primary to secondary to high cost of education. These means that few children attain tertiary education where skills are developed despite the huge resources spent on education. The average years of schooling in Kenya is currently 8.4 years, a very limited time to enable a child acquire adequate skills for economic growth and development, thus a significant number of Kenyans have skill deficit, because eight years of education is inadequate.

Cost of education refers to the total amount of money invested by parents and government to enable a student to access secondary education. Supporting education is one of the smartest economic and human development investments that any country can make (World Bank 2009). The cost of education is termed as one of the great challenges in transition rate from primary to secondary school. According to Lewin (2007) tuition fee is the greatest challenge to access to secondary education in Sub-saharan Africa. Acheampong (2002) states that direct and opportunity costs of education hinder access to education of the poor. A study done in Malawi concluded that access to education in the country is determined by the ability of parents to meet the costs (Chimombo, 2009). In Kenya FDSE government subsidy program only cover tuition in secondary schools and parents are required to supplement the government efforts to meet the financial shortfalls. Nyaga (2006) conducted a study on the impact of the free secondary school education to the transition rate from the primary to the secondary schools in Imenti central. The study found out that the transition rate only improved with a very small margin of 16.58% against the expectations of government that was to achieve 85% transition rate. In the recommendations he sought further researchers to unfold how the cost of education still remains an underlying challenge despite the government offering to subsidize the cost by paying the tuition fees. The trends in transition rates nationally and Machakos Sub-County from 2014 – 2017 are shown in Table 1.

Table 1. Transition rate in schools

Year	National transition Rates	Transition rates in Machakos Sub-County
2014	80.4%	72%
2015	81%	73%
2016	82.05%	74%
2017	84%	75%

Data on table 1 shows that transition rates from primary to secondary schools in Machakos Sub-County has remained almost 10% below the national transition rates.

This shows that there are factors inhibiting transition from primary to secondary. The transition rate is expected to be higher than the national transition rate. The enrolment data from most sub-county day schools show under enrolment (Ministry of Education). These schools receive government subsidy FDSE and therefore charge lower fees compared to boarding schools. This shows that resources are left totally idle or are under-utilized. This study will investigate the socio economic factors affecting transition from primary to secondary school in Machakos Sub County.

Research objectives

The study was guided by the following objectives;

- i. To determine the average cost of putting a learner in school in Machakos sub-county.
- ii. To assess the rate at which cost of education affect transition rates from primary to secondary school in Machakos sub-county.
- iii. To determine the rate at which cost of education influence transition rate from primary to secondary school in Machakos sub-county.

Statement of the problem

Secondary education provides an all-round mental, moral and spiritual development as well as forming a firm students foundation for further education, training and work (Common Wealth Education Fund, 2003). Basic Education Act (2013), gives every child a right to free basic education which includes secondary education. In Machakos Sub-County there is under enrollment in most of the secondary schools (Machakos Sub-County Education Office). This implies that facilities continue to remain idle due to lack of students. The transition rate from primary to secondary school in Machakos Sub-County is 75% implying that 25% of pupils do not transit to secondary school (Machakos Sub-County Director, 2016). This implies that there are critical factors that contribute to the problem of low transition rate in Machakos Sub-County. Hence the need for this study.

Significance of the study

The findings of the study would guide the ministry of education in making policies to enhance transition from Primary schools to Secondary Schools. The government would use the findings from this study to make and implement policies that would increase the transition levels so as to enhance human capital in the country. Education planners would use the findings to forecast on

the number of students expected to transit from primary to secondary school in a given period. Head teachers would use findings to advice parents on best practices to enhance transition from primary to secondary school. In line with vision 2030, the key development stakeholders would use findings in this study to attain one of the key milestones of the vision 2030 compulsory and quality basic education. The United Nations would also find the findings of this study useful to attain one of the SDGs on quality education for all. Parents and guardians would use the findings of this research to understand their role in ensuring that their children comfortably transit from the primary education to the secondary education. This research would serve as a basis of reference for future scholars who would want to explore more on the factors influencing the rates of transition levels from one educational level to the next. The study would facilitate individual researchers and academicians in education to identify the gaps on factors that influence pupils transition rates from primary to secondary schools in Machakos Sub-County and carry out research in those areas.

LITERATURE REVIEW

Cost of Education on transition rate from primary to secondary school

Poverty is major barrier to education even when it is officially free. Additional costs for uniforms, textbooks, teachers' salaries and school maintenance create financial barriers for many families and learners thus affecting transition from primary to secondary school. The lower the family's household income, the greater the effect that associated cost of education will have on the families ability to ensure the transition of their children from primary to secondary school. For children on the streets without family support, direct and indirect costs become insurmountable barriers. The improvement in transition from primary to secondary education in America constituted a shift in education policy which necessitated more investment in secondary school education by increasing public funding (World Bank, 2005). The US secondary school system was decentralized and access and transition into secondary school education was increased. Public schools in the US currently educate more than 90% of all children enrolled in elementary and secondary schools. This is the result of a process that relied heavily on public funding particularly of education expansion from local governments.

Global and regional perspective of the influence of cost of education on transition rate from primary to secondary

In Asian countries, public investments were made in primary and secondary education after the Second World War. Singapore and South Korea adopted policies aimed at increasing quality and access to secondary education and transition increased. Japan took urgent measures to

increase transition to secondary school through increased public investment thus decreasing the cost burden from the parent and the country is enjoying economic benefits through industrialization (World Bank, 2005).

Financial requirements for joining secondary school influences transition from primary to secondary schools and are one of the greatest challenges of access to secondary in Sub Saharan Africa. This is because secondary education in majority of the countries is part of a fee-paying sector. This means that parents are required to meet some operational costs such as maintenance fees, food, uniforms, learning materials and special equipment (Lewin, 2007). State investment in secondary education tends to be the most neglected of the education sector, receiving average between 15% and 20% of total education resources from the government (World Bank, 2007). Such as low investment in secondary education has direct implication on transitions to secondary schools. In Cote d'ivoire the international rescue committee (RC) is addressing the cost barrier through facilitating families with out of school children to form village savings and loan association. The association enables members to save money and obtain small loans for economic activities which in turn enable members to meet the direct and indirect costs of education. CARE-Somalia provides conditional cash grants to enable Somalia families to meet the cost of schooling for girls. UNHCR provides school uniforms for displaced children in Chad and Rwanda. Cash grants for school fees, uniforms and learning materials are also provided for the displaced in Syria. In Kenya, Uganda and Timor Leste enrollment surged by 10 to 20% following abolition of fees. In Kenya the introduction of FSE increased enrollment to about 70%.

Cost of education on transition rate from primary to secondary in Kenya

In Kenya, the cost of education is met by the government and household members. The public spending on education by the Government of Kenya is driven by the sessional Paper No. 1 of 2005 on policy framework for Education and Research and the Second Kenya Education Sector Support Programme (KESSP II) as well as the Basic Education Act, 2013. According to Mutegei (2005) in his study on "factors affecting demand for secondary education in central division, Tharaka District", some of the costs associated with secondary education are: school uniforms, transport, pocket money, motivation fees/remedial tuition fee, boarding fees, development fees and other levies on school uniform. The study shows that girls uniform is more costly than the boys' uniform. On average a girls spends Kshs. 5,094.73 and boys Kshs. 4,035.75 on uniform every year. Pocket money is also considered as a direct cost of schooling. The study shows that girls receive more money from parents as pocket compared to boys. Students in boarding school receive more pocket money than students in day schools. Motivation fee is the amount of

money paid by the parents in order to pay teachers who conduct remedial classes. The study shows that parents with girls in secondary schools pay more money for motivation fees compared to parents with boys. On transport cost, the study established that on average girls pay slightly higher transport costs than boys. The cost of transport for students in day schools is lower than in boarding schools. The cost of secondary education has continually been on the rise. In public boarding schools, the fees per year is currently capped at a maximum of Kshs. 40,545 to Kshs. 53,533. In public day schools charge lunch and other approved development levies are charged. The government subsidy is Kshs. 22,244 for both day and boarding secondary schools disbursed in three school terms in the ratio 50:30:20. (Ministry of Education, 2018). Previously the government subsidy was Kshs. 12,870 and the parents paid the remaining Kshs. 9374 in day schools plus lunch.

Psacharopoulos and Woodhall (1985) content that the cost of education inhibits access to education for poor families. According to KESSP (2003) the primary to secondary transition rate is low because of high cost of secondary education. Chabari (2010) carried out a study on the challenges of implementation of free secondary education in public schools in Kangundo district Kenya. The findings of the study indicated that the funds released by the government were inadequate and were never released in time. Ngware, Oketch, Ezehand Mudege (2009) examined whether household characteristics matter in schooling decisions in urban Kenya. The study found out that there was a strong association between the household wealth index and probability of transition from primary to secondary school. It is therefore necessary to establish whether the same scenario affect Machakos Sub-County.

Ellen (2005) carried out a research on the progress accessibility to secondary education in the African countries. Cluster sampling was applied to sample African countries that would represent their regions in the study and used mailed questionnaires to the ministry of education of the sampled countries. The findings concurred with the view that low transition to secondary education was common in African countries and was related to the high cost of education, lack of facilities and lack of space coupled with teacher shortages.

Omuga, (2010), found a great positive correlation between the cost of education and low transition rates from primary to secondary schools. In his study he used a sample size of 198 primary schools in Nakuru County. Questionnaires and interview schedules were used to collect data from the sampled population which comprised of teachers and parents of the sampled schools. The connection of primary education to secondary education in terms of transition rates is a pain to many parents and the community. This is because primary schools are very committed to ensuring the transition and the schooling system is motivated by an examinations system bent on ensuring the scoring of high grades in the primary school

leaving examinations. This leads to the production of very good results at the primary school exams but causes pain to parents who cannot afford the secondary school education, which is not free (Omuga, 2010).

Wangari (2012) conducted a study on factors influencing transition rates from public primary schools to secondary school level in Murang'a East District. The study applied simple random sampling and questionnaires were used to collect data from the respondents. The study found out that, the transition rate was 76.24%. The findings cited lack of funds or ability to pay for children's secondary education as the major factor inhibiting transition rate which attributed to 84.21% of the total failure of transition. The study recommended for greater budgetary allocation to the education sector placing greater emphasis to financing secondary education to cater not only for tuition but other allied accompanying costs like boarding fees. Forum for awareness creation on the need to stem the tide of gender discrimination as a basis of deciding on the child to proceed to secondary level at household levels was required. The study did not however consider the family incomes such as agriculture, business etc. this study will close this gap by determining how the level of family income influence the transition level. According to GOK (2012) Parents often bear the burden of school fees for secondary education. Transition enrolment rates from primary to secondary are directly related to family income hence the poorer a child's household, the less likely the child is to attend secondary school (UNICEF, 2007).

Parents are forced to forgo the secondary education for their children especially so in the rural areas because they want them to be in regular work to earn an income and contribute to the sustenance of the family. There is evidence of reduced enthusiasm to proceed to secondary school in the rural areas because many consider it normal to stop learning and keep the household by way of earning a living (Mfumira, 2009). This brings out the social inequalities for advancement in life. The same impacts on the transition rates from primary to secondary school level by the very aspects of the cost involved. Weya (2010) stated that transition from primary to secondary school is measured by the enrolment in secondary school. He further said that there is direct correlation between family incomes and the transition rates from primary to secondary schools. This brings out the factor of social inequalities in that however bright a child is in primary school, they cannot be assured of progression to secondary school in the absence of a bursary or well-wishers chipping in if parents of the concern child have no income.

One of the reasons to justify government intervention in market for education is that education generates positive externalities. Education yields both private and social returns. Some of the private returns to education include higher wages and better employment prospects. Social returns of education include pro-social behavior like volunteering, political

participation and interpersonal trust. Adults with higher qualification are more likely to report desirable social outcomes, including good and excellent health, participation in volunteer activities, interpersonal trust and political efficacy (Steer, 2015). Governments must therefore ensure that transition from primary to secondary school remains high through reduction of cost of education so that as many people as possible can access secondary education.

RESEARCH METHOD

The study used the descriptive survey design. For the survey, a sample of 80 respondents selected using combination of simple random and purposive sampling techniques. The study used questionnaire and interview schedule to collect the primary data. Data was analyzed using descriptive and inferential statistics

RESEARCH FINDINGS

Influence of Cost of Education on the rate of transition in schools

The head teachers were asked to indicate the average cost of putting a learner through secondary school in a year. Their responses were as shown in Table 2.

Table 2: Response of Head teachers on Average Cost of Putting a Learner in school

Cost (Kshs)	Frequency	Percent
11,000 – 20,000	18	58
21000-30000	6	19.8
31000-40000	3	8.6
Above 40000	4	13.6
Total	31	100.0

The Head teachers who indicated that the cost of putting a learner in a secondary school was ranging between 11,000 – 20,000 was represented by a (58%), for 21,000 – 30,000 it was (19.8%). Whereas, those who were characterized by a range of 31,000 up to 40,000 was represented by (8.6%) and above 40,000 it was (13.6 percent rate). This implies that the average cost of putting a learner in a secondary school was 11000 to 20000.

The Head teachers were further asked to indicate how the costs of education affect the number of learners from their institution who access secondary school education depending on ability of parents. Their replies were as shown in Table 3

Table 3: Response of Head teachers on how Cost of education affects the Number of Learners in School

	Frequency	Percent
Very much	17	54.8
Fairly	14	45.2
Not at all	0.00	0.00
Total	31	100.0

From the findings, the head teacher indicated that cost of education fairly affect the number of learners from one's institution who access secondary school education depending on ability of parents as very much as shown by 54.8% and fairly shown by 45.2% . The not at all option had a zero response. This implies that cost of education affect the number of learners from institutions who access secondary school education depending on ability of parents very much. The head teachers were further asked to indicate whether there is a relationship between parents mode of earning a living and their ability to finance their children's education in secondary school. Their responses were as shown in Table 4.

Table 4: Response of headteachers on relationship between mode of parents earning a living and their ability to finance education

	Frequency	Percent
Yes	28	91.4
No	3	8.6
Total	31	100.0

The findings in table 4 show that the head teachers indicated that there is a relationship between parents mode of earning a living and their ability to finance their children's education in secondary school as shown by 91.4% while 8.6% said there is no relationship between their mode of earning a living and their ability to finance their children's education in secondary school. This implies that there is a relationship between parent's mode of earning a living and their ability to finance their children's education in secondary school.

The head teachers were further asked to indicate whether they had a situation of parents from their school unable to pay for their children's secondary school education. Table 5 shows their responses.

Table 5: Response of head teachers on whether some parents are unable to meet the cost of their Children's School Education

	Frequency	Percent
Often	23	74.1
Rarely	8	25.9
Not at all	0	0.00
Total	31	100.0

From the findings, majority of the Headteacher indicated that they often have a situation of parents from their school unable to pay for their children's secondary school education (74.1 per cent) while (25.95 per cent) indicated that rarely they have a situation of parents from their school unable to pay for their children's secondary school education. This shows that most of parents from most schools are unable to pay for their children's secondary school education. The respondents were further asked to indicate whether in the event of parent's inability to pay their children secondary school education, have there being any initiative by the community to take care of the same. Their responses were as shown in Table 6.

Table 6: Head teacher's response on inability of Parents to pay their Children Secondary School Education and community intervention.

	Frequency	Percent
No	3	9.9
Yes	28	90.1
Total	31	100.0

Majority of the headteacher indicated that in the event of parent's inability to pay their children secondary school education, there were initiative by the community to take care of the such students as shown by 90.1% while 9.9% opposed to the statement that in the event of parent's inability to pay their children secondary school education, there were initiative by the community to take care of the same. This shows that in the event of parent's inability to pay their children secondary school education, there were some initiatives by the community to take care of the needy students/poor backgrounds.

Finally, the class teachers were asked to indicate the extent to which the various cost aspects influence transition of pupils from primary to secondary schools in Machakos Sub-County. Their responses were as shown in Table 7.

Table 7: Class teachers response on how some cost aspects influence on Transition in Schools

	Mean	S.D.
Amount charged for school levies such as uniforms, food etc	4.461	0.720
Lack or inadequate of educational subsidies by the government e.g FSE	4.368	0.538
Cost of learning materials such as books	3.824	0.961
Cost sharing of secondary tuition by parents and government	2.592	0.657
Form one student scholarships by corporate and other sponsors	3.737	0.597

As per the findings in Table 7, the class teachers indicated that amount charged for school levies such as uniforms, food as expressed by a mean score of 4.461, lack or inadequate of educational subsidies by the government like FSE as shown by a mean score of 4.368, Cost of learning materials such as books as illustrated by a mean score of 3.824 and form one student scholarships by corporate and other sponsors as indicated by a mean score of 3.737 greatly affect influence transition of pupils from primary to secondary schools in Machakos County. However, the class teachers indicated that Cost sharing of secondary tuition by parents and government as shown by a mean score of 2.592 moderately influence transition of pupils from primary to secondary schools in Machakos County.

Hypothesis testing

HO₁: Cost of education has no significant influence on transition rate from primary to secondary school in Machakos Sub-County.

The researcher performed simple regression analysis and the results were as shown in Table 8.

Table 8: Cost of Education and Transition Rates in Schools

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.590 ^a	.349	.329	.43402		
a. Predictors: (Constant), Cost of Education						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.327	1	3.327	17.660	.000 ^b
	Residual	6.216	33	.188		
	Total	9.543	34			
a. Dependent Variable: Transition Rate						
b. Predictors: (Constant), Cost of Education						

Table 8...

Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	1.288	.341		3.783	.001
	Cost of Education	.365	.087	.590	4.202	.000

a. Dependent Variable: Transition Rate

From the research findings as presented in Table 8, the F statistic of model 1 on the influence of cost of education on transition rates from primary school to secondary schools in Machakos Sub-County was 17.660($p=.000$). This implies that the influence of cost of education on transition rates from primary school to secondary schools in Machakos Sub-County was statistically significant at 95% confidence level with ($p<.05$). Hence this model was suitable to estimate transition rates from primary school to secondary schools in Machakos Sub-County. The study rejected the null hypothesis one (H_{0_1}) which states that; cost of education has no significant influence on transition rate from primary to secondary school in Machakos Sub-County. Hence the implication is that cost of education affects transition rate from primary to secondary school in Machakos Sub-County significantly.

In addition, the model was subjected to other two goodness of fit tests, one; coefficient of determination (R^2) which indicates the proportion of variation in the dependent variable that is explained by all the independent variables taken together and two, the test of the slope (β) which determines the strength of the relationship between the dependent variable and each independent variable.

From Table 8 above coefficient of determination for model 1 was ($R^2 =.349$), and it shows that all factors related to cost of education (cost of education) taken together explained 34.9% of variations on transition rates from primary school to secondary schools in Machakos Sub-County. This implies that 65.1% of variations in transition rates are explained by other factors not included in this model. Similarly, based on test of fit test, the test of the significance of the slope revealed that the influence of cost of education on transition rates from primary school to secondary schools in Machakos Sub-County was statistically significant with ($p=.000$) whereby a unit change in cost of education resulted to .365($p=.000$) changes in transition rates from primary school to secondary schools in Machakos Sub-County which was positive. The empirical equation for the transition rates was as follows

$$TR = 1.288 + .365X_1$$

Where; TR is Transition Rate from primary to secondary school

X_1 is Cost of Education

DISCUSSION OF THE FINDINGS

Cost of Education and Transition Rates

The head teachers were asked to indicate the average cost of putting a learner through secondary school in a year. The results as reported in table 2 showed that the average cost was between Ksh.11,000 and Ksh.20,000 in public day schools as supported by 58% of the head teachers. In public boarding secondary school, the school fees ranges between Kshs. 40,545 to Kshs. 53,533. The head teachers were further asked to indicate how the ability of parents to pay these costs affects transition from primary to secondary school. Majority of the head teachers as reported in table 3 said that the cost of education affects transition very much. Another 45.2% reported that the cost of education fairly affected transition rate. None of the head teachers supported the option that cost of education does not affect transition depending on ability of parents. This means that day schools are more affordable to most parents as shown by the cost of education from the head teacher's responses. Head teachers were asked to indicate whether there is a relationship between the parents' mode of earning a living and their ability to finance their children's education in secondary school. The results as reported in table 4 show that there is a strong relationship between the parents' mode of earning a living and ability to finance their children's education as represented by majority of head teachers shown by 91.4% of the responses. Head teachers were asked to indicate whether there were some parents who were unable to meet the cost of their children's secondary school education. The results as reported in table 5 show that 74.1% of the parents were unable while 25.9% were able to meet the cost of their children's secondary school education. In the event that the parents were unable to pay for their children education, the community had initiatives to take care of such children through bursaries and other forms of sponsorship as showed in table 4.12 represented by 90.1% of the responses. The majority of head teachers as reported in table 6 said that cost affects transition very much as showed by 54.8%. Another 45.2% reported that cost of education affected transition rate fairly. None of the head teachers supported the option that cost of education does not affect transition depending on ability of parents. This meant that day schools are more affordable to most parents as shown by the cost shown by the responses from head teacher.

Class teachers were asked to indicate the extent to which the various cost aspects influence transition of pupils from primary to secondary school in Machakos Sub-County. The results as reported in table 7 showed that amount charged for school levies such as uniform and food had the higher mean of 4.46, followed by inadequate educational subsidies by the government with a mean of 4.368. Cost of learning materials such as books had a mean of 3.824. This means that these factors greatly influence transition rate from primary to secondary

school in Machakos Sub-County. Cost sharing had the lowest mean of 2.592 showing that it moderately influences transition. This may be due to the fact that the government had taken over payment of tuition materials and parents are no longer levied on the same. These findings agree with a study by Wangari (2012), on factors influencing transition rates from public primary schools to secondary schools in Murang'a East District. The study found out that lack of funds or ability to pay for children secondary education as the major factor inhibiting transition rate which attributed to 84.21% of the total failure of transition from primary to secondary school. From the inferential statistics represented in table 8, the F statistic on the influence of cost of education on transition rate from primary to secondary school in Machakos Sub-County was 17.660 ($P=0.000$). This implies that the influence of cost of education on transition rates from primary to secondary schools in Machakos Sub-County was statistically significant at 95% confidence level with ($P<0.05$). The study rejected the null hypothesis one (H_{01}) which states that: cost of education has no significant influence on transition rate from primary to secondary school in Machakos Sub-County. In other words, there is a positive and significant influence of cost of education on transition rate from primary to secondary school. From 8, a unit change in cost of education results to 0.365 positive changes in transition rates which are statistically significant. These findings concur with Ngware, Oketch, Ezehand and Mudege (2009) who examined whether household characteristics matter in schooling decisions in urban Kenya. Analysis showed that different household and individual attributes motivate different decision. The findings showed that better off households were more represented in public schools. The predicted probability of a decision to attend a public school where government subsidy (FPE) has been paid for a primary age child increase as the household wealth increases. The study concluded that children from poorer households benefit less from the free public schools. This means that children from poor households are disadvantaged as their parents cannot afford to enroll them in primary school and as a result they also miss secondary school education. This is shown in table 5 where majority of the head teachers stated that most of the parents were unable to meet the cost of their children's education in secondary school. The findings of this study show that there is need for bursaries and sponsorships for children from poor backgrounds/families whose parents cannot afford to pay for their secondary education because they have no means of earning a living. This will enable the 100% transition policy to be implemented. Their study found that there was a strong association between the household wealth index and the probability of transition from primary to secondary school. This is also true in Machakos Sub-County as shown by the study findings.

CONCLUSION

The study concluded that cost of education significantly influenced transition rates from primary school to secondary schools in Machakos Sub-County. It was clear that average cost of putting a learner in a secondary school was 11000 to 20000. The study also established that there is a relationship between parents mode of earning a living and their ability to finance their children's education in secondary school and in this case most parents are unable to pay for their children's secondary school education. The study also deduced that amount charged for school levies such as uniforms, cost of learning materials such as books and form one student scholarships by corporate and other sponsors greatly influence transition of pupils from primary to secondary schools in Machakos County.

RECOMMENDATIONS

The study makes the following recommendations:-

- (i) Parents should be trained on income generating activities that can make them financially stable so as to support the education of their children.
- (ii) The government should subsidize secondary education more so make it more affordable.
- (iii) Day schools should be funded to construct enough learning facilities like laboratories as they are relatively cheap compared to boarding schools. This can be done by the Ministry of Education, constituency development fund (CDF) and the county governments.

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