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Abstract

Educational resources and facilities cost money. The government and families mostly cover these expenditures. Kenya has spent considerably in education to improve access and participation. Despite these attempts, many students enroll in secondary school in form one, but the numbers drop as they advance to form four. Some are unsuccessful in the four-year course. The study's main goal was to determine the effect of direct educational costs on the transition rates of students in public boarding secondary schools in Uasin Gishu County. This research employed a Convergent Parallel Mixed Methods Design. 34 principals and 3,917 parents were targeted. The sample includes all the 34 principals and 362 parents purposively and Yamane's Simplified formula-selected respectively. Proportional random sampling aided in the choice of parents. Interviews, questionnaires, and archive content analysis collected data. Thematic analysis helped interpret qualitative data while inferential and descriptive statistics interpreted quantitative data. The findings indicated that, in public boarding secondary schools, student transition is highly connected with direct educational expenses. Direct educational expenditures predict public boarding secondary school students' grade to grade transition rate. They explain 81.8% of the variation with repairs, maintenance and improvement cost accounting for the highest (34.7%) and school meals was responsible for 0.1% of the variance. The study concluded that, direct costs of education affect students' grade to grade transition. It recommends the government to: review and increase student capitation so as to cover boarding expenses, diversify funding sources to fully cushion the needy students and fully fund school projects and programmes in order to relieve

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parents/guardians of the cost burden and thus increase student participation in Public Boarding Secondary schools.

Keywords: *Direct costs of education, Boarding Expenses, Board of Management Salaries and Motivation Fees, Public Boarding secondary Schools, Student Capitation, Students' Transition Rates*

1.0 Introduction

Advancement of societies, governments, and the economy all rely heavily on education. It helps alleviate poverty by raising both the individual and collective productivity. For this reason, it is clear that donor agencies, governments, and non-governmental organisations have all recognised Education for All (EFA) and accepted the concept of making basic education available to all (UNESCO, 2015). After the MDGs and EFA Goals were decommissioned, the international community came up with the Sustainable Development Goals (SDGs). Notably, attaining the SDGs and improving people's lives depends on making sure that everyone has access to high-quality education (UNWomen, 2022). Primary, secondary, and tertiary levels all contribute to achieving this end.

UNESCO (2015) as cited by (Kiruru *et al.*, 2020) observed that countries have created policy frameworks that aim to improve educational opportunities for all citizens. While Japan reduced the financial burden on families by investing heavily in their children's education, South Korea and Singapore enacted initiatives to speed up the transition to secondary school (OECD, 2015). However, countries in Latin America continue to report negative rates in spite of these efforts. As many as 90% of children in primary tier for instance, move to the next level of secondary schooling. The bad news is that only 80% of students finish lower secondary while just 59% of them finish upper secondary school level (UNESCO, 2017). New Zealand provides free education to students aged 5 to 19 to increase student participation in school. Households on the other hand, are responsible for providing stationery, exam fees and school uniforms. Parents are also required by schools to pay for activities in which their children participate. The costs incurred limit students' ability to fully participate in education, undermining their desire to achieve their life goals (Preston, Smith, & Calder, 2016).

African countries have adopted education policy frameworks that provide financial assistance for education. South Sudanese communities, for example, pay for their children's education. Ghana instituted a fee-free education policy, while Rwanda instituted a fee-free education policy. Uganda, Tanzania, and Kenya implemented a capitation policy to increase student participation in East Africa (Kiruru, et al, 2010). These strategies are designed to improve student transition rates. Despite this, UNESCO (2019) reports that secondary school dropout and graduation rates remain dismal. School levies according to Barungi and Mwesigye's (2019) research, continue to be a significant barrier for secondary school students in Uganda despite the existence of the Universal Secondary Education Programme and Capitation Grants. The brief also mentioned that payments are significantly higher in government boarding schools than in non-government schools. The cost of food and boarding is attributed to this disparity. Furthermore, low transition rates in Ugandan secondary schools is seen as a result of high costs that are out of reach for the majority of parents/guardians.

Kenya implemented its Free Secondary Education policy in January 2008 to make secondary education in the country more accessible and affordable. According to Muganda, Simiyu, and Riech (2016), the primary reason for establishing FDSE was to address low levels of student participation in secondary education, as evidenced by low transition, completion, and retention rates. The main goal of FDSE, according to Abuya and Mutisya (2018), was to

enable more children from low-income households to attend secondary school. Kenya Vision 2030's social pillar emphasises the importance of training and education in achieving the goal of a middle-income economy by 2030. Furthermore, all children's rights in Kenya were recognised in the 2010 Kenyan constitution amendments that specifically addressed the education sector. Every child in Kenya has a constitutional right to a free, publicly funded primary school education, which has been prioritised by the Kenyan government. As a result, as shown in Table 1, the Kenya National Bureau of Statistics (2019) reports that the Kenyan government has consistently increased budgetary allocation to the education sector.

Table 1: Budgetary allocations to education (2015/2016 - 2019/2020)

Financial Year	Allocation (Ksh.)
2015/2016	335.75 billion
2016/2017	339.3 billion
2017/2018	415.3 billion
2018/2019	439.2 billion
2019/2020	473.4 billion

Source: Kenya National Bureau of Statistics (2019)

From Table 1, it is evident that there is an increase of 137.65 billion Kenya shillings (41%) over the five years. Increased resources are available because of universal free secondary education (Kenya National Bureau of Statistics, 2019).

Despite the heavy investment, the low transition of secondary education remains an agenda of concern to policymakers and practitioners in the world (Gray & Mark, 2010). Bridge, Dilulio, and Monson (2011) found that students' inability to successfully transition from secondary to post-secondary education is a major contributor to the global education crisis. Around the world, about 71 million youngsters are out of secondary school; leading to a lack of skills acquisition and subsequently lack of employment in the future (UNESCO, 2012).

Theoretical Framework

This study was based on Hanushek (2007) description of the Education Production Function model. The concept assumes that, like a company, a school receives inputs (such as funding) and uses them to produce outputs during the process of teaching and learning. Household education expenses such as boarding fees, cost of meals taken at school, cost of activities, cost of repairs, maintenance, and improvements and Parents Teachers Association fund were used as inputs in this study. The output is student participation which is determined by the transition rates.

The production function model of education was defined using the formula below;

$$X = f(a, b, c \dots \varepsilon)$$

Where;

$X = f(a, b, c \dots \varepsilon)$ - is the output or result such as students' transition rates.

$X = f(a, b, c \dots \varepsilon)$ -f stands for function in this case, it explains how the independent variables/inputs (direct educational costs) affect the (x) dependent variable (students transition rate).

$a, b, c \dots d$ - are the inputs, the direct education costs in the form of boarding fee (cost of school meals and accommodation), PTA project fund, motivation fee, cost of repairs, maintenance and improvement and activity fees.

ε – is the error term.

This model illustrates the relationship between the financial burden placed on families and their ability to send their children to secondary school (inputs). Hanushek, (2007) stresses the importance of the inputs (resources) transformed during the teaching/learning process to produce excellent outcomes (results). It is important to note however that, a lack of inputs like resources in the form of household direct educational costs may present a barrier to the process (Teaching/learning process), which in turn may lead to a negative result or output like low student participation (low transition rates) in schools and vice versa.

The purpose of this research was to determine if and how much students' grade to grade transition was affected by their families' educational spending. Direct educational costs are the inputs that could affect students' participation (students' transition rates) as the output in the model. The formula therefore can be expressed as follows;

$$P = f(D_1, \dots, D_u, + \varepsilon)$$

Where;

P – Stands for the measures of student participation (the dependent variable/output) which is assessed in form of transition and retention rates of students.

f - Stands for the function of the model or the parameters to be measured. In this case, it explains how household educational costs affect students' transition rates.

$D_1 \dots D_u$ – The Direct Costs of Education consist of the following inputs/independent variables: They are represented by the costs of accommodation and meals. Activity fee. Repairs, maintenance and improvement .and PTA project fund.

This model offered a succinct explanation of the effect that direct educational costs have on students' grade to grade transition in public boarding secondary schools. Again, it offered equations that were helpful for the regression analysis. This study examined the effects of various inputs (or expenses) on the quality of the end product (student participation). Thus, the cost of accommodation and meals, activity fees, repairs, maintenance and improvement and PTA project money are all factors that affect the transition of students.

2.0 Literature Review

2.1 Rationale for Investing In Secondary Education

A high-quality secondary education is a requirement for seizing useful prospects for socio-economic development (World Bank, 2011). This is the rationale behind public and private investments in education. While examining the economic rewards of investing in education, the World Bank (2010) found that people are willing to devote additional years to their education to obtain better employment opportunities and increase their income. Many people's social mobility can be improved by going to school. The study also reveals that countries and regions raise the standard of education among their citizens because they presume that, doing so will improve labour productivity, job quality, and economic growth (GoK, 2010).

According to the World Bank (2001), referenced by Nderitu (2011), secondary education investments produce fair social and private rates of return. For instance, there are three strong

reasons for governments to support secondary education in Sub-Saharan Africa. First and foremost, secondary education is important for economic development because it gives people and communities the fundamental information, principles, and abilities they need to advance. Second, enrolling in secondary education can inspire kids to demonstrate outstanding civic and social ideals. Thirdly, it provides young people with fair private returns that allow them to develop attitudes and abilities that are unlikely to occur in early grades. According to Nderitu (2011), doing so empowers young people to fully engage in society, acquire skills relevant to the workforce, pursue ongoing education, and take charge of their own life.

Secondary education is a highly important link between primary education, the workforce, and training Kenya Institute of Public Policy Research and Analysis (KIPPRA, 2011). Due to the importance of secondary education, strategies have been laid to ensure that each individual can access and complete their studies successfully. This explains why nations make significant investments in education. For instance, the Kenyan government established the secondary school education bursary fund through an Act of Parliament to improve access to secondary school education, completion rates, retention rates, and the reduction of inequalities and disparities in the secondary education delivery system (GoK, 2012).

2.2 Household Education Costs

2.2.1 Direct Costs of Education

Both direct and indirect costs are incurred while investing in education. The term "direct costs" refers to the actual costs associated with education, such as accommodation and meals, activity, repairs, maintenance and improvement and parents association costs among others. They are the expenses people and families have to pay to invest in education. Akaguri (2011) refers to them as household educational costs. When a child or children enroll in school, households incur costs to sustain them in school. The fee schedule takes them into account. While potential costs which are the foregone earnings are considered as indirect costs (Akaguri, 2011). Globally, these expenses hinder societies with low-income households from educating their child. Some costs continue to be a barrier for extremely poor households, even in communities where faith-affiliated donors bear the actual costs (<https://googleweblight.com>).

i. Boarding fee (Accommodation and meals)

Amjad and Macleone's (2014) research on public-private partnerships aimed to determine whether or not higher tuition levels were associated with higher test scores. Results showed that boarding schools, despite being more costly produced better academic outcomes than day schools. It's because boarding school students get more one-on-one instruction time than their day school counterparts. Students at boarding schools often show exceptional skill in English since they are forced to speak only that language and their native speech is discouraged. Concerns concerning the performance inequalities between school types are raised as a result of the study's findings. The report suggests that the government should go beyond funding to improve schools' efficiency and effectiveness. The study did not account for the expenditures associated with boarding institutions, which may have influenced students' decisions to participate. This study addresses this knowledge gap.

In a study on educational opportunities in Bangladesh, Ahmed (2011) focussed on how the free and reduced-price school lunch programme affected kindergarten enrollment. Students in food-insecure areas of Bangladesh increased by 14.2 percent in enrollment and 1.34 percent in attendance one year after the government began providing free school lunches, according

to research. In contrast, the feeding programme decreased school dropout rates by 7.5%. Finally, it was determined that the availability of free lunches in schools has a significant impact on student enrollment. The study concluded that if the government cared about keeping students in school, it would devote more money to the school lunch programme. It is also suggested that research be conducted to identify patterns of school dropout at both the elementary and secondary levels. The study's success in elementary schools augurs well for a rollout to secondary institutions. This study looked only at the correlation between free school lunches and student enrollment. There was no proof that student transition rates were affected by school lunches. Once again, the financial implications were ignored. This void was used by the present investigation.

Research conducted by Alderma, Behrman, Lary, and Menon (2010) on the effects of the School feeding programme for children in refugee camps in Northern Uganda aimed primarily to evaluate the effect on enrollment. According to the findings, the enrollment increased by 8.9 percent. The programme was also proven to have a beneficial effect on attendance and reduce the need for students to repeat classes. However, the study found no correlation between participation in the programme and higher academic achievement or readiness for transition to secondary school. This study fills a potential gap by examining the effect of parent/guardian-paid school meals on student transition in boarding schools. The previous study focused on free food programmes in elementary schools but did not specify whether or not they increased transition rates.

Mutegi's (2015) study on the unit cost of education and its effect on student enrollment rates in secondary schools in the Tharaka South sub-county reports that in January 2008, the Kenyan government began providing free secondary education to all students in the country by waiving tuition costs totalling Kshs 10,265. Parents, on the other hand, were expected to pay for the textbooks, supplies, transportation and construction of dormitories, classrooms, and purchase of school buses. The primary goal was to analyse how changes in home income or spending affected students' enrollment. The research showed that when the cost of enrolling a child is higher than the government's subsidy, the child is less likely to enroll. Proportional random sampling and purposive sampling were used in the current study, while the previous study used census.

Ohba (2009), who conducted a study in rural Kenya to determine whether free education aids poor students' admission, agrees with Mutegi (2015), who points out that despite the government's efforts, the cost of education is still enormous because schools charge levies for boarding equipment, lunch, school buildings, school uniform, sports uniform, textbooks, stationery and pocket money. Secondary school is out of the question for children whose families can't afford the fees. How much money parents or guardians put forth for these necessities was not quantified in either study. Research in rural Kenya also paved the ground for this study to be conducted in metropolitan areas.

ii. Activity Fee

In this analysis, "activity fees" means the money set aside to cover the expense of extracurricular activities. Sports, athletics, theatre, and musical festivals and competitions are all examples of extracurricular activities. According to the available literature, students' physical and mental well-being, as well as their ability to transit and remain engaged in their education is fuelled by their engagement in extracurricular activities. According to Nora's (2016) research on minority student prejudice, students' participation in extracurricular activities increases their health-related social contacts, which in turn increases their likelihood of staying in school and graduating. In a similar vein, Yilzid (2016) found that extracurricular activities have a significant impact on student's personal growth and academic success. The

research shows that extracurricular activities benefit students' mental and social growth as well as their physical health and the ability to communicate and connect effectively. As a result, it concludes that extracurricular activities play an important role in setting the stage for future language learning and growth. Students' intellectual, academic, moral, and social growth are all bolstered by their participation in extracurricular activities, as suggested by the study. There was no examination of how or if payments for these activities affected students' transition rates. This research was able to do so.

Research into the financial implications of students' participation in extracurricular activities in New Zealand schools was conducted by Gasson, Pratt, Smith, and Calder in 2016. The primary purpose was to determine whether or not students were deterred from taking part in extracurricular activities due to financial constraints. Even though the students were not sent home to collect activity fees, the study found that, parents were worried that their children wouldn't get the full benefit of school if they didn't pay them. As a result, their children may be vulnerable to threats and harassment. The cost of participating in any other extracurricular activities offered by the school in addition to sports and athletics are all covered by the activity fee.

The study used an exploratory research methodology and polled parents. The results showed that children from low-income homes faced challenges since their parents could not afford to pay for their education. The study found that financial constraints prevented students from benefiting fully from educational and social opportunities. Examining the impact of financial constraints on students' engagement in extracurricular activities was the focus of this research. This research looked into how school levies affected students' ability of students to progress from one class to the next class. In contrast to Gasson *et al*, who only engaged with parents, this study included school administrators and used mixed methodologies (Gasson *et al*, 2016).

The primary goal of Ouma (2016) research on boy-child education in Kenya was to shed light on the factors that prevent males from finishing high school education. Limiting student from taking part in extracurricular activities was found to be a significant predictor of behavioural problems in the classroom. According to the research, students engage in inappropriate behaviour and risk dropping out if they have too much free time after class. As a means of reining in student discipline and increasing student engagement, the study suggests schools place a premium on extracurricular activities. The study provided information about the benefits of extracurricular activities for students. However, it failed to account for the money spent on such pursuits. The study also did not determine whether or not students who could not afford activity fees dropped out of school.

iii. Parents Teachers' Association Fund (PTA fund)

PTA is an official group of parents and educators working together to increase parental involvement in the classroom. Donations to the PTA kitty are discussed and approved at the yearly meeting of parents and teachers. School construction and maintenance are supported by these levies, which cover the cost of Repairs, Maintenance and Improvements (RMI). The fund also factor in the cost of remedial classes, motivation fees and Parents Association/Board of Management teachers' salaries (Kingori, 2015).

The United States Parents Teachers Association's purpose statement and mission seek to uplift the well-being of the child in the community, at school and at home. Nigeria identifies the association as a crucial partner in making sure that the society backs the state government to make sure that every child in Nigeria attains quality education through prompt payment of levies (Maryam, 2011).

Laboke (2011) noted that there were other sources of financing education in Ghana where parents are encouraged to provide support to schools by paying levies to run specific costs of education. The author did not specify the kind of costs paid by the parents. Similarly, the author did not correlate the levies to student participation thus it paved the way for the current study to do so. Verspoor (2011) posits that Parents Teachers Association levies are instrumental in the provision of facilities in schools to enable teaching and learning to take place. Mbugua (2011) concurs with this study holding that PTA funds were used in developing school physical facilities. The two studies remained silent on the effect of PTA levies on student participation hence paving the way for the current study to do so.

While considering the factors that influence the educational opportunities for boys and girls, Dean (2016) emphasised the importance of accessible and adequate school infrastructure with sufficient instructional materials. The study as well found that good and well-maintained infrastructure such as classrooms attract students to remain in school thus enhancing their retention and transition. The study also noted that teachers' gender matters in education. That both boys and girls need role models as they pursue their education. The study concludes that both physical infrastructure and human resources have a role in the provision of education. The research provides suggestions for improving the quality and accessibility of educational materials. While the study emphasised the significance of school infrastructure, it did not account for the costs of repairs, maintenance, and improvements or how those costs might affect student transition. The current study, therefore, filled the gap.

3.0 Research Methodology

The study was done in public boarding secondary schools in Uasin Gishu County, Kenya. This research adopted both quantitative and qualitative approaches. To be precise, it employed a Mixed Methods Design specifically the Convergent Parallel Mixed Methods Approach. According to Creswell (2014), investigations that collect both qualitative and quantitative data fit into the Convergent Parallel Mixed Methods Approach. He further argues that the design enables the researcher to combine the two forms of data, conduct more research, and provide a comprehensive evaluation of the issue at hand. (Creswell, 2014). The target was 3917 parents of form four students and 34 principals from the 34 public boarding secondary schools. Yamane simplified formulae followed by proportional random sampling was used to sample 362 parents. The 34 principals were purposively sampled. Sampling was done as Kothari & Garg (2014) notes that it gives every individual component in the population an equal opportunity to take part in the research. Questionnaires were used to collect quantitative data from the parents, while interview schedules aided in acquiring qualitative data from the principals.

Variables

Both the independent and dependent variables were taken care of by the study. Student transition rate was the dependent variable, whereas direct costs of education were the independent variables. Direct educational costs (expenses) covered the costs of accommodation and meals, repairs, maintenance and improvement, activity fees and Parents' Association contributions.

5.0 Conclusion

The direct costs of education include the costs of accommodation, meals, Activity, Repairs, Maintenance and Improvement. The reviewed literature linked these expenses to the number of students transferring between grades in public boarding high schools. Such costs are borne by families who send their children to public boarding schools, according to the research. A majority of principals agreed that these expenditures are necessary to maintain a steady,

progressive educational environment. The study also found that students' transition rates can be predicted in large part by the actual costs of their education. The research demonstrated that the direct costs of education vary in terms of their influence and contribution to the shifts in student transition rates in public boarding secondary schools. For instance, the transition rate among students was most affected by the cost of Repairs, Maintenance, and Improvement (RMI)). On the other hand, students' transition was barely affected by the cost of school lunches. Increases in any component of direct educational costs led to lower transition rates. Thus, this research concludes that, student transition rate in Kenyan public boarding schools is affected by the direct costs of education incurred by households despite tuition waivers and other government policies.

6.0 Recommendations

Good and stable prices for products like maize, milk, wheat, tea, and coffee should be provided by the government so as to boost parents' economic power and ability to meet the financial obligations like boarding school expenses. The government should also provide low-interest loans to low-income families so that they can pay for their children's education. Parents, too, need to be educated on the role they play in encouraging their children to get involved in schooling. Schools to fully support the poor students in boarding secondary schools by seeking donations from a variety of sources, including sponsors, donors, and well-wishers.

Given that this study was conducted in public boarding secondary schools, a similar investigation should be carried out in private boarding secondary schools for comparison.

References

- Abuya, B.A. & Mutisya, M. (2018). *Why funding alone can't shake up Kenyans School Transition Rate: Population and Health Research Centre*. Retrieved from <https://theconversation.com/why-funding-alone-cant-shake-up-kenyas-school-transition-rate-95443>.
- Abuya, B., Adamson, K., Ngware, M. Onsomu, E & Oketch, M. (2015). *Free Primary Education and Implementation in Kenya: The role of Primary School Teachers in Addressing the Policy Gap*. Nairobi: Sage.
- Ahmed, M. (2011). *Impact of feeding children in school: Evidence from Bangladesh*. Washington, D.C: International Food Policy Research Institute.
- Akaguri, L. (2011). *Household choice of schools in Rural Ghana: Exploring the Contributions and limits of low-fee private schools to Education for All*. Ph.D. Thesis, University of Sussex.
- Alderman, H. Behrman, J. R. Lary, V, & Menon, R. (2001). Child health and school Enrolment: A longitudinal analysis. *The Journal of Human Resource*, 36(1):185-205
- Amjad, R. & Macleod, G. (2014). Academic effectiveness of Private-Public and Private-Partnership Schools in Pakistan. *International Journal of Education Development*, 37, 22-31.
- Amunga, J. & Ondigi, B. (2016). The effect of user charges on access to basic education in Kenya. *International Journal of Advanced Engineering and Science (IJAERS)*, 3(2), 73-78.
- Barungi, M. & Mwesigye, F. (2019). *Lowering the cost of secondary Education Strategies Public-Private Partnerships: Evidence from the promoting Equality in African Schools (PEAS) Programme in Uganda. Policy Brief: Economic Policy Research Centre. Issue No. 103 (March 2019)*. Retrieved from <https://ideas.repec.org/p/ags/eprcpb/291794.html>
- Bennell, P., Bulwani, G & Musikanga, M. (2016). Costs and Financing of Secondary Education in Zambia: A Situational Analysis, No. 42912. Vol. 6. Retrieved from: <https://agris.fao.org/agris-search/search.do?recordID=US2012415382>
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th Ed.). Thousand Oaks, CA: Sage
- Gasson, N. R., Pratt, K., Smith, J. K., & Calder, J. E. (2017). The Impact of Cost on Children's Participation in School-Based Experiences: Parents' Perceptions. *New Zealand Journal of Educational Studies*, 52(1), 123-142. <https://doi.org/10.1007/s40841-016-0046-z>
- GoK. (2010). *Educational Statistics Booklets 2003-2007*. Nairobi: Government Printers.
- GoK. (2012). *A Policy Framework for Education: Aligning Education and Training The Constitution of Kenya and Vision 2030 and Beyond*. Nairobi: Government Printers.
- GoK (2012). *Evaluation Research for Beginners: A Practical Study Guide*. Bonn: Deutsche Stifling for International Eritwick.
- Hanushek, E.A. (2007). *Education Production Functions*. Stanford. California: Stanford University

- KIPPRA. (2001). *Education Indicators in Kenya* (No. 4; Working Paper). Nairobi: KIPPRA.
- Kiruru, N. J., Mogaka, M. C., & Pierre, M. J. (2020). Schooling Hidden Costs : the Correlation Between Home-Based Costs and Students ' Transition Rate in Rwanda. *European Journal of Education Studies*, 34–54. <https://doi.org/10.5281/zenodo.3834855>
- Kombo, D. and Tromp, D. (2009). *Proposal and Thesis Writing: an Introduction*. Nairobi: Paulines Publications Africa.
- Kothari, C. & Garg, G. (2014). *Research Methodology (3rd ed): Methods and Techniques*. New Delhi: New Age International Publishers.
- Kothari, C.R. (2014). *Research methodology methods and techniques* (2nd Ed.). New Delhi: New Age International Publishers.
- Lancaster, G. Dodd, S & Williamson P. (2004). Designed and analysis of pilot Studies; recommendations for good practice. *Journal of education in clinical practice*, 10(2), 307-312
- Ministry of Education, Kenya. (2012). *Report of the task force on the re-alignment of the Education sector to the constitution of Kenya 2010: towards globally competitive quality education for sustainable development*. Nairobi: Ministry of education
- Muganda, J.A., Simiyu, A.M. & Riech, A. (2016). Factors affecting Subsidized Free Day Secondary Education in Enhancing Learners' Retention in Secondary Schools in Kenya. *Journal of Education and Practice*, 7(20), 49-55.
- Mugenda, O. & Mugenda, A. (2003). *Research Methods: Qualitative and Quantitative Approaches*. Nairobi: Act Press.
- Mutegi, R.G., (2015). *Influence of unit cost of Education on student Enrolment rates In Public secondary schools in Tharaka South Sub-County, Kenya*. Ph.D. thesis, University of Nairobi.
- Nderitu, J. (2011). *Determinants of Education output in public secondary schools in Central Province, Kenya*. Ph.D. Thesis, Kenyatta University.
- Njeru, E & Orodho, J. (2003). Access and participation in secondary school education In Kenya: Emerging issues and policy implications Volume of Issue 6. Nairobi: IPAR.
- Njeru, H.E., & Orodho, J.A. (2003). *Financing Education in Kenya: Secondary School Bursary School Implementation and Challenges, Discussion Paper 035/2003*, Nairobi: Institute of Policy analysis and Research.
- Njuguna, F.W & Muchanje, P.N. (2019). Socio-economic factors affecting retention of boy-child in Secondary Schools of Mathioya, Kenya. *Journal of Education and Practice*, 10(29), 70–83. <https://doi.org/10.7176/jep/10-29-10>
- Nora, A. (2016). The role of perception of Prejudiced and discrimination on the Adjustment of minority students in F College. *Journal of Higher Education*, 67(2), 1538-4640.
- OECD. (2015). *Education Policy Outlook. Making Reforms Happen*. OECD Library. Retrieved from: <http://dx.doi.org/10.17/97/89264225442-e>
- Ohba, A. (2009). Does Free Secondary Education enable the poor to Gain Access? A study from rural Kenya, *CREATE Pathways to Access Research Monograph No. 21*. Retrieved from: http://www.create-rpc.org/pdf_documents/PTA21.pdf

- Oso, W. Y. & Onen, D. (2009). *A general guide to writing research proposal and report*. Nairobi: Jomo Kenyatta Foundation
- Ouma, J.M. (2016). Fifty years of Boy Child Education in Kenya: A Paradigm shift. *International Journal of Humanities and Social Science Invention*, 5(9)53-57. Retrieved from HTTP://www.jhssi.org/Papers (9) version 2/B0520610.pdf.
- Preston, Smith, and Calder (2016). *The Impact of Cost of Childrens' Participation in School-Based Experience: Parents Perceptions*. New Zealand Association for Research in Education
- Spata, A.V. (2003). *Research Methods in Psychology: Science and Diversity*. Hoboken, New Jersey: Wiley
- UGCIDP. (2013-2018). *Uasin Gishu County Integrated Development Plan*. Retrieved From: <https://repository.kippira.or.ke/handle/123456789/841>
- UNESCO. (2014). *Progress in getting all children to school stalls but some countries show the way forward*. Paris: UNESCO
- UNESCO. (2019). *Migration, Displacement and Education: Building Bridges, not Walls. Global Education Monitoring Report (1ST Ed.)*. Paris: UNESCO
- UNESCO. (2015). *Education for All 2000-2015: Achievement and Challenges: EFA Global Monitoring reports 2015, PP.75-103*. Paris: UNESCO.
- UNESCO. (2017). *Strengthening peer learning of education policies for SDG 4: the role of Regional organizations*. Paris: UNESCO.
- UNESCO. (2021). *Global education monitoring report, 2021/2: non-state actors in education: who chooses? who loses?* Paris: UNESCO.
- UNESCO & UNICEF. (2007). *A Human Right Based Approach to Education for All. A Frame Work for the Realization of Children's Rights to Education and Rights within Education*. New York: United Nations Children's Fund/ United Nations Educational, Scientific and Cultural Organization.
- UNWOMEN. (2022) *Progress on the Sustainable Development Goals: the gender Snapshot*. Retrieved from: progress-on-the-sustainable-development-goals-the-gender-snapshot
- Wachiye, W. & Nasonga, J. (2010). *Access to secondary education through the Constituency bursary fund in Kanduyi Constituency Kenya*. Masinde Muliro University of Science and Technology. Retrieved from: <http://www.academicjournal.org/err2>.
- World Bank. (2004), *Strengthening the Foundation of Education and Training in Kenya Report No. 28064_KE*. Washington, D.C.: World Bank.
- World Bank. (2010). *World Development Report 2000/2001: Attacking Poverty*. Washington, D.C: The World Bank.
- World Bank. (2011). *World Development Report 2000/2001: Attacking Poverty* Washington D.C: The World Bank.
- World Bank. (2014). *World Development Report 2000/2001: Attacking Poverty* Washington, D.C: The World Bank.
- Yamane, T. (1967). *Statistics: An Introductory Analysis (2nd Ed.)*. New York: Harper & Row.