A Cohort Analysis on the Impact of free Tuition Secondary Education Policy on Student Survival Rates in Public Secondary Schools in Kericho County, Kenya

Viviline Ngeno

University of Kabianga

DOI: https://dx.doi.org/10.47772/IJRISS.2025.908000444

Received: 10 August 2025; Accepted: 16 August 2025; Published: 16 September 2025

ABSTRACT

Secondary education is a conduit through which essential skills, knowledge and competencies are imparted for the benefit of individuals specifically and the society generally as such, its significance at individual and societal levels cannot be overlooked. The Kenyan government introduced the Free Tuition Secondary Education (FTSE) Policy in 2008 in a bid to ensure that students regardless of their socio-economic backgrounds acquired secondary education. The goal of this policy in sum was to increase access, retention and completion rates of students in secondary schools. Survival Rate was another concern to be addressed by the FTSE policy since its influence was unknown. It is thus against this backdrop that the study sought to establish the impact of FSE Policy on Survival Rates in Kericho County. The study was based on the concept of investment choices. Descriptive, ex-post factos and correlational research designs were adopted. The sample size was 485 comprising Principals, Sub County Quality Assurance and Standards Officers, Directors of Studies and form IV students of 2011. Snowball and saturated sampling techniques were used to select respondents. Questionnaire, interview schedules, Focus Group Discussion guide and document analysis guide were used to collect data. Reliability coefficient of the principals' questionnaire was 0.80 at set p-value of 0.05. Quantitative data was analyzed using cohort analysis, descriptive and inferential statistics. Qualitative data was transcribed and analyzed thematically. The study established that there was a moderate positive relationship between FTSE policy and Survival Rate with a correlation coefficient of 0.324 at a p-value of 0.05, Coefficient of determination R^2 was 0.1050 meaning it accounted for 10.50% of the variation. The study concluded that FTSE policy increased Survival Rates. The study recommended that FSE funds be reviewed upwards to increase Survival Rates. The findings of this study are significant to stakeholders in education as it informs them on the need to review the policy with a view to improving secondary school education so as to achieve the objectives of the FTSE policy.

Keywords: Free Tuition Secondary Education policy, Student Survival Rate

INTRODUCTION

Nwanyanwu and Johnnie (2020) opine that education is an essential process in the lives of every living being. It exposes individuals to all aspects of life and builds confidence in them. It also aids one to air his/her views and express himself/herself in the public even in the face of challenges. The process of education produces manpower to the nation's economy and promotes nation building. Its study creates substantial standards and basis to improve human nature, to inform and create awareness that will build and develop human minds.

Secondary education is very important as it gives the youths the right to acquire necessary skills, knowledge, attitudes and values which enable them to lead, live and become productive individuals and discharge their social duties as global citizens. This stage of education aims at socio-economic emancipation, which has to do with the youths having the ability/freedom and power to determine their own social and political rights and determine their own financial position and future. It has to do with one developing a sense of autonomy and self-confidence (Nwanyanwu, & Johnnie, 2020).

World Bank (2001) contends that over the last few decades, the importance of secondary education has changed radically. This holds true both for the opportunities this level of education offers to the individual student as well

as the role it plays in the economic and social development of nations. Only forty years ago, secondary education was the privilege of the few, even in most European countries and its role in economic development was mainly to train a limited number of primary school graduates to meet the manpower needs of the economy. Coverage of secondary education was especially low in Sub-Saharan Africa, where the enrollment ratio was only 3 percent in 1960 and 7 percent in 1970. During the last three decades, secondary education has become practically universal in most industrialized countries. Good quality secondary education is now considered a prerequisite both for successful integration of young people into the modern economy and for the ability of countries to benefit from the ICT and knowledge revolution and to compete successfully in the new globalized, knowledge-based economy. This view is corroborated by Ohba, (2009) who opines that currently, many middle and high-income countries have transformed secondary education from an elite system to a mass system that provides opportunities for further learning to all primary school graduates. In many such countries basic education, which includes lower secondary education is free and compulsory; and free (but not compulsory) in upper secondary.

Secondary education provides countries with critical higher-level skills and knowledge for advanced learning and training of technicians, scientists and entrepreneurs. It also plays a crucial role in the socialization of young people and in targeting at-risk youth and is central to fostering positive social attitudes. Secondary education yields considerable private returns and provides opportunities to acquire attitudes, skills and competencies unlikely to be developed during the primary grades. These skills enable young people to participate fully in society, take control of their lives and continue learning (World Bank,2001).

Arnot et al., (2012) argues that secondary education is particularly beneficial for girls because it improves their agency and empowerment and reduces harmful socio-cultural practices such as forced marriage. Bhuwania, Huh and Heymann (2023) contend that improved access to secondary education reduces child mortality, decreases the prevalence of teenage pregnancies and lowers fertility rates. Nwanyanwu and Johnnie (2020) further opine that secondary education is an instrument for national development, social change and a vehicle for developing skills, competencies and imparting knowledge.

According to Kapur (2019), secondary education enables individuals to compete in the global economy. It helps them develop the competencies and abilities that are necessary to cope with problems that may affect them in their daily lives. In addition, secondary education is an agent for nation building and social cohesion. When it is well-planned and adequately resourced, it will be able to reinforce the potential to create an environment where a large number of teenagers can augment their knowledge and skills needed to render a significant participation in the social and economic society.

Akingunloye, Okotoni and Olowo (2021) posit that the position occupied by secondary education is not only crucial but strategic to the realization of the national goals. It stands to prepare the recipients for technical and vocational competence or preparation for tertiary education. Furthermore, secondary education plays a major role in identifying and preparing them for future roles. For the students to be adequately prepared for the roles mentioned, quality education is paramount. For quality to be achieved, the principal actors in the education sector who include the government, teachers, the community, students and other stakeholders should have quality input followed by a quality process in achieving quality output. Lall (2000) further corroborates the benefits of secondary education by postulating that it links primary schooling to further training in tertiary institutions and forms a human capital base that is the cornerstone of firm productivity.

Free education is referred to as education funded by the government or charitable organisations, rather than tuition funding. There are many versions of this system. The funding body may undertake the whole of the expenses or the major portion, leaving the trivial aspects such as transportation and school uniform costs to be borne by the parents or guardians. Free education is a method of removing every constraint to sound and quality education. Many countries of the world practice free education in one form or the other (Akingunloye, Okotoni & Olowo, 2021).

Countries have offered free education at varied levels. For instance, many Sub-Saharan countries offer free primary education while several of them have made strides to ensure that there is a smooth transition from primary to secondary courtesy of free secondary education policies that they have developed to ensure that they make basic education accessible to all. The implementation of free education at the basic level in Sub Saharan

Africa is supported by Gruijters, Abango and Casely-Hayford (2024) who posit that after the widespread abolition of primary school fees in the 1990s and the early 2000s, there was a strong momentum towards fee-free secondary education. They contend that more than half of all Sub-Saharan African countries have abolished fees at the lower secondary level. Additionally, Free Secondary Education policies have substantially increased secondary school enrollment thereby fulfilling their main objective which is to improve access.

The need to make secondary education accessible to all regardless of one's financial standing was informed by the fact that many children from poor households who successfully completed free primary education were not able to proceed to secondary schools because their parents were unable to afford the costs of this level of education. As a result, many governments in Sub Saharan Africa introduced free secondary education as a strategy to expand access to education for the poor. Uganda, for instance, abolished lower secondary education fees in 2007 with the aim of shifting education access patterns from limited elites to the majority of children in the country (Ohba, 2009).

Different countries have offered free education to their citizens at varied levels. In Nigeria for example, a renewed version of the Universal Basic Education (UBE) was introduced in 2006 and reintroduced in 2009. This means that every child spends the first 9 years of basic and compulsory education up to the Junior Secondary School (JSS) level as UBE; and another three years in the senior secondary school. The four other years of the 9-3-4 educational system are for tertiary education. In one of the states in Nigeria (Ondo State), free education has been in existence since the introduction of free education by the late Obafemi Awolowo in 1955. Free education was re-introduced in the state in 1999 when the country transited from military rule to a democratic government. Aspects of free education policy that were implemented include: abolition of development and all sorts of levies in public primary and secondary schools; regular release of grants- in- aid to primary and secondary schools; payment of Senior School Certificate Examination (SSCE) fees for the eligible students and writing off of the Junior Secondary Certificate Examination (JSCE) fees; provision of science and laboratory equipment to public schools; provision of scholarships/bursary awards to students; purchase of library books for schools; introduction of computer centers and the free shuttle which transports students to and from schools (Akingunloye, Okotoni & Olowo, 2021).

Tanzania just like her neighours Kenya and Uganda has also followed suit in offering free basic education. According to UNESCO (2002) the idea of scrapping enrolment fees and other compulsory contributions in the primary and lower secondary schools in Tanzania ensued from international education commitments and other international conventions to which the country is a signatory. For instance, the most notable 1990 World Conference on Education for All (EFA) in Jomtien and the 2000 World Education Forum in Dakar required signatory countries to take basic education as a basic right for every child. With this regard, all participating countries were required to have robust and persistent political obligations and increase financial allocations to achieve this goal and meet set targets.

Godda (2018) opines that the provision of free education in Tanzania is a response to various education and development policies such as the "Education and Training Policy 2014" and "The Tanzania Development Vision 2025." The Education and Training Policy 2014 overhauled the education system with basic education intended to run from standard one to Form Four. According to the policy, basic education shall be fee free in addition, the government shall provide textbooks for all schools and ensure the provision of quality education recognized across the region and the world. The abolishment of fees was one of the ways of ensuring that all children regardless of their economic backgrounds would receive free basic education. The government of Tanzania through the education Circular No.3 of 2016 however, bestowed upon parents some responsibilities for instance, they were still required to make contributions for their children's education through purchase of uniforms for school and sports activities, provision of exercise books and pens and paying for the medical expenses of their children. Just like in other nations such as Kenya and Uganda, the free basic education policy was not without challenges. There were problems encountered by school heads with regard to the management of these funds since they were not only disbursed irregularly but also late; they were also insufficient. With regard to the institutions, the fee free education increased enrolment hence impacting negatively on physical resources such as classes, chairs, desks and ablution blocks among others which were already overstretched. Additionally, the teachers could not keep up with the surge in the numbers and this drastically affected the quality of teaching and

learning. In some instances, parents were reluctant to make financial contributions when called upon to do so. To them, the government had taken over all financial responsibilities for their children.

According to Ndolo, Simatwa and Ayodo (2016), Free Secondary Education policy was introduced in Kenya in 2008 ostensibly to make secondary school education affordable so as to enhance access, transition and student academic performance. Driven by the desire to achieve the goal of Education For All (EFA), the government of Kenya initiated the fee free secondary education having previously implemented the Free Primary Education. According to the Republic of Kenya (2008) tuition free secondary education, a form of investment in human capital through secondary education, was introduced in 2008 with the aim of increasing access, retention and completion rates of students in secondary schools. This subsidy was intended to reduce the cost of school fees thus lessening the parents' financial burden as well as ensuring access to secondary education to all students transitioning from primary to secondary irrespective of their socio-economic background. The Kenyan government gives a capitation grant of Kshs. 10, 265 per student to meet the cost of tuition in public secondary schools. The disbursement of the fund is in three batches in the ratio 50:30:20 in term one, term two and third term respectively (Ministry of Education Science & Technology, 2015). To achieve the objectives of FSE, the government provided a guideline as presented in Table 1.

Table 1 Costs incurred by the Government for each Student per Year after the Introduction of FTSE Policy in 2008

Vote head	**Day Schools Kshs.)**	**Boarding Schools (Kshs.)**	
	GOK Subsidy (FSE)	**GOK Subsidy (FSE)**	**Parent Fees**
Tuition	3,600	3,600	0
Boarding, Equipment and Stores	0	0	13,034
Repair, Maintenance and Improvement	400	400	400
Local Travel and Transport	400	400	500
Administration Costs	500	500	350
Electricity, water and Conservancy	500	500	1500
Activity Fees	600	600	0
Personal Emolument	3,965	3,935	2,743
Medical	300	300	100
Total School Fees	**10,265**	**10,265**	**18,635**

Source: Ministry of Education (2009)

According to the Ministry of Education (2009) FTSE is meant to cater for the following items in secondary education: Tuition Kshs. 3,600/=, to cater for the students learning materials for instance textbooks, reams of paper, exercise books and other learning materials, Kshs. 400/= for Repair, Maintenance and Improvement (RMI), Kshs. 500/= for Electricity, water supply and conservancy (EW&C). Kshs. 400/= for Local Transport and Travel (LTT), Kshs.500/= Administrative Costs (AC), Kshs.3, 965/=, Personal Emolument (PE). Kshs. 600/= and Kshs. 300/= Co-curricular activities and medical care respectively.

According to the MOE (2009), the day schools' parents were to cater for lunch, uniforms, personal effects and other projects for example, expansion of infrastructure upon approval by the District Education Board (DEB) in consultation with the Boards of Management (BOMs) and Parents Teachers Association (PTAs). The parents whose children were in boarding schools on the other hand, should cater for boarding, equipment and store Kshs. 13,034/=, RMI Kshs. 400/=, EW&C Kshs. 1,500/= LTT Kshs. 500/= personal emolument Kshs. 2,743/= and medical care Kshs. 100/= respectively totaling to Kshs. 18,635/=. Parents were not required to pay for tuition and co-curricular activities but they were to cater for the following costs: school uniforms, boarding and projects. The implementation of the first phase of FSE ended in 2011 with the graduation of the first cohort that fully benefited from this policy. What was unknown however, was the influence of FSE policy on Survival Rate in Kericho County. Table 2 shows the gross enrollment using the variable of gender nationally ad in Kericho County.

Table 2 Gross Enrolment by Gender for Secondary Students Nationally and Kericho County from 2004 to 2007

Year	Number of Students		Totals	Percentages (%)		GPI
	Boys	Girls		Boys	Girls	
National level						
2004	490,506	435,643	926,149	52.96	47.04	**0.89**
2005	494,157	439,992	934,149	52.90	47.10	**0.89**
2006	546,072	484,008	1,030,080	53.01	46.99	**0.89**
2007	638,690	541,577	1,180,267	54.11	45.89	**0.85**
Kericho County						
2004	20,135	15,134	35,269	57.09	42.91	**0.75**
2005	22,363	14,005	36,368	61.49	38.51	**0.63**
2006	22,785	15,126	37,911	61.40	38.60	**0.66**
2007	23,083	16,382	39,465	58.49	41.51	**0.71**

Sources: National Enrolment: Economic Survey (2009) and County Director of Education Office, Kericho (2011)

Table 2 is the gross enrolment rates for secondary school students in the Kenyan national level and Kericho County level from 2004 to 2007 respectively. The Gross enrolment nationally shows that the students ranged from 926,149 to 1,180,267 from 2004 to 2007. The boys were 490,506 (52.96%); 494,157 (52.90%); 546,072 (53.01%) and 638,690 (54.11%) respectively. For the girls the enrolment was as follows; 435,643 (47.04%); 439,992 (47.10%); 484,008 (46.99%) and 541,577 (45.89%) respectively.

FTSE policy was meant to ensure that every child accesses education in Kenya. Gross Enrolment trends in Kericho County indicated that Survival Rate was of concern. Thus, from Table 3, it can be noted that enrolment fluctuated as students transited from one form to another. Table 3 shows gross enrolment in terms of Form-to-Form transition of secondary school students in Kericho County from 2004 to 2007.

Table 3 Gross Enrolment in Terms of Form to Form Transition of Secondary School Students in Kericho County 2004 - 2007

Years	Form I	Form II	Form III	Form IV
2004	9,103	9,444	8,620	8,102
2005	**9,434**	9,333	8,990	8,611
2006	10,516	**9,329**	9,217	8,849
2007	10,310	10,637	**9,237**	9,281

Source: County Director of Education Office, Kericho (2011)

From Table 3, it can be observed that transition of the three cohorts was as follows: 2004 cohort transited as follows 9,103; 9,333; 9,217 and 9,281, the 2005 cohort transited as follows: 9,434; 9,329 and 9,237 and the 2006 cohort transited as follows: 10,516 and 10,637. The fluctuations could be attributed to repetitions and dropout because on the whole a general decline can be observed as students transited from form one to form four for the 2004 cohort. This trend was of concern because with introduction of FTSE policy the participation rates were expected to increase and be sustained. FTSE policy was introduced to enhance transition of pupils from primary to secondary schools, improve the quality of secondary education and reduce wastage. This trend parallels that of South Africa.

Purpose of the Study

The purpose of the study is to determine the Impact of Free Tuition Secondary Education Policy on Student Survival Rates in Public Secondary Schools in Kericho County, Kenya.

Research Objective

To determine the Impact of Free Tuition Secondary Education Policy on Student Survival Rates in Public Secondary Schools in Kericho County, Kenya.

Research Question

What is the impact Free Tuition Secondary Education Policy on Student Survival Rates in Public Secondary Schools in Kericho County, Kenya.

Research Hypothesis

There is a positive relationship between Free Tuition Secondary Education Policy and Student Survival Rates in Public Secondary Schools in Kericho County, Kenya.

SYNTHESIS OF LITERATURE

Asankha and Takashi (2011) carried out a study on Impacts of Universal Secondary Education Policy on Secondary School Enrollments in Uganda. The study used household longitudinal survey data from 940 households in Uganda. The first survey was done in 2003 a second in 2005 and the final one in 2009. The survey was jointly conducted by Makerere University in Uganda and the Foundation for Advanced Studies on International Development (FASID) as a part of the GRIPS Research on Poverty, Environment and Agricultural Technology (REPEAT) project. The study found out that the Free Universal Secondary Education policy has increased the student enrollments in public secondary schools in Uganda. Girls especially those from poor households seem to have benefited more from this new policy. This study is instrumental to the current in the sense increased enrollment is evidence that Free Secondary Education has positively impacted survival rates. The points of divergence between this study and the current however, are as follows: while this study employed a survey research design, the current adopted descriptive, ex-post facto and correlational research designs. The sample size of this reviewed study was 940 households while that of the current was 485 comprising Principals, Sub County Quality Assurance and Standards Officers, Directors of Studies and form IV students of 2011.

Kweka (2019) carried out an Analysis of the Influence of Free Education Policy on Secondary School Students' Academic Achievements a Case of Oljoro Ward, Arusha Region. The study which used 50 respondents adopted the Functionalist and Conflict theories. The data was collected using Questionnaire and Document Analysis Guide. The qualitative data was analyzed thematically while the results of the quantitative one was presented in the form of tables, graphs and pie charts. The study results revealed that free education policy introduced by the government played a crucial role in improving the academic performance of the learners. This study contributes to the current with regard to data collection instruments as well as strategies used in data analysis. On the contrary, they are different with regard to the number of respondents used in the study, the study locations that is this reviewed study was carried out in Arusha, Tanzania while the present was carried out in Kericho, Kenya. Additionally, while this study was interested in looking at the impact of FSE on performance, the current was interested in examining the influence of FSE on survival rates.

Munisi, Werema and Namusonge (2021) conducted an Assessment of Free Secondary Education Policy on Quality of Secondary Education in Tanzania: A Case Study of Meru District Council. The study used a descriptive research design. Simple random sampling was used to select 13 schools (45%) from the 29 public secondary schools in the district. The head teachers that were included in the sample were from those 13 selected schools and 10 teachers from each of the selected schools. Questionnaires and interviews were the research instruments used to collect data from heads of schools, teachers and District secondary education officer. Data collected was analyzed by use of Statistical Package for Social Sciences (SPSS). The results of the study revealed that the abolition of school fees at secondary school level led to an increase in the enrolment of students. As a result, teaching and learning had been compromised by large classes, limited books and a shortage of teachers. Moreover, the funds allocated have proved to be inadequate in administration of schools and therefore affect the teaching and learning processes. This study informed the current with regard to the challenges experienced with the introduction of Free Secondary Education Policy as well as the data collection instruments that were used. It is apparent that some of these challenges cut across countries. However, it differs from the current in a number

of ways for instance, while this study was interested in assessing the impact of free secondary education on the quality of secondary education in Meru District, Tanzania, the current is interested in establishing the influence of Free Secondary Education Policy on Survival rate in Kericho County, Kenya. The research designs also differ as well as the data analysis techniques employed.

Lyanga and Chen (2020) carried out a study on the Impacts of Fee - Free Education Policy in Junior Secondary Schools in Tanzania. This study employed a qualitative research design. Data was collected using document analysis guides from Tanzanian's Ministry of Education Science and Technology (MOEST), National Examination Council of Tanzania (NECTA), United Republic of Tanzania (URT), Buchosa District Education Officer (BDEO) and other published documents. The study revealed that fee free education has led to the increase in the number of those enrolled in the government schools compared to non-government schools. Apart from that, the number of female students has increased as compared to that of the males. Additionally, the study noted that Fee-free education has a direct impact on students' pass rate in national examination in secondary education in Tanzania. The data collected in form 4 national examination from 2013 to 2017 supports this assertion. It reveals that there has been a great improvement in Certificate Secondary Education Examination pass rates from 57.2% in 2013 to 77.6% in 2017 which enabled many students to enter an advanced level of education. This study informs the current with regard to some of the data collection methods used. Just like the current study, this one also employed document analyses guides to obtain data. Moreover, through increased enrollment and transition rates from primary to secondary schools which are findings of this study, FSE has positively impacted survival rates, a variable that is under investigation in the current study.

Stenzel, Kwadwo and Vincent (2024) conducted a study on Free Secondary Education policy and education attainment. The study was based on the human capital theory and it employed a comprehensive panel dataset spanning the 2013/14–2019/20 school years to measure and evaluate the impact of the policy on educational outcomes for all students with an emphasis on the schoolgirls. The study adopted an alternative estimation method which ensured robust comparisons between similar districts across the treatment and control groups. The results of this study revealed that Ghana's Fee Free Secondary education policy positively impacts overall completion rates especially for girls in high-uptake districts relative to those in the low-uptake districts. While this study was interested in the impact of FSE policy on educational outcomes of all students generally and the girl-child specifically, the current was interested in the influence of the FSE policy on all students irrespective of their gender. It adopted an experimental research design thus used control and treatment groups. Additionally, it was a comparative study carried out in low and high-uptake districts in Ghana and used the human capital theory in data analysis. The current on the other hand, involved a sample of public secondary schools in a county in Kenya, it adopted Ex post facto, survey and correlational research designs and its conceptual framework was based on the concept of investment choices.

Ndolo, Simatwa and Ayodo (2016) conducted a study to determine the influence of Free Secondary Education policy on access to secondary school education. The study adopted ex-post facto and correlational research designs. The study sample consisted of 34 principals, 1 Sub- County Schools Auditor, 2 Sub–county Quality Assurance and Standards Officers and 337 form IV students of 2014. The data for this study was obtained using Questionnaire, Interview Schedule, Focus Group Discussion and Document Analysis Guide. Sacharopoulous and Woodhall (1985) concept of investment choices was adopted. The study revealed that there was a positive and strong relationship between Free Secondary Education policy and access generally. The study further interrogated the impact of Free Secondary Education policy on access by determining the actual impacts on access in small, medium and large secondary schools. The impact of Free Secondary Education policy on access was very high in medium and large secondary schools, where Free Secondary Education policy accounted for 96.8% and 93% variations in access respectively. This means that Free Secondary Education funding produced desired results to a large extent in medium and large secondary schools. In small secondary schools, the impact was good but lower than that in medium and large secondary schools. This study informed the current in a number of ways for instance, the research designs as well as the data collection methods employed were similar. On the contrary, while it was interested in investigating the impact of FSE policy on access, the current was interested in determining the influence of FSE policy o survival rate.

Wanjala and Ali (2017) carried out a study on the Impact of Subsidized Fees on Students' Access to Quality Education in Public Secondary Schools in Wajir County. A descriptive survey design was used while

questionnaire, interviews, observation and document analysis were used to collect data. The respondents for the study were 54 teachers, 20 secondary school principals and 20 chairpersons of Boards of Management. Quantitative data was analyzed using descriptive and inferential statistics while qualitative data was analyzed thematically. The findings of the study reveal that a majority of the principals (56.1%) reiterated that the implementation of subsidized fees programme had no noticeable change on students' academic performance in Wajir County. They argued that academic performance had not improved much due to inadequate teaching and learning materials, low transition from one class to another as well as high dropout rate. On the contrary, Chi-square correlation coefficient established a positive relationship between subsidized fees and student access in Wajir County. This study informs the current with regard to the data collection instruments that were used as well as the data analysis methods that were employed.

Khamati and Nyongesa (2013) sought to find out the factors influencing the implementation of Free secondary education in Kenya, a case study of Mumias district in Western province. The study adopted a survey design and data was collected using a questionnaire from thirty secondary school principals. Several factors were examined for instance, the study found out that FSE had led to increased enrolment and retention in secondary schools. All the respondents had recorded a steady increase in the period 2008-2010. Out of these, 99% of the respondents assigned the increase to FSE with only 1% saying it was due to the good KCSE results posted by their schools. However, all sampled schools were recording improving performance which they assigned to the fact that students were staying in school more and had better learning materials as a result of FSE. This study contributes to the current in the sense that its findings reveal an increase in enrollment and retention rates which by extension positively impact survival rates. This study however, differs from the current in the sense that while it was interested in examining the factors influencing the implementation of free secondary education in Mumias District, Kenya, the current is interested in studying the influence of Free Secondary Education Policy on survival rate in public secondary schools in Kericho County, Kenya. While the former used one data collection instrument, the present employed four. Additionally, the data analysis techniques employed in the two studies were different.

Olang'o et al., (2021) carried out a study to investigate the Influence of Free Day Secondary Education Policy on Academic Performance of Rural Public Day Secondary Schools in Kilifi County, Kenya. The study adopted a descriptive survey research design and a sample of 375 respondents were used. Structured questionnaires and interview schedules were used to collect data from principals, teachers, and education directors. Data on performance and enrolment were collected through document analysis. The study adopted the Classical Liberal Theory of Equal Opportunity. Qualitative data was analyzed thematically while quantitative data collected was analyzed then presented using mean, percentages and range by means of Excel computer programme. Further, Pearson's Product Moment Correlation Coefficient was used to calculate the correlation between enrollment and school national standardized test results. The findings of the study reveal that the implementation of the Free Day Secondary Education policy had a negative influence on rural public day secondary schools' academic performance. This was attributed to affordability of fees which created high demand for spaces in rural public day secondary schools in an environment with insufficient teaching and learning facilities. The study findings also revealed that student capitation was inadequate, teaching-learning resources too were inadequate in rural public secondary schools in Kilifi County. The insufficiency of required resources therefore had a negative influence on learners' academic performance. While this study was interested on the impact of free secondary education policy on the performance of learners, the present is interested on the impact of free secondary education policy on survival rates of learners.

Asena, Simiyu and Riechi (2016) carried out a study on Factors Affecting Subsidized Free Day Secondary Education in Enhancing Learners Retention in Secondary Schools in Kenya. The study adopted a cross-sectional survey research design. A sample size of 340 respondents (Educational Officers, Principals, B.O.G chairpersons, P.T.A chairpersons and Parents from each Sub County in Bungoma County) was selected purposively for the study. Questionnaires and interview schedules were used to collect data from the respondents. The study adopted the Human capital theory; qualitative data was analyzed using systematic content data analysis while quantitative data was analyzed using descriptive statistics, the mean and standard deviation. The results were presented using percentages, frequency distribution tables and pie chart. The results indicated that enrollment and transition rates of learners had increased since the introduction of Subsidized Free Day Secondary Education by the government in the year 2008. This study is pivotal to the current in the sense that through increased enrollment and transition

rates, free secondary education has positively impacted survival rates. This study however differs from the current since it was interested in the factors affecting the Free Secondary Education policy in enhancing learners' retention in schools while the current was interested in the survival rate of learners with regard to the Free Secondary Education policy. Additionally, while this study used the Human Capital theory in data analysis, the current employed the Investment Choices conceptual framework. The study was similar to the current in the sense that both used questionnaires and interview schedules to collect data even though the current also employed Focus Group Discussions and document analysis in data collection.

Ngasura, Nyakundi and Koros (2023) conducted a study on the Influence of Government Subsidy on Students' Enrollment in Public Secondary Schools in Uasin Gishu County, Kenya. The study adopted a descriptive survey design and the Human Capital theory. A questionnaire was used to collect quantitative data and unstructured interview guide was used for qualitative data. Document analysis was also used in data collection. Data was analyzed using both descriptive and inferential statistics. Regression analyses were utilized for inferential statistics. The study used 479 respondents (130 principals, 343 class teachers and 6 quality assurance and standards officers). The study findings showed that 313 (70%) of the respondents in Uasin Gishu County reported that government subsidy has led to increased student's enrollment in public secondary schools. This implies that government subsidy has contributed to a significant impact on student enrollment. This study differs from the current on a number of variables namely: the research designs used, the area of study and what was being studied (this study examined the influence of government subsidy on students' enrollment in public secondary schools while the current investigated the influence of Free Secondary Education Policy on survival rate in public secondary schools in Kericho county) and the theoretical framework employed in data analysis. On the other hand, the study is similar to the current with regard to the data collection instruments and the techniques used in data analysis. Additionally, this study informed the current with regard to the fact that increased enrollment and transition rates from primary to secondary schools have positively impacted the learners' survival rates.

Nzuki (2018) carried out a study on Kenya's Constituency Development Fund, Free Secondary Education Policy and Access to Secondary Education. This study used a multiple-case study design and adopted Huisman and Smits' (2015) theoretical model. Results showed that Free Secondary Education Policy had contributed to increased school enrollment and reduced student's dropout from school. The Free Secondary Education Policy covered direct and indirect costs which would have otherwise been charged from parents through PTA levies. From the results, the study concluded that with the Free Secondary Education Policy the fees charged from parents had reduced hence education became more affordable which enabled parents to enroll their children in schools. This study informs the present with regard to the fact that free secondary education has positively impacted survival rates through increased enrollment. The two studies are however different since Nzuki's adopted a multi-case study design while the present used Ex post facto, survey and correlational research designs. While this study employed Huisman and Smits' theoretical model, the current's conceptual framework was based on the concept of investment choices.

Muasya (2013) conducted a study on the effect of subsidized secondary education on enrollment and retention among the secondary schools in Mwingi sub county, Kitui County. The findings of this exploratory research study revealed an increase in school enrollment and noted that girls had recorded a higher increment than boys. Furthermore, the study established that retention was higher after 2008 hence concluding that school enrollment and retention had increased with the introduction of the Free Secondary Education Policy in the Sub County. This study finding is crucial to the current because the Free Secondary Education Policy has positively impacted survival rates through increased enrollments.

THEORETICAL FRAMEWORK

Classical Educational Production Function Theory

Classical Educational Production Function Theory was adapted in this study. This theory was developed in the 1960s and 1970s, particularly through the works of economists like Eric Hanushek, who used it to assess the efficiency of school inputs. It is an economic model that seeks to explain the relationship between educational inputs and student outcomes. It borrows from the production function concept in economics, where output is

produced from a set of inputs. The Educational Production Function (EPF) attempts to model how various inputs such as teachers, class size, facilities, and student background are transformed into outputs such as test scores, graduation rates, and other academic achievements. Just as a factory uses labour and capital to produce goods, schools use resources to "produce" education. The Classical Educational Production Function Theory provides a foundational framework for analysing the effectiveness and efficiency of educational inputs. While useful for policy-making and resource allocation, it should be applied with caution and supplemented with qualitative assessments due to its limitations. This theory is relevant in this current study since FTSE is one of the inputs education system and an independent variable in this study. While the output is survival rates which is the dependent variable.

Human Capital Theory

Human Capital Theory was also adapted in this study. This theory was developed by Adam Smith in 1776, expanded by Gary Becker (1964) and Theodore Schultz (1961). Since Education is an investment in people, increasing their knowledge, skills, and productivity, which leads to higher earnings and economic growth. The Assumption of this theory was that Individuals and societies are more likely to invest in education if the benefits outweigh the costs. This theory was applicable to this study because of the Removal of Financial Barriers. Before the FTSE policy, many students especially from low-income families dropped out because of tuition costs. By making secondary education free, the direct cost of schooling is eliminated, encouraging more families to keep children in school until completion. Therefore reducing costs increases investment in education because the future earning potential verses cost is now higher. Applying Human Capital Theory, the Free Tuition Secondary Education Policy in Kericho County is a deliberate investment to increase survival rates by removing cost barriers. This boosts the number of skilled individuals in the economy, thereby promoting long-term socio-economic growth.

Conceptual Framework

The conceptual framework (Figure 1) postulates that survival rate is influenced by Free Secondary Education Policy in Kenya. The conceptual framework was based on the concept of investment choices advanced by Psacharopolous and Woodhall (1985). The adaptation involved having one independent and five dependent variables with one intervening variable. The originator of this concept provided a production function equation in which there was one dependent and many independent variables: $Y = X_1 + X_2 + X_{3+}$ ------ (Pscharapolous & Woodhall, 1985). The available data presupposed that FTSE subsidy could influence survival rate in secondary schools and was in line with the objectives of FTSE policy (MOE, 2007). Woodhall (2004) indicates that education is a form of investment in human capital that yields economic benefits and contributes to the country's future wealth by increasing the productive capacity of its people. FTSE subsidy is an investment choice by the Government of Kenya aimed at promoting transition from primary to secondary school education at the same time enhancing survival rates.

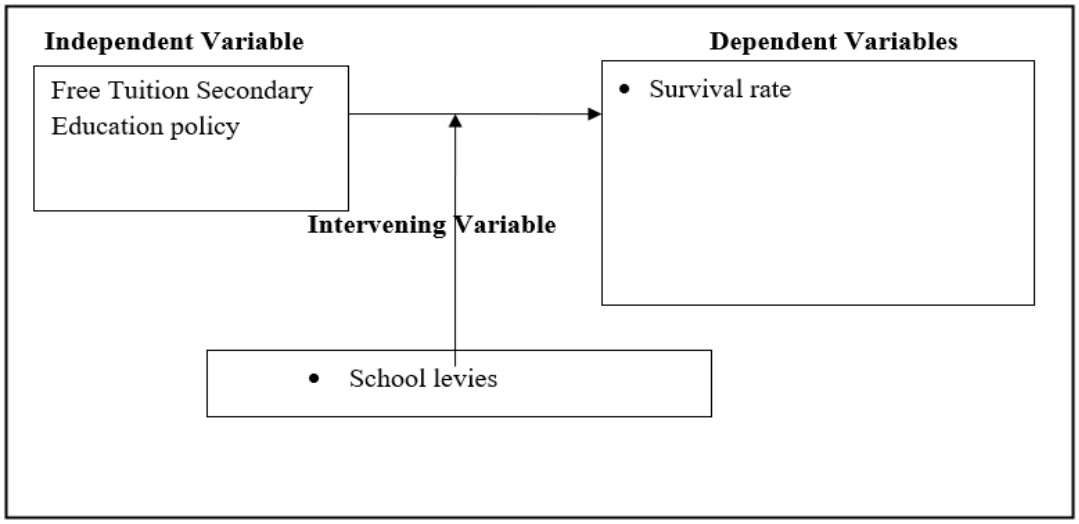

Figure 1: Conceptual Framework Showing the Impact of the FTSE Policy on Survival rate in Kericho County

This conceptual framework was adapted to focus on independent and dependent variables. Independent variable was FTSE policy while dependent variables was Survival rate. According to Mc Burney and White (2010) an independent variable is selected by the experimenter to determine the effects of behavior. While dependent variable is a measure of a subject's behavior that determines independent variable effects. This study focused on the following variables: Free Tuition Secondary Education Policy and Student survival rate in Kericho County, Kenya. The school levies was an intervening variable.

METHODOLOGY

Ex post facto, descriptive survey and correlational research designs were used in this study. Ex post facto research design seeks to discover possible causes of behaviour, which has already occurred and cannot be manipulated (Gall, Gall & Borg, 2007). For the purpose of this study ex-post facto research design allowed the researcher to get all the relevant information on Survival rate for two cohorts before and after the FTSE policy in Kericho County. This was done through use of relevant documents like class registers, school fees registers and admission books. Descriptive survey research design involves careful description of education phenomena and reports the way things are. The descriptive survey is able to explore the relationship between variables in their natural setting as they occur (Leedy &Ormrod, 2005). The design was appropriate because it allowed the use of questionnaires and interview schedules as research instruments for collecting data at a given point in time. Questionnaire enabled the researcher to get the relevant information to compute survival rate. The weaknesses in the questionnaires were dealt with by the use of interview schedule. According to Mugenda and Mugenda (2003) correlational research design is used to establish relationship between variables. Correlational involves collecting data in order to determine whether and to what degree a relationship exists between variables. The degree of relationship is expressed as a correlation coefficient (r). The design was relevant in this study because it assisted in establishing the influence of FSE fund on survival rate.

The study population consisted of 45 secondary school principals, 45 Directors of Studies, 5 District Quality Assurance Standards Officers (DQASOs) from 45 secondary schools in Kericho County. The DQASOs in this study were selected because they are directly involved in assessment of quality in schools and they were capable of giving relevant information on the influence of FTSE policy on survival rate in Kericho County. The school principals were selected as respondents since they are the school accounting officers and they are in a better position to avail all the information required on FTSE and survival rate. The principals had all the relevant documents required for instance, KCSE results, class registers, admission books, accession and fee registers. They also had vast experience hence better placed to give the relevant information. Directors of Studies were also used as respondents representing the teachers. These are senior teachers and, in some schools, they were referred to as examination officers. The Directors of studies had a lot of experience and they were in a better position to provide the required data. They gave all the relevant information on the influence of FSE policy on survival rate in Kericho County.

The sample size

Table 4 Sample Frame

Category of Respondents	Target population	Sample size
	(N)	(n)
School Principals	45	40
Directors of Studies	45	40
District Quality Assurance & Standards Officers	5	5

Saturated sampling technique was used to select the 5 DQASOs, 40 Directors of Studies and the 40 School Principals. Saturated sampling is whereby the whole population is used because it is too small to be sampled (Mugenda & Mugenda, 2003). This type of sampling was adopted in this study to select the DQASOs, Directors of Studies and School Principals as their populations were too small to be sampled.

Instruments for Data Collection

Questionnaire, interview schedule, Observation Guide, Focus Group Discussion Guide and document analysis guide was used in this study. Questionnaire is widely used in descriptive research because they obtain facts about current conditions and are useful in making inquiries concerning views and opinions (Mugenda & Mugenda, 2003). The instrument was selected because it gives the respondent adequate time to give relevant information required and make it possible for anonymity. Documents used were class and fee registers, KCSE results, library records, accession registers, inventories, ledgers and admission books. These documents were pivotal in the analysis of FTSE and Survival rates in Kericho County.

Interview schedules were used for the DQASOs, Directors of Studies and the School Principals to get information on the impact of FTSE on survival rate in Kericho County. This we were given permission to access the required documents. The questionnaire was administered to each school Principal from the selected 40 schools. A document analysis guide was used to assist the researcher examine the relevant documents and the get the relevant information. Documents used to get information on survival rate in Kericho County as presented by the school principals were the admission books, class registers, fees registers, library records and KCSE results.

Reliability of a measurement instrument is the extent to which it yields consistent results when the characteristic being measured has not changed. Like validity, reliability takes different forms in different situations (Leedy & Ormrod, 2005). Test – retest method was adopted in this study because the instrument was to be administered on different occasions for a period of six months. The instruments were administered to the same respondent twice at an interval of two weeks in 5(10%) and Pearson product moment correlation coefficients was used to compute the correlation coefficient. The correlation coefficient was 0.8 at a set p-value of 0.05. This means the instrument was reliable as the calculated coefficient was greater than 0.7. Two weeks were found to be standard for these instruments to piloted again (Mugenda & Mugenda, 2003).

Survival rate is calculated on the basis of the reconstructed cohort method which uses data on enrolment and repeaters for consecutive years (UNESCO, 2009 b). Computations were done per school after the introduction of the FTSE policy to determine the cohort survival rate in Kericho County. The survival rate was computed using the following formula given by (UNESCO, 2009 b).

$SR_{g,i}^{k}=\frac{\sum_{t=1}^{m} p_{g,i}^{t}}{E_{g}^{k}}*100$ where: $P_{g,i}^{t}=E_{g,i+1}^{t+1}- R_{g,i+1}^{t+1}$

grade (1,2,3……n)

year (1,2,3……..m)

pupil cohort

$SR_{g,i}^{k}$ Survival Rate of pupil-cohort **g** at grade **i** for a reference year **k**

E_{g}^{k} Total number of pupils belonging to a cohort **g** at a reference year **k**

$P_{g,i}^{t}$ Promoters from $\boldsymbol{E_{g}^{k}}$ who would join successive grades **i** throughout successive years **t**

R_{i}^{t} Number of pupils repeating grade **i** in school year **t**

$$SR_{g,i}^{k}=\frac{\sum_{t=1}^{m} p_{g,i}^{t}}{E_{g}^{k}}*100$$

Where: $P_{g,i}^{t}=E_{g,i+1}^{t+1}- R_{g,i+1}^{t+1}$

Pearson Correlation (r) was then done to determine the influence FSE policy on survival rate in Kericho County.

Interpretation of Pearson Correlation Co- Efficiency

Correlation coefficients (r) were therefore interpreted to determine the Impact of FTSE on Survival rates in terms of direction and strength of relationship. Elfison, Runyon and Haber (1990) interpretation guideline was adopted (Table 1).

Table 5 Interpretation of Pearson Correlation Coefficients (r)

Strength of the relationship	Positive (+)	Negative (-)
Weak/low/small	0.01 – 0.30	0.01 – 0.30
Moderate/ medium	0.31 – 0.70	0.31 – 0.70
Strong/high	0.71 – 0.99	0.71 – 0.99
Perfect relationship	1.00	1.00
No relationship	0.00	0.00

From Table one (5) it can be observed that Pearson (r) between + or - 0.01 – 0.30 is a weak/low/small relationship, between + or - 0.31 – 0.70 is a moderate/medium, while relationship between + or - 0.71 – 0.99 is a strong/high relationship. Perfect relationship is where it is positive or negative 1.00 while 0.00 means there is no relationship. Coefficient of determination R^2 is the square of the Pearson r which tells how much of the variance is accounted for by the correlation which is expressed in percentages while the other remaining percentage could be due to other factors (Leedy & Ormrod, 2005). This was adopted in the interpretation of Pearson (r) and coefficient of determination R^2 in this study.

FINDINGS

The return rate of principals' questionnaire was as shown in Table 6

Table 6 Return Rate of the Principals Questionnaire used for Data Collection

Respondents	Issued	Number Returned	Percentage (%)
Principals	40	40	100
Totals	40	40	100

From Table 6, it can be observed that all principals returned the questionnaire as was required. The rate of return for the questionnaires was 100%. This data on return rates helps to justify the validity of the data that was used in this study and the new knowledge generated.

Demographic Characteristics of the Respondents

The respondents in this study included school Principals, Directors of Studies, DQASOs and students. Their demographic characteristics were as shown in Tables 7 and 8

Table 7 Principals' Gender and Headship Experience (n=40)

Demographic characteristics	Frequency (f)	Percentage (%)
Gender		
Male	30	75.00
Female	10	25.00
Total	**40**	**100.00**
Headship Experience in years		
5	1	02.50
6-10	12	30.00
11-15	17	42.50
16-20	10	25.00
Total	**40**	**100.00**

Table 7 indicates that out of all the 40 (100%) school Principals involved in the study, 30 (75%) were male while 10 (25%) were female. This shows that very few female teachers are as appointed school Principals in Kericho County. This is in agreement with the study carried out in a sampled number of schools in Kenya by Bosire et al., (2009) which found out that out of the 30 sampled school Principals 22(79%) were male while 6 (21%) were female. The school principals' leadership experience was also indicated and one (2.50%) had headship experience of 5 years, 12 (30.00%) had an experience of 6-10years, 17 (42.50%) had 11-15 years of experience while 10 (25.00%) had 16-20 years.

From the findings in Table 7, most school principals had headship experience of 6 years and above. This shows that they had enough experience in school management and they were able to give relevant information on survival rate in Kericho County. Principals with experience can be relied on for the authenticity of data collected. They were also better placed given that the data required dated back to the year 2004. Table 8 gives information on the teaching experience that the heads had prior to being appointed to administrative positions as heads of institutions.

Table 8 Teaching experience before being Appointed as School Principals (n=40)

Years	Frequency (f)	Percentage (%)
5-10	2	5.00
11-15	5	12.50
16- 20	24	60.00
21-25	9	22.50

From table 8, those principals with a teaching experience of between 5 -10 years were 2(5%) between 11-15 years were 5 (12.50%), while 24(60%) had a teaching experience between 16-20 and 9 (22.50%) had a teaching experience of between 21-25 years. This shows that these School Principals had gone through all the ranks in the teaching profession and had experience to be appointed to administrative positions. According to Education Portal (2014), most Principals in the US enter the profession after obtaining enough experience as teachers. This is in agreement with the findings of this study which reveal the vast teaching experience that those appointed as principals have. Therefore, they were better placed to answer questions on survival rate in Kericho County. This is vital in determining the validity of data that was generated in this study. Table 9 provides information on the highest professional qualifications of the sampled principals in the study.

Table 9 School Principals' Highest Professional Qualifications (n=40)

Highest Qualification	Frequency (f)	Percentage (%)
BED, BSC +PGDE, BA + PGDE, B.COMM + PGDE	15	37.50
M.ED	25	62.50
Total	**40**	**100.00**

From table 9, fifteen (37.50%) had a Bachelor's degree while 25 (62.50%) had Masters. Basing on the findings in Table 9, it is clear that all the principals had the required level of education. Education Portal (2014) shows that in the US the requirement to be a School Principals is a Bachelor of Education degree. This is also applicable in this study and in agreement with The Basic Education Act 2013 (Republic of Kenya, 2013). Given their academic credentials, these principals were thus in a position to understand and give the relevant information on gender parity, repeater rates, dropout rates, wastage rate and students' academic achievement in Kericho County. Table 10 shows on average the school levies incurred by parents in four years before introduction of FSE Policy for the 2004 cohort.

Table 10 School Levies incurred by Parents on average in four years before introduction of FSE Policy for the 2004 cohort (n=40)

Type of School	Amount (Kshs)
Day scholars in mixed schools	63,617.11
Boarders in mixed schools	96,954.05
Girls boarding	105,299.00
Boys boarding	115,234.00

From Table 10, the day scholars in mixed schools paid on average Kshs.63, 617.11 in four years while boarders in mixed schools paid Kshs.96, 954.05 in their four years of study. The students in single sex schools paid higher than the other schools. The girls paid Kshs.105, 299 on average while the boys paid Kshs.115, 234 on average for the four years they were in school. This data was important as it informed the need for fee subsidies in secondary schools an issue which culminated in the genesis of FTSE policy on Survival rate.

Table 11 FTSE Fund and School Levies incurred in four years on average for 2008 Cohort after introduction of FTSE policy (n=40)

Type of School	FSE in 4 year (Kshs.)	Percentage (%)	Costs incurred by parents in 4 years (Kshs.)	Percentage (%)	Totals in Kshs.
Days scholars in mixed schools	41,060	40.43	60,509.65	59.57	**81,569.65**
Boarders in mixed schools	41,060	27.40	108,803.85	72.60	**112,863.85**
Girls boarding	41,060	25.62	119,178.57	74.38	**160,238.57**
Boys boarding	41,060	24.88	123,964.43	75.12	**165,024.43**

With regard to Table 11, the government spent Kshs. 41, 060 for four years while the parents spent Kshs.60, 509.65 on average for four years in mixed day schools and for boarders in mixed schools they spent Kshs.108, 803.85. In girls and boys boarding schools, they spent Kshs.119, 178.57 and Kshs.123, 964.43 respectively.

Day school students were not given any guideline on the amount of levies the parents were to pay while parents in boarding schools were to pay Kshs.18,627 per year which would add up to Kshs.74,508 in four years. This data was relevant in this study because it helped in establishing the influence of FSE policy on survival rate.

To establish the survival rate in Kericho County, data on enrolment for two cohorts 2008 and 2009 were collected from the school principals in 40 schools in the county. Survival rate by grade and cumulative survival rate was computed in the county and per school. According to UNESCO (2009 b) Survival rate is calculated on the basis of the reconstructed cohort method which uses data on enrolment and repeaters for consecutive years. The data was computed and presented as in Tables 12 and 13.

Table 12 Reconstructed Cohort Students Enrolment matrix in Kericho County after Introduction of FTSE Policy (n=40)

Years		Form I	Form II	Form III	Form IV
2008	**E** **R** **N**	**4615** **13** **0**			
2009	**E** **R** **N**	4614 12 0	**4097** **106** **230**		
2010	**E** **R** **N**		4098 123 352	**3420** **114** **734**	

2011	**E** **R** **N**			3252 111 423	**2739** **134** **830**
2012	**E** **R** **N**				2725 136 822

Key: R; Repeaters N; New Students E; Enrolment

Table 12 shows the two cohorts that were used to compute dropout rates after FTSE policy from 2008 to 2011 to determine the cohort survival rate in Kericho County. These two cohorts were also used to determine the students who left the system in those cohorts. The use of two cohorts allowed the researcher trace the students who left the system since the repeaters were already identified. This study finding was determined using the UNESCO guideline (2009b). The students who enrolled in form one in 2008 and completed form 4 in 2011 were used as a cohort to determine the survival rate after the introduction of FSE policy.

Survival rate which is calculated on the basis of the reconstructed cohort method uses data on enrolment and repeaters for consecutive years (Table 12). The survival rate was computed using the following formula given by (UNESCO, 2009 b) guideline was then adopted.

$SR_{g,i}^{k}=\frac{\sum_{t=1}^{m} p_{g,i}^{t}}{E_{g}^{k}}*100$ where: $P_{g,i}^{t}=E_{g,i+1}^{t+1}- R_{g,i+1}^{t+1}$

i grade (1,2,3……n)

t year (1,2,3……..m)

g pupil cohort

$SR_{g,i}^{k}$ Survival Rate of pupil-cohort **g** at grade **i** for a reference year **k**

E_{g}^{k} Total number of pupils belonging to a cohort **g** at a reference year **k**

$P_{g,i}^{t}$ Promoters from $\boldsymbol{E_{g}^{k}}$ who would join successive grades **i** throughout successive years **t**

R_{i}^{t} Number of pupils repeating grade **i** in school year **t**

Cumulative survival rate was computed as follows

$SR_{g,i}^{k}=\frac{\sum_{t=1}^{m} p_{g,i}^{t}}{E_{g}^{k}}*100$

Where: $P_{g,i}^{t}=E_{g,i+1}^{t+1}- R_{g,i+1}^{t+1}$

Cohort Survival rate= $\frac{2739}{4615}$ x 100 = 59.35%

Cumulative Cohort Repeater Rate $=\frac{12+123+111+136}{4615}$ x100 = 8.28%

Cumulative cohort Dropout Rate = 100- (59.35 + 8.28)

= 32.37%

In order to establish the influence of FSE policy on survival rate for 2008 cohort, FTSE fund and school levies per school were computed and the results were as shown in Table 13. The dropout rate per school after the introduction of FSE policy was computed using UNESCO guideline (2009b). That is**,** cumulative dropout rate

in education is calculated by subtracting the survival rate from 100 at a given level. Survival rate is calculated on the basis of the reconstructed cohort method which uses data on enrolment and repeaters for consecutive years.

$PR_i^t = \frac{NE_{i+1}^{t+1}}{E_i^t}$

PR_i^t Promotion Rate at Grade i in school year t.

Cumulative dropout rate per school was computed as follows using the formula given by (UNESCO, 2009 b) guideline was then adopted.

$SR_{g,i}^k = \frac{\sum_{t=1}^{m} p_{g,i}^t}{E_g^k} * 100$ where: $P_{g,i}^t = E_{g,i+1}^{t+1} - R_{g,i+1}^{t+1}$

i grade (1,2,3……n)

t year (1,2,3……..m)

g pupil cohort

$SR_{g,i}^k$ Survival Rate of pupil-cohort **g** at grade **i** for a reference year **k**

E_g^k Total number of pupils belonging to a cohort **g** at a reference year **k**

$P_{g,i}^t$ Promoters from $\mathbf{E_g^k}$ who would join successive grades **i** throughout successive years **t**

R_i^t Number of pupils repeating grade **i** in school year **t**

Cumulative dropout rate was computed as follows:

Cumulative dropout rate = $100 - (SR_{g,i}^k + R_{g,i+1}^{t+1})$

$SR_{g,i}^k = \frac{\sum_{t=1}^{m} p_{g,i}^t}{E_g^k} * 100$

Where: $P_{g,i}^t = E_{g,i+1}^{t+1} - R_{g,i+1}^{t+1}$

Table 13 Survival Rate per School in Kericho County after Introduction of FTSE Policy 2008 Cohort (n=40)

Survival Rate (%)	Frequency (f)	Percentages (%)
0.00-19.99	1	2.50
20.00-39.99	6	15.00
40.00-59.99	16	40.00
60.00-79.99	12	30.00
80.00-99.99	5	12.5

Table 13 indicates the dropout rates per schools as indicated by the school Principals in Kericho County. One school had survival rate ranging from 0.00 to 19.99%, six (15.00%) of the schools had survival rates ranging from 20.00 to 39.99. sixteen (40.00%) ranged from 40.00 to 59.99, twelve (30.00%) ranged from 60.00 to 79.99 and 80.00 to 99.99 had 5 (12.5%) schools. Table 14 shows the Pearson Product Moment Correlation (r) Matrix for FTSE fund and Survival Rate in Kericho County.

Table 14 Pearson Product Moment Correlation (r) Matrix for FTSE fund and Survival Rate in Kericho County

		Survival Rate	FTSE fund
FTSE fund	Pearson Correlation	1	.324*
	Sig. (2-tailed)		.041
	N	40	40
Survival rate	Pearson Correlation	.324*	1
	Sig. (2-tailed)	.041	
	N	40	40

*. Correlation is significant at the 0.05 level (2-tail)

Table 14 indicates that the relationship between FTSE policy and survival rate is a positive moderate. The relationship was significant with a coefficient of 0.324 at a set p-value of 0.05. According to Elifson, Runyon and Haber (1990) and Leedy and Ormrod (2005) guideline Correlation coefficients (r) interpretation indicated that this was a positive moderate influence. This means that FTSE funding accounted for an increase in survival rate. Coefficient of determination R^2 is the square of the Pearson r which tells how much of the variance is accounted for by the correlation which is expressed in percentages (Leedy & Ormrod, 2005). To account for the influence of FTSE on survival rate, Pearson's r was therefore squared. The coefficient of determination R^2 = 0.1050 which meant that FTSE accounted for 10.50% of the variation in survival rate.

This study is in agreement with the study carried out in Uganda by Asankha and Takashi (2011) on Impacts of Universal Secondary Education Policy on Secondary School Enrollments in Uganda. This study is instrumental to the current in the sense increased enrollment is evidence that Free Secondary Education has positively impacted survival rates. It also concurs with the study done in Tanzania by Lyanga and Chen (2020) on the Impacts of Fee - Free Education Policy in Junior Secondary Schools in Tanzania. FSE has positively impacted survival rates. While it is also in agreement with the study done in Ghana by Stenzel, Kwadwo and Vincent (2024) on Free Secondary Education policy and education attainment. The results of this study revealed that Ghana's Fee Free Secondary education policy positively impacts overall completion rates especially for girls in high-uptake districts relative to those in the low-uptake districts.

The study carried out by Khamati and Nyongesa (2013) to find out the factors influencing the implementation of free secondary education in Kenya, a case study of Mumias district in Western province was also in agreement with the current study. The study found out that FSE had led to increased enrolment and retention in secondary schools. It also concurs with the study done by Asena, Simiyu and Riechi (2016) on Factors Affecting Subsidized Free Day Secondary Education in Enhancing Learners Retention in Secondary Schools in Kenya. This study focused on retention which was in line with the current study. It is also not in agreement with the sudy done by Ngasura, Nyakundi and Koros (2023) conducted a study on the Influence of Government Subsidy on Students' Enrollment in Public Secondary Schools in Uasin Gishu County, Kenya. This implies that government subsidy has contributed to a significant impact on student enrollment. This study differs from the current study. The study carried out by Nzuki (2018) on Kenya's Constituency Development Fund, Free Secondary Education Policy and Access to Secondary Education is in agreement with the current the study. From the results, the study concluded that with the Free Secondary Education Policy the fees charged from parents had reduced hence education became more affordable which enabled parents to enroll their children in schools. This study informs the present with regard to the fact that free secondary education has positively impacted survival rates through increased enrollment. It aslo concurs with the study done by Muasya (2013) on the effect of subsidized secondary education on enrollment and retention among the secondary schools in Mwingi sub county, Kitui County. The findings of this study established that retention was higher after 2008 hence concluding that school enrollment and retention had increased with the introduction of the Free Secondary Education Policy in the Sub County.

CONCLUSIONS

The Fee Free Secondary Education policy in Kenya was mainly driven by the desire to achieve the goal of Education for All. Countries especially those in Sub-Saharan Africa wanted to ensure that students regardless of

their socio-economic backgrounds get secondary education that would equip them with the knowledge, values, competencies and skills to enable them to not only function effectively as global citizens but also fully participate in their societies. Despite the challenges that have been faced as a result of implementing the FSE policy, the merits are vast and worth mentioning for instance, it has boosted access and enrollment; it has ameliorated completion rates and enhanced academic achievement among others. This study thus revealed that the FSE policy influences survival rate that is, there is a moderate positive relationship between the policy and survival rate.

The following Recommendation was made:

There is need for the Kenyan government to increase the amount of funds to education to improve on survival further.

REFERENCES

1. Akingunloye, B.A., Okotoni, C.A. & Olowo, B.F. (2021). Implementation of Free Education: A Catalyst for Secondary Education Quality in Ondo State Secondary Schools, Nigeria. International Journal of Innovative Approaches in Education, 5(1), 44-62. doi: 10.29329/ijiape.2021.333.4
2. Arnot, M., Roger, J., Casely-Hayford, L. & Noronha, C.(2012). Schooling and Domestic Transitions: Shifting Gender Relations and Female Agency in Rural Ghana and India. Comparative Education 48 (2): 181–194.doi:10.1080/03050068.2011.608896
3. Asena, M. J., Simiyu, A.M.& Riechi, A. (2016). Factors Affecting Subsidized Free Day Secondary Education in Enhancing Learners Retention in Secondary Schools in Kenya. Journal of Education and Practice. Vol 7(20), 49-55.
4. Bhuwania, P., Huh, K. & Jody Heymann, J. (2023). Impact of Tuition-Free Education Policy on Child Marriage and Early Childbearing: Does Secondary Matter More? Population and Development Review 0 (0): 1–29.
5. Education Portal. (2014). School Principal Educational Requirements to Become a Principal Glossary of Career Education Programs, Htp: //education. portal.com/articles/School Principal Educational Requirements to Become a Principal.html. 009: www.afrrevjo.com399.
6. Elifson, K.W., Runyon, R.P. & Haber, A. (1990). Fundamental of Social Statistics. MC Graw Hill. Newyork.
7. Gall, D.M., Gall, J.P. & Borg, R.W. (2007). Educational research, an introduction. New York: Longman.
8. Gay, L.R. (1987). Educational Research: Competences for Analysis and Application. Florida International University: Merrill Publishing Company.
9. Godda, H. (2018). Free Secondary Education and the Changing Roles of the Heads of Public Schools in Tanzania: Are They Ready for New Responsibilities? Open Journal of Social Sciences, 6, 1-23.https://doi.org/10.4236/jss.2018.65001
10. Gruijters, R. J., Abango, M. A., & Casely-Hayford, L. (2024). Secondary school fee abolition in sub-Saharan Africa: Taking stock of the evidence. Comparative Education Review, 68(3) https://www.journals.uchicago.edu/doi/full/10.1086/731496
11. Hallack, P. & Poisson, M. (2007). Corrupt Schools, Corrupt University: What can be done? Paris: IIEP UNESCO.
12. Harbison, R.W. & Hanushek, E. (1992). Educational Performance of the Poor: Lessons from Rural Northeast Brazil. New York: Oxford University Press.
13. Huebler, F. (2005). Creative Commons License in Education. London: Oxford University.
14. Huebler, F. (2010). International Education Statistics. Adult and youth literacy in 2010 Paris: UNESCO Institute for Statistics (UIS).
15. Israel, G.D.(1992). Sampling the Evidence of Extension Program Impact. Program Evaluation and Organizational Development, IFAS. Florida. University of Florida.
16. Kapur, R. (2019). Meaning and Significance of Secondary Education. International Journal of Law, Management and Social Science.Vol 3(1), 85-95.
17. Khamati, M.J & Nyongesa, J.W. (2013). Factors Influencing the Implementation of Free Secondary Education in Mumias District, Kenya. Journal of Social Science for Policy Implications 1(1), 32-47.

18. KNEC. (2010). KCSE Results 2011. Nairobi: Kenya National Examination Council. http://blog.theonlinekenyan.com/kcse-results-2009.
19. KNEC. (2011). KCSE Results 2011.Nairobi: Kenya National Examination Council http://blog.theonlinekenyan.com/kcse-results-2010.
20. KNEC. (2012). KCSE Results 2011. Nairobi: Kenya National Examination Council http://blog.theonlinekenyan.com/kcse-results-2011.
21. Kombo, D. K. & Tromp, D.L.A. (2006). An Introduction of Proposal and Thesis Writing. Nairobi: Pauline publications Africa.
22. Kweka, A.S. (2019). Analysis of the Influence of Free Education Policy on Secondary School Students' Academic Achievements: A Case Study of Oljoro Ward, Arusha Region. Unpublished bachelors project. Institute of Adult Education, Arusha.
23. Lall, S. (2000). Skills, Competitiveness and Policy in Developing Countries. QEH Working Paper Series QEHWPS46.
24. Leedy, P.D. & Ormrod, J.E. (2005). Practical Research: Planning and design. New Jersey: Pearson Merrill Prentice Hall.
25. Liston, V. (2006). NGO'S and Spatial Dimensions of Poverty in Kenya. Dublin: Department of Political Science, Trinity College.
26. Lyanga, A.A. & Chen, M. (2020). The Impacts of Fee - Free Education Policy in Junior Secondary Schools in Tanzania. Asian Journal of Education and Social Studies 13(3), 36-47
27. Mc Burney, D.H. & White, T.L. (2010). Research Methods. Wadsworth Cengage learning. United States of America. http://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202005.pdf
28. MOE. (2007). Report of Task force on Affordable Secondary Education. Nairobi. Ministry of Education.
29. MOE. (2008 a). Endangering Education Sector Budget. Reforming Future Education Sector Budgets. Nairobi: Government Printer.
30. MOE. (2008 b). The Development of Education National Report of Kenya. Inclusive education: The Way of the Future. The International Conference on Education, Geneva, 25-28 November 2008.
31. MOE. (2009). Guideline for the Implementation of Free Secondary Education. Republic of Kenya. Nairobi.
32. MOE. (2011). Quality education for National Development. Nairobi. Government Printer.
33. MOE. (2012). Education for Development. Kericho District Education Day. Prepared by DEO's Office Kericho.
34. MOE. (2013). Kipkelion District Education Day. Prepared by DEO's Office Kipkelion.
35. MOEST, (2015). Circular on compliance with gazetted school fees Guidelines. www.education.go.ke
36. Muasya, N.K. (2013). The Effect of Subsidized Secondary Education on Retention and Access to Secondary Education in Mwingi Central District, Kitui County, Kenya. Unpublished Masters thesis. Kenyatta University: Kenya.
37. Mugenda, O.M. & Mugenda, A.G. (2003). Research Methods: Quantitative and Qualitative Approaches. Nairobi: ACTS Press.
38. Munisi, I.S., Werema, S. & Namusonge, S. G. (2021). Assessment of Free Secondary Education Policy on Quality of Secondary Education in Tanzania: A Case Study of Meru District Council. International Journal of Social Sciences and Information Technology. Vol VII (III), 37-45.
39. Ndolo, M.A., Simatwa, E. N.W and Ayodo, T.M.O. (2016). Impact of Free Secondary Education Policy on Access to Secondary School Education in Kenya. A Case Study of Mbita and Suba Sub-Counties. Greener Journal of Educational Research. Vol. 6 (2),067-085
40. Ngasura, E., Nyakundi, E., & Koros, P. (2023). Influence of Government Subsidy on Students' Enrollment in Public Secondary Schools in Uasin Gishu County, Kenya. Open Journal of Social Sciences, 11, 424-440 https://doi.org/10.4236/jss.2023.118030
41. Nsubuga, E.H.K. (2000). Fundamentals of Educational Research.Kampala. MK Publishers (U) Ltd.
42. Nwanyanwu, L., & Johnnie, S. E. A. (2020). Secondary Education: Its Impacts and Weaknesses in Nigerian Educational System and Meeting Global Demands. International Journal of Scientific Research in Education, 13(5), 938-954.
43. Nzuki, C.K. (2018). Kenya's Constituency Development Fund, Free Secondary Education Policy, and Access to Secondary Education. Unpublished PhD dissertation. Walden University.

44. Wanjala, G. & Ali, K.H. (2017). Impact of Subsidized Fees on Students' Access to Quality Education in Public Secondary Schools in Wajir County, Kenya. International Journal of Education and Research, vol. 5(7), 247-262.
45. Ohba, A. (2009). Does Free Secondary Education Enable the Poor to Gain Access? A Study from Rural Kenya. CREATE Pathways to Success. Washington, DC: Oxford University press.
46. Oketch, M. & Rolleston, C. (2007). Research Review on Institute of Education. University of London: UK.
47. Olang'o, J., Malechwanzi, J., Murage, S. & Amuka, L. (2021). Effects of Free Day Secondary Education Policy on Academic Performance of Rural Public Day Secondary Schools in Kilifi County, Kenya. Journal of Learning for Development. Vol. 8, (1),192-203.
48. Olubuor, R. O. (2009). Private cost analysis of pre-school education in Nigerian private schools. University of Benin, Nigeria.
49. Onsomu, E.N. & Muthaka, D. (2008). Financing of Secondary Education in Kenya. Costs and Options. Nairobi: Kippra.
50. Orodho, A. J. (2004). Techniques of Writing Research Proposal and Reports in Education and Social Science. Nairobi: Reata Printers.
51. Orr, L. & Larry, L. (1999). A study on Education Social Science Experiments. Thousand Oaks, CA: Sage.
52. Psacharapoulos, G. & Woodhall, M. (1985). Education for development. An analysis of investment choices. Washington D.C: Oxford University Press.
53. Punch, K.F. (2005). Introduction to Social Research: Quantitative and qualitative approaches. London. SAGE Publications Ltd.
54. Republic of Kenya. (1988). Sessional Paper No.6 of 1988 of Education and Manpower Training for the next decade and Beyond. Nairobi: Government Printer.
55. Republic of Kenya. (2004). Sessional paper No. 1. of 2004 A policy framework for Education, Training and Research. Nairobi: Government Printer.
56. Republic of Kenya. (2005). Kericho District Strategic Plan. Implementation of the National Population for Sustainable Development. Nairobi: National Coordination Agency for Population Development.
57. Republic of Kenya. (2005). Sessional paper No.1. of 2005 Kenya Education Sector Support Programme. Nairobi: Government Printer.
58. Republic of Kenya. (2006). Ministry of Education Strategic plan 2006-2011. Nairobi: Government Printer.
59. Republic of Kenya. (2006). Sessional Paper No.55 of 2006 Financing of secondary Education in Kenya Costs and Options. Nairobi: Government Printer.
60. Republic of Kenya. (2008). Kenya's Economic Survey Highlight. Nairobi: Government Printer.
61. Republic of Kenya. (2008). Free Secondary Education Programme. Nairobi:Government Printer.
62. Republic of Kenya. (2010). Kenya's Economic Survey Highlight Report. Nairobi: Government Printer.
63. Republic of Kenya. (2010). National census and Population Statistics. Nairobi: Government Printer.
64. Republic of Kenya. (2011). Ministry of Education Quality Education for Development. Nairobi: Government Printer.
65. Republic of Kenya. (2011). Kenya's Economic Survey Highlight. Nairobi: Government Printer.
66. Republic of Kenya. (2012). Sessional Paper No...of 2012. A policy Framework for Education and Training. Reforming Education and Training in Kenya. Government of Kenya. Nairobi. Government Printer. http://www.vision2030.go.ke/cms/vds/Sessional_Paper_July_5,_2012.pdf
67. Republic of Kenya. (2012). Vision and Mission of the Ministry Of Education. Nairobi: Government printer.
68. Republic of Kenya. (2013). Sessional Paper No. 14 of 2013. Kenya Basic Education Act. Nairobi. Government Printer.
69. State University. (2002 a). Criticism of Public Education - Inequality of Opportunity, Highly Bureaucratic Systems, Achievement-Based Outcomes, School Choice, Reform after Reform. StateUniversity.com http://education.stateuniversity.com/pages/2341/Public-Education-Criticism.html#ixzz21kP3lpsL.
70. Stenzel, A.G., Kwadwo, V.O & Vincent, R.C. (2024). Free secondary education policy and education attainment. International Journal of Educational Development.1-19.

71. UNESCO. (2009 a). Education for All by 2015. Education International's Response to the Global Monitoring Report 2008. ie.org/docs/Retrieved on 26th July 2012 at 7:30 pm
72. UNESCO. (2009 b). Education Indicators Technical Guidelines. UNESCO institute for Statistics. Paris: UNESCO.
73. UNESCO. (2009 c). The role of the higher Education Loans Board in Pro-poor management approaches to enhancing access to university education in Kenya. Paris:IIEP. unesco.org/cgi-bin/www.
74. UNESCO. (2009 d). Gender Equity in Education: Policy Guidelines for Implementation Aus AID Australian Government. ISBN 978-9980-86-189-4 Department of Education, Papua New Guinea.
75. UNESCO (2002) Education for All, Is a World on Track? EFA Global Monitoring Report.
76. Woodhall, M. (2004). Analysis in Educational Planning Cost Benefit Analysis in Education. Paris: IIEP .UNESCO.
77. World Bank. (2000 a). Education for All from Jomtiem to Dakar and Beyond. Word bank. Senegal http://siteresources.worldbank.org/Education/Resources/278200-1099079877269/547664-1099079993288/efa_jomtien_dakar.pdf.
78. World Bank. (2000 b). World Declaration on Education for all and Framework for Action to meet the basic needs. Jomtiem: Thailand, World Bank.
79. World Bank (2001). Secondary Education in Africa: Strategies for Renewal. World Bank presentations at the December 2001 UNESCO/BREDA-World Bank Regional Workshop in Mauritius on the Renewal of African Secondary Education