

Effect of Increased Enrollment on Learning Resources in Public Primary Schools in Masaba South Sub-County, Kisii County, Kenya

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Abstract: The purpose of the study was to do an evaluation of selected factors on quality education in public primary schools in Masaba South sub-County, Kisii County, Kenya. The study attempted to achieve the following specific objectives: to ascertain the effect of learning facilities factors affecting quality education. The study adopted sequential explanatory design within mixed method approach. The study was guided by Human capital theory assisted by social systems theory of management and a conceptual framework was used to show interrelationships between the variables. The target population for this study was 82 head teachers, 112 deputy head teachers in public primary schools, from 82 primary school teachers in the South sub county. The sample constituted of 68 head teachers, 86 deputy head teachers, from the 68 sampled public primary schools. Stratified sampling was used in selecting the respondents of the study. A questionnaire, interview schedule, and document analysis was used to collect primary data. Validity of the questionnaire was done by the expert judgment of the lecturers in the school of education, planning and economics. Pilot testing was done using nine respondents to ensure reliability before being used in the study. Using Split- Half method by Spearman Brown Formula, an index was established to ascertain reliability. The reliability index for the questionnaire was 0.818. Data was analyzed both quantitatively and qualitatively. On the concern about the effect of learning facilities on quality education, the study found out that library had a highest input towards learning resources with a Beta coefficient of .391. The second largest Beta coefficient was .341 which was for electricity. This was followed closely by the professional documents, ICT integration, water, latrines, administration offices, playground, classrooms and Laboratory with Beta values of .146, .125, .106, .094, .074, .054 and -.088 respectively. On the concern about effect of teacher resource on quality education in primary schools, work load had a highest input of .260 towards teachers as a resource; it was followed by syllabus which had an input of 209 units. Teacher pupil ratio had the lowest input of -.130 units. The content, testing policy, capacity building, and adequacy had inputs of .017 units, .024 units, .079 units, .084 units .088 units respectively. This study is useful to the Ministry of Education to make necessary changes on the effect of the selected factors on quality education provision in public primary schools. The researcher recommended that the Ministry of Education revisits its policies related to Primary Education and make changes on the findings to enhance quality education. The researcher suggests a study to be done on the effect of the other remaining factors on quality education.

Keywords: Education In Public Primary Schools, Enhance Quality Education.

1. INTRODUCTION

1.1 Background of the Study:

Quality education includes learners who are well-nourished, ready to participate and learn, healthy, and supported in learning by their families and communities. It is about school environments that are healthy, safe, protective and gender-sensitive, and provide adequate resources and facilities. The content also should be reflected in relevant curricula and materials for the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and knowledge in such areas as gender, health, nutrition, HIV/AIDS prevention and peace. The processes through which trained teachers use child-centred teaching approaches should have well-managed classrooms and schools and skillful assessment to facilitate learning. This will reduce disparities and outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society (UNICEF, 2000)

According to UNESCO (2002) quality education is associated with the ratio between inputs and outputs. The output of education refers to that portion of student growth or development that can be reasonably attributed to specific educational experiences. Further, in the analysis of indicators of quality education, there are a number of internationally recognized indicators of quality that are highlighted in the substantial body of literature which attempts to determine the appropriate school quality inputs required to boost student achievement. OECD (2010) documents that although much debate surrounds attempts to define quality education; common ground exists, as the issue of the Education for All (EFA) Global Monitoring Report makes clear. Additionally it asserted that quality must be seen in light of how societies define the purpose of education. In most, two principal objectives are at stake: the first is to ensure the cognitive development of learners. The second emphasizes the role of education in nurturing the creative and emotional growth of learners and in helping them to acquire values and attitudes for responsible citizenship. Finally, quality must pass the test of equity: an education system characterized.

The UNESCO (2007), Santiago model proposes five dimensions of the quality of education that attempt to capture the perspectives of the various educational stakeholders concerned and the social action that they are engaged in at the local level. In addition to the dimensions of effectiveness, efficiency and equity that characterize an educational system, the model stresses the dimension of relevance which is analyzed at two distinct levels: relevance of the educational system in responding appropriately to collective societal concerns, and relevance to the daily conditions of individual learners, their families and communities. The five dimensions of this model are defined in the following manner; first, relevance is the need for educational experiences to guarantee the kinds of learning that truly prepare people for modern life, and in line with the vision of four pillars of learning as proposed by the UNESCO (2006) "Delors Report". Secondly, pertinence which is the flexibility of the educational experiences so that they can adjust to the particular conditions of individuals, can value diversity, and can provide venues for participation. Thirdly, equity meaning the extent to which the universal right to education is effective for all in view of the creation of more just societies. Fourthly, effectiveness which is the extent to which public action is effective in expanding access to basic education. That is comprehensive early childhood care and education, universal completion of primary education, ensuring student learning achievement. Finally, efficiency means the extent to which public services are efficient in the use of resources for the delivery of education as a public good.

The concern to improve quality of education in schools has started receiving the highest priority in almost all countries throughout the world. Earlier, emphasis was being placed on ensuring access to complete and free primary education for all the children. However, with the tremendous growth in school enrolments throughout the world, priority given earlier to educational expansion and access is now being replaced by plans and policies that are calling for the quality of schooling. This concern has become universal in the developed as well as in the developing countries, in those that have achieved total access as well as in those still striving for access. In fact it has now been established that access and quality are not sequential elements, and a number of international organizations have visualized the role of quality as being instrumental in improving access (UNESCO, 2003, UNESCO, 2005).

The Global Monitoring Report (2005) highlights the importance of the quality of education provided in schools and access seen in terms of the teaching - learning processes and how much pupils are learning. First of all, quality schooling, generally speaking, means higher life time incomes. By enhancing students' cognitive skills, improved school quality directly influences their performance in the labour market and hence relates to individual earnings, greater productivity and economic growth. Increased attainment by learners also results in higher completion rates at all levels of schooling

and consequent reduction in rates of repetition and drop out (UNESCO, 2005). Apart from influencing individual productivity and income, higher school quality also has a strong impact on economic growth of countries as some studies have shown (Hanushek and Kimko, 2000; Lee and Barro, 2001). Schools are also instrumental in developing desirable non-cognitive outcomes among students that may contribute to economic success such as honesty, reliability and determination. There is also good evidence to suggest that the quality of education and acquisition of cognitive skills have important social returns (UNESCO, 2005).

While many countries such as Senegal, Bangladesh, India and Egypt are making impressive progress in access to primary education, learning achievements still continue to be a problem (UNESCO, 2005). A review of major research studies and achievement surveys in India found the academic performance of primary school pupils to be disappointingly low. The percentage of students who attained mastery levels was found to be negligible (Reddy, 2004). A compilation of various studies in Pakistan concluded that on the average, students do not achieve competency on more than half the curriculum in the 5th grade. Moreover, pupils performed better on rote learning skills than items requiring comprehension and problem solving skills (UNESCO, 2003).

UNICEF (2005) documents that school curriculum have three dimensions; the formal, non-formal and informal which are prerequisites for a holistic approach towards learning and in turn well balanced development of learners. The report indicates that quality education aims at the wholesome development of children. In fact all-round development is the key theme of education. Additionally, when a child comes to school, he/she comes in totality and so education should help him/her to develop total personality. To fulfill these purposes, varieties of educative experiences are to be provided in the school programs which may contribute to a long, happy and normal life of the child. In this regard, educational experiences should not only include formal knowledge to help him to develop intellectually and mentally but also impart lots of other experiences for his social, physical and spiritual development.

In Ghana, the mean score of grade 6 pupils was a mere 25%. In Bangladesh, rural children aged 11 years had poor reading and comprehension skills (Glewwe and Kremer, 2005). It is fairly evident from the above account that school quality differs widely within and between countries. Children in developing countries not only receive fewer years of education, but also attain lower achievement levels compared to their western counterparts. This reflects the low school quality in developing countries. In developed countries too, the stagnation of pupil performance on test scores represents a puzzling phenomenon (UNESCO, 2005; Glewwe and Kremer, 2005).

Quality schooling may often play a crucial role in governing parental choices for sending children to school and in determining their attendance patterns. The findings from a few African countries show that the attainment of cognitive skills are critical for determining earnings, apart from the number of years of schooling (UNESCO, 2005). The status of educational quality across various countries can be gauged from internationally comparable data on academic performance and test scores which have often served as a proxy for educational quality. The third International Mathematics and Science Study, Progress in International Literacy Study and Programme for International Assessment are international surveys of cognitive achievement mainly from developed countries, but also include a few middle income developing countries (UNESCO, 2005).

Educational resources can be categorized into four groups that is human, material, physical and financial resources. Educational resources are central to the educational process because they play an important role in the achievement of educational goals and objectives since they facilitate teachers' work and accelerate learning on the part of the student (GOK, 2005). Republic of Kenya (2010) noted that the educational system has stipulated various activities, materials and requirements which are inadequate that need to be provided at all levels of the system in order to meet the objectives of education. The nature of the curriculum presupposed that infrastructure, laboratories, workshops, classrooms, equipment, physical facilities and teaching aid would be provided to implement the scheme successfully.

In Kenya tangible achievements have been made through the quest for universal access to education which has been a legitimate priority for the post-colonial period. One of these landmark achievements has been the provision of free primary education and subsequent increase to enrolment, especially after 2003. However, beyond the euphoria over the alleged success of the free primary education initiative and the increased enrolment, there has been little policy attention to issues of quality primary school education (Sifuna & Sawamura, 2008).

Bogongo, (1992) assert that Kenya embarked on an educational program aimed at universalizing access to education upon attaining political independence in 1960. The first president of Kenya observed that the young nation faced three major threats: poverty, disease, and ignorance.

In combating these perceived enemies the government touted increased enrollment as a viable weapon. This commitment was amplified in the reports of various education commissions; notably the Ominde commission of 1964 and the Gachathi commission report of 1976, as well as in various national developments plans. The Kenyatta government (1963-1978), the first post-independence government in Kenya, set the pace by declaring in the ruling party's manifesto of 1963 and 1969 that the government was committed to providing seven years of free primary education.

According to Gok (2003), the number of public primary schools in the country had increased steadily from 14,864 in 1990 to 18,901 in 2001/2 representing a 27.2% increase. This has brought a high strain on educational resources, teacher resource, gender parity and pupils' participation on co-curricular activities. The Gok has further noted that the percentage of girls' enrolment had also increased in the same period to 49.3%, implying that gender parity in enrolment in public primary schools at the national level had effectively been achieved.

Ngugi and Njeri (2008) have noted that since its implementation, FPE has received both praise and criticism more especially on the resources not matching with the large numbers. On the whole, the policy received widespread support because it alleviated financial concerns from parents and gave children who had no chance of going to school the opportunity to do so. They also assert that enrolment increased by 39% from 5.9 million in 2002 to 8.2 million in 2008, incorporating an additional 2.3 million Kenyans into the school system. Ksh 47.5 billion has been distributed to 18,346 public primary schools to date. The government has not failed to provide its Ksh1, 020 to each student per year. Primary school completion rates have increased from 62.8% in 2002 to 81.0% in 2007. Concurrently, transition rates from primary to secondary schools have also increased by just over 10%. More girls have also been integrated into the system, nearly attaining gender parity at the national level. Textbook ratios have also improved, though not adequate.

Mushtaq and Najum (2009) assert that despite its achievements, FPE in Kenya has also many challenges. The number of teachers or facilities was not expanded to accommodate new numbers head teachers lacked any knowledge on financial management, communication between stakeholders was poor, funds were not always allocated on time, and there was a lack of accommodations.

Kigotho and Wachira (2007) also noted that although free primary education under government seems to have increased pupil enrolments, it has at the same time created considerable problems as the preliminary surveys show. The program seems to have exacerbated the problem of teaching and learning facilities, there is a lot of congestion in classrooms, learning facilities are minimal, and many school management committees feel they are restricted in improving the state of learning due to the government's ban on school levies and the conditions laid down to request for concessions are cumbersome and slow.

UNESCO (2009) asserts that a few reasons accounted for why Kenya was now able to successfully implement FPE. First, Kenya was in a stronger economic position to support the program than it was before. It was no longer suffering from economic decline that crippled it in the 1980s and 1990s. The country also received a considerable amount of international support and financial aid that helped it put the program into place. The 2000 Education for All Campaign gathered African heads of state in Dakar, Senegal, to promote the importance of access to primary education for all. Free primary education is also a Millennium Development Goal. So when Kenya proposed the FPE program, the international community was more than willing to help. International donors include the World Bank (\$50mil), UNICEF (\$2.5 mil), and the UK Department for International Development (\$21.1 mil), the World Food Programme (\$13.9 mil) and OPEC (\$9.9 mil). The government had enough funding to get its program up and running.

Republic of Kenya (2012) noted that learning can occur anywhere, but the positive learning outcomes generally sought by educational systems happen in quality learning environments. Learning environments are made up of quality educational facilities. Further indicates that content refers to the intended and taught curriculum of schools. National goals for education, and outcome statements that translate those goals into measurable objectives should provide the starting point for the development and implementation of curriculum and co-curricular activities. Educational processes entail how teachers and administrators use inputs to frame meaningful learning experiences for students. Their work represents a key factor in ensuring quality school processes. The environment, content and processes that learners encounter in school lead

International Journal of Novel Research in Education and Learning

Vol. 4, Issue 1, pp: (47-81), Month: January – February 2017, Available at: www.noveltyjournals.com

to diverse results, some intended and others unintended. Quality learner outcomes are intentional, expected effects of the educational system. They include what children know and can do, as well as the attitudes and expectations they have for themselves and their societies.

Republic of Kenya (2015) asserts the policy framework on reforming Education and Training Sector in Kenya to realign it to vision 2030 and the constitution of 2010. It commits the Government of Kenya to provide every child with quality education. The Sessional paper noted that quality education entails: relevance of curriculum; adequacy; knowledge; skills and competencies; globally competitive education; acquisition of desired values, attitudes, innovativeness and creativity. Further, it asserted that quality education is that which enables people develop all their attributes and skills to achieve their potential as human beings and member of societies. Quality education enables each of us develop all our talents to the full and to realize our creative potential including responsibility for our lives and achievement of personal aims. Quality education promotes good quality teaching/learning processes. It provides content and good quality materials and resources. It enhances teacher capacity, morale and commitment. Quality education enhances quality learning outcome by defining and helping children learn what they need to learn and teaching them how to learn. Additionally, quality education provides healthy, hygienic, and safe learning environment, with adequate water and sanitation facilities and healthy classrooms, healthy policies and practices and provision of health services such as nutritional supplementation and counseling. It provides life skills, physical and psycho socio-emotional health of learners and teachers. Quality education helps defend and protect all children from abuse and harm.

The Kisii County Education Conference, (2016) report which was held by all the education stakeholders including; professionals, parents, political leaders and scholars indicated that there is need for research on the cause of lowering quality of education in the County. It was noted that teaching and learning is not taking place despite the fact that there has been increased enrolment rates in the County. The Ministry of Education report released by Masaba sub- County Quality Assurance and Standards office (2016) noted that issues dealing with pupils' participation on co-curricular activities, gender parity teacher pupil ratio and adequacy of learning resources have not been addressed well. This has brought educational quality challenges. Due to the above the researcher decided to evaluate the effect of selected factors on quality education in Masaba sub- county, Kisii County, Kenya.

1.2 Purpose of the Study:

The purpose of this study was to explore learning facilities factors affecting quality education in public primary schools Masaba South sub-County, Kisii County, Kenya.

1.3 Research Hypotheses:

The following were the research hypotheses which were used in this study

H₀: There is no statistical significance between learning resources and quality education

H_a: There is a statistical significance between learning resources and quality education

1.4 Scope of the Study:

Evaluation of selected factors on quality education in public primary schools in Masaba South sub-County, Kisii County of Kenya was considered. The study was carried out in Masaba South sub-County, Kisii County, Kenya. The study was guided by Human Capital Theory and social systems theory of management. A target population of 112 deputy head teachers' and 82 head teachers were sampled. Sequential explanatory within mixed method approach design was used in the study. The data was collected through self –administered questionnaire for deputy head teachers, an interview schedule for head teachers and document analysis. Data was analyzed qualitatively using themes and quantitatively using descriptive and inferential analyses.

1.5 Assumptions of the Study:

The research study was based on the following assumptions:

That there are effects of selected factors on quality education provision in public primary schools. That the respondents will be honest and cooperate with the researcher in providing the required information and the responses provided will reflect true and accurate information.

1.6 Limitations of the Study:

The research study was faced with the following limitations:

This study may not be generalizable to other public primary schools in other sub-counties. Differing institutional environments and differing developmental missions restricted the results of this study to Masaba sub-County. Nevertheless, the underlying theoretical assumptions and methodology of this study, as well as the findings of this study, could be of assistance to other public primary schools elsewhere that want to explore an evaluation of the selected factors on quality education provision.

There was reluctance of some key informants which was assumed to be a result of their limited understanding of the research topic or to weakness found in their school environment. To control the problem of fear to disclose the weak points of the schools the research assured respondents of anonymity. To minimize the limitation of inadequate understanding of the topic the researcher was to explain to the respondents what the research is all about. Some respondents did not have enough time to fill the questionnaire, the researcher was obliged to interview them and complete the test items.

Finally, due to the poor attitude of some stakeholders, the researcher was confronted by an apprehension of some respondents in giving information which they regard confidential. Respondents were also hesitant in giving information on quality of education for fear of portraying their institutions. However these limitations were minimized by the fact that the study was carried out using respondent who were professionals and familiar to the researcher. Secondly, the researcher assured the respondents of confidentiality. The researcher's personal acquaintance with respondents also made it possible to share ideas with them.

1.7 Theoretical Framework:

The theoretical background of this study is based on the concept of the provision of quality primary school education. This was done using Human Capital Theory supported by the Social Systems Theory of Management. Human Capital theory states that investment in education enables one to climb the social-economic ladder through enhanced income capacity. Human capital is the stock of skills that the labor force possesses. The flow of these skills is forthcoming when the return to investment exceeds the cost (both direct and indirect). Returns to these skills are private and the individual's productive capacity increases with more of them. But there are often externalities that increase the productive capacity of others when human capital is increased. Human capital is defined in the skills the labor force possesses and is regarded as a resource or asset. It encompasses the notion that there are investments in people (e.g., education, training, health) and that these investments increase an individual's productivity.

The fundamental difference between humans and other species is the extensive transmission and preservation of knowledge among humans. This transmission and preservation is what has led to modern economic growth. But the transmission could not have been broad based and could not have reached the "masses" of people if not for institutions called schools. The theory highlights that education systems should be designed in a way that learners at all levels achieve quality education to enhance their economic productivity. Modern theories of economic growth have focused on developing human capital as an endogenous factor that could accelerate technological progress towards economic growth. This is made on that basis that the behavior of people responsible for accumulation of factors of production and knowledge can be modified by policy through quality education.

This theory is supported by the Social Systems Theory of Management in an attempt to justify quality education in operations of an organization as a system. The theory also views an organization as a social system consisting of individuals who cooperate within a formal framework, drawing resources, people, finance and time from their environment and putting back into that environment. The systems theory maintains that an organization (school) does not only depend on its environment but it is also part of a larger system such as the society or the economic system to which it belongs. Educational system is a complex system comprising of subsystems at different levels. These are: macro (state), meso (school) and micro (student) levels. At each of these levels, educational decisions are influenced by different actors, for example, at the school level the school committee, the head teacher, teachers, and parents make certain decisions and give opinions on the management of the school. Schools are open systems hence they respond to the external influences as they attempt to achieve objectives.

The theory also puts forward the concept that a system is a collection of parts unified to accomplish an overall goal. A school system can be looked at as having inputs, processes, outputs and outcomes, which in the long run produce feedback. Inputs include resources such as textbooks, laboratory, teachers, pupils, money, time and physical resources. These inputs go through a process where they are planned, organized, motivated and controlled, ultimately to meet the organization's goals. Outputs are results obtained after inputs are processed. Outcomes are seen by improved life styles of or productivity. Feedback would be information from human resources carrying out the process or from the larger environment of the organization, e.g., influences from government, society, economies, and technologies. If there is a mismatch between inputs, processes and outputs in an educational system, then the quality education will not be achieved.

In studying a system consisting of inputs, educational processes, and outputs, the most desirable outputs is quality education. Thus, quality education is a determining factor on the kind of life people lead after schooling. A major problem in primary schools in developing countries is quality primary education which has been camouflaged by the desire to promote access to education by increasing education opportunities to school-age population, in a bid to achieve Universal Primary Education (UPE). Generally the above theories were found to be relevant to the proposed study because policies regarding the adequacy of resources must be properly addressed in public primary schools which may otherwise lead to negative direct implications on quality education, a trend that can be addressed and reversed.

1.8 Conceptual Framework:

According to Orodho (2005) a conceptual framework is a model of presentation where a researcher conceptualizes or represents the relationship between variables and shows the relationships grammatically and diagrammatically. In this study the dependent variable was quality education whose indicators are; adequacy of learning resources and adequacy of teacher resource, The independent variable were the selected factors whose parameters are; learning resources which include office, laboratory, class rooms, library water, playground, ICT, latrines, professional records, and electricity, teacher resources including work load, teacher pupil ratio, content, capacity building, and testing policy and syllabus coverage.

2. LITERATURE REVIEW

2.1: Introduction:

This chapter is divided into four subsections of reviewed literature relevant to the research study. The first section deals with a review on effect of learning facilities on quality education in school. The second section deals with the effect of teacher resource on quality education in school. At the end of each subsection an integrated critique is provided that opens gaps to be filled by the present study

2.2: Effect of Learning Resources on Quality Education in School:

Mazhar and Saima (2008) carried out a study in Pakistan on determinants of enrollment in primary education a case study of district Lahore. Primary data was collected from 3320 households where 2520 households belonged to the urban areas and 800 households belonged to the rural areas. The factors contributing positively and significantly to net enrollment of children at primary school level were found to be family size, dwelling ownership, expenses on education, literacy ratio and dependency ratio. It was also established that access to school is not a very significant factor towards inhibiting school attendance. It was concluded that despite the positive effect of some of the characteristics of individuals and households on gross as well as net enrollment, there are various more strong qualitative factors across the socio-economic spectrum that had differential impacts on school enrollment.

Idiage (2004) noted that teacher's qualification and adequate facilities were determinants of assessing academic performance of students in secondary schools. Hence the availability of facilities in schools affects the academic performance of students. Many studies done on factors influencing poor performance of students in KCSE examinations have indicated increased enrollment leading to inadequate teaching learning resources as one of the key variables Kitheka (2005).

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 Vol. 4, Issue 1, pp: (47-81), Month: January – February 2017, Available at: www.noveltyjournals.com

Kwame, Jerome, Abena, Athassan and Frances (2007) wrote a paper entitled “The Consortium for Educational Access, Transitions and Equity (CREATE)”. Consortium supported by the UK Department for International Development (DFID). Its purpose was to undertake research designed to improve access to basic education in developing countries. What also emerged from this review was the importance of ensuring that children start school at the appropriate age, especially in the first grade. There was a high risk of older children dropping out as they are pulled away into the informal labour market especially in contexts where poverty is high. If they start school late chances are that they will drop out. This review also indicated that what is perhaps needed are a range of interlocking supply and demand policy driven initiatives to create meaningful access. The evidence points to the fact that late entry and early withdrawal is influenced by children’s health in the early years (undernourished children are likely to start school late and more likely to drop out). Here is where targeted school feeding programmes in which children from poor rural areas are provided one school meal of high nutritional value can make a difference. Poverty is clearly at the root of poor participation in school in Ghana – in contexts where poverty is high we can expect to see a high incidence of child labour, migration out of communities etc. Girls’ enrolment and attendance is especially affected by such conditions. The purpose of the study was to undertake research designed to improve access to basic education in developing countries whereas the researcher’s purpose was to study on how the evaluation of selected factors on quality education in Kenyan context hence filled the gap in the literature.

Boyle, Brock, Mace, and Sibbons, (2002) wanted to have a comprehensive understanding of the burden of educational costs, both indirect and direct and purchase of educational resources on poor households. The study was conducted across four countries (Bangladesh, Nepal, Uganda and Zambia) in four sites (3 urban and rural selected using various poverty indexes). In each site, 75 semi-structured interview (SSI) questionnaires were administered to individual. Specific details of each site were provided, but typically 140-180 households were surveyed from each country. For purposes of comparison, approximately 75% of these were poor households while 25% were given to slightly better off households. Qualitative data were collected through group and individual interviews to triangulate data and add depth to the information gathered. Participatory Approaches Groups were conducted with (1) boys and girls (2) primary and secondary teachers (3) parents and community leaders. Supplementary data was included from two countries (Kenya and Sri Lanka). Only qualitative data through Participatory Appraisal (PA) methods was collected in these locations. The study found that poor households are not concerned with educational resources and do not make both economic and non-economic decisions accordingly. The poor are disproportionately vulnerable to economic shocks. Socio-cultural factors and gender play a role in deciding which children to educate, as well as school characteristics, such as safety and punishment. Poor households routinely listed cost as a prohibitive factor and often made sacrifices in consumption to meet school costs. The study wanted to create a comprehensive understanding of the burden of educational costs, both indirect and direct and purchase of educational resources on poor households in Bangladesh, Nepal, Uganda and Zambia which creates a gap as the researcher’s study was on the increased enrollment in primary education and its implications on quality education in Kenya. While the above reviewed study used only households as their respondents the present study used the head teachers and deputy head teachers in schools another gap to be filled in the literature.

Usman (2007) noted that central to the education process are educational resources which play an important role in the achievement of education objectives and goals by enhancing effective teaching and learning. According to Adeogun and Osifila (2008) physical resources include laboratories, libraries, classrooms and a host of other physical infrastructure while material resources include textbooks, charts, maps and should be proportional to the enrollment in schools.

Akisanya (2010) commenting on educational resources says that, they are important because the goal of any school depends on adequate supply and utilization of physical and material resources among others as they enhance proper teaching and learning. Karimi (2011) noted that effective school libraries provide additional reading opportunities for students which in turn improve reading skills, comprehension and writing clarity of expression which in turn support students’ performance in all other curriculum subjects. He further noted that size of school library should be able to accommodate the size of the school.

UNESCO (2005) did a study whose purpose was to examine the first year of free primary education in Kenya and to uncover existing challenges. The study used various data collection techniques. Multi-stage sampling was used that first included purposively sampling of five out of eight administrative provinces, from which two districts were sampled that represented high and low agro-ecological zones as well as contrast in performance on the Kenya Certificate of Primary

Education exam in 2002. A total of 9 districts were selected: two from each province except Nairobi. From each district, stratified random sampling was used to select 18 schools (based on good vs. poor KCPE performance) which resulted in 162 schools total. Replacement was used for schools that were inaccessible due to their remote location. From each school, a representative sample of stakeholders was selected. Two pupils were selected (one male, one female) randomly from the registers for Classes 4 through 8, resulting in 10 pupils per school. For teachers, three teachers were selected from Class 8, two science teachers from Classes 5 and 7, and three non-science teachers from Classes 4, 6, and 8; thus a total of 8 teachers were selected. Community members were purposively selected based on invitations from the head teachers from which four committee members and six parents were chosen with the intention to be mixed in terms of gender. Focus group discussions were held with pupils, teachers, and community members. All head teachers from the 162 schools completed a questionnaire. Furthermore, an observation checklist was completed by the research teams who visited two lower classes and two upper classes in each school. Finally, the principal researcher for each district conducted an in-depth interview with each district education officer. It was found out that even with FPE, children were turned away because of limited space, teachers and facilities. This study left gaps to be filled as it was done in the first year of free primary education in Kenya while the researcher does it after fourteen years. This study focused on challenges of FPE while the researcher studied increased enrollment in primary education and its implications on quality in Masaba South sub-county, Kisii County, Kenya. While the above reviewed study used Multi-stage sampling that first included purposive sampling and stratified random sampling the current study filled the gap by using simple random sampling and purposive sampling technique. The reviewed study used 162 schools in total while the researcher's study used 68 schools a further gap to be filled.

Taylor and Spaul, (2013) assert that there exists some trade-off between increased enrollment on the one hand, and declining educational quality on the other due to overstretching of resources. However, they noted that scrutiny of the most recent cross-national datasets of educational access and educational quality shows that there is less empirical support for this belief than was traditionally thought to be the case. OECD countries' education goals for their youth are ambitious: providing enriching learning opportunities to all from the early years and until at least the end of upper secondary education. The OECD report *No More Failures: Ten Steps to Equity in Education* (Field, Kuczera and Pont, 2007) already highlighted this. More recently, OECD ministers of education have signaled the importance of offering all children a strong start in life, access including high quality schooling until the end of secondary education. We need to provide a range of alternatives in lower secondary education and upper secondary for all, without making education systems too easy. This does not imply lowering the bar. We aim to make our education systems more inclusive, by developing mechanisms whereby we can ensure that everyone succeeds by providing tailored approaches (OECD, 2009). This is a major challenge, but a stepping stone towards access to quality education provision.

Investing during the early years allows students to acquire skills and knowledge that shape their development and that are very difficult to acquire later on and hence improve access (Heckman, 2011). These include cognitive, non-cognitive and socio-emotional skills, which facilitate the acquisition of skills and knowledge in the subsequent years of education. Therefore investing in high quality education in pre-primary, primary and secondary education for all is an equitable and productive use of resources, especially in a context of limited resources. This investment is likely to lead to a higher probability of completion of primary education and, at a lesser extent, secondary education, and makes completion of these qualifications less dependent on socio-economic background. The investment may also lead to increased intergenerational mobility in education and subsequently in earnings (Restuccia and Urratia, 2004).

Owoeye and Yala (2010), has noted that in some instances textbooks provide the only source of information for students as well as the course of studies for the subjects. They note that those seeking to improve the quality of education in instructional materials would inevitably lead to changes in actual teaching. While the selection of a textbook has been judged to be of vital importance to academic achievement, it is sad to say that relevant books are not available for teaching and learning activities. Improvements seem to be linked to the instructional practices implemented in the smaller classrooms rather than the classroom size itself (Faubert, 2012). As for school size, evidence suggests that, on average, variations in school size make quite small differences to student success (Hattie, 2009). Nevertheless, as with class size, smaller schools may have a positive impact on disadvantaged students (Leithwood and Jantzi, 2009).

Since the educational process functions in a world of books according to Owoeye and Yala (2010), the chief purpose of a school library is to make available to the pupil at his or her easy convenience all books, periodicals and other reproduced

materials which are of interest and value which are not provided as basic or supplementary textbooks. They further noted that as a resource the library occupies a central and primary place in any school system as it supports all functions of the school. The higher the proportion of minority students, the smaller the optimal school size (Faubert, 2012). Smaller schools, in certain settings, may foster student engagement and sense of belonging more than larger schools. Changes in school size should be accompanied by reforms in the school and classroom, to allow the specific use of “small school” instruction resources. Otherwise, the mere reduction of school or class size does not enhance the total time per student, as it does not imply that the teachers will necessarily adopt more effective learning strategies. It is both the frequency and quality of student/student and student/teacher interactions in small schools and classrooms that matters. Moving from one size to another requires a shift in what it means to be an effective teacher (Faubert, 2012).

Willms (2000) asserted that access and quality in education is generally an achievement in literacy and numeracy. This, in particular represents key educational outcomes. Teaching students to read, write and calculate is often considered the primary purpose of formal education, but students’ regular attendance and attention in school does not guarantee this outcome. Investigations into literacy levels in recent years have shown that children in developing countries had lower levels of literacy than children in high-income countries who had received similar amounts of schooling. A large scale study in Bangladesh demonstrated, for example, that although basic skills and levels of formal education are related, the majority of those who had completed primary school failed to attain the minimum standard of competency in the four subject areas tested (Greaney, Khandker & Alam, 2009). This and other studies underscore the critical relationship between outcomes and the quality of environments, contents and processes. According to Fakoya (2002) under funding have adverse effects on the quality educational resources in secondary schools.

Pennycuick, (2003) noted that countries significantly expanded access to primary education during the 1990s, but the building of new schools has often not kept pace with the increase in the student population. In these cases, schools have often had to expand class sizes, as well as the ratio of students to teachers, to accommodate large numbers of new students. A UNICEF/UNESCO survey conducted in 1995 in 14 least developed countries found that class sizes ranged from fewer than 30 students in rural and urban Bhutan, Madagascar, and the Maldives, to 73 in rural Nepal and 118 in Equatorial Guinea (Postlewaithe, 2008). Educators and researchers from diverse philosophical perspectives have debated the relationship between class size and student learning at length. Although many studies have found a relationship, class size has not consistently been linked to student achievement. This may be due to the fact that many schools and classrooms have not yet adopted the more demanding but higher quality student-centered learning. Moreover, quantitative relationships between class sizes and academic achievement rarely take other key quality factors into account, such as teachers’ perceptions of working conditions and their sense of efficacy (Willms, 2000).

Adeoye and Papoola (2011) assert that for learning to take place, learners must have access to necessary information materials and learning resources. They have to interact with tangible and intangible resources to ensure some level of performance. This is supported by Mutai ((2006) who asserted that learning is strengthened when there is enough reference materials such as textbooks, exercise books, teaching aids and classrooms. Further he asserted that academic achievement illustrates per excellence the correct use of these materials.

World Bank (2008) in a study on textbooks and school library provision in secondary education in Sub-Saharan Africa revealed that textbooks and libraries were not only inadequate but unevenly distributed among rural and urban schools in the area of study. Similarly Asiabaka (2008) on effective management of schools in Nigeria noted that the government’s failure to establish policy directive on minimum standards in relation to schools facilities has led to disparities in acquisition. This is because while some have well equipped laboratories, libraries and other facilities for effective teaching and learning others have none and where they exist, such facilities are poorly equipped. On the same vein Olaniyan and Ojo (2008) also noted that lack of textbooks and training manuals was one of the challenges facing successful implementation of introductory technology in Nigerian secondary schools. This is supported by Chiriswa (2002) who noted that effective teaching and learning depends on the availability of suitable adequate resources such as books, laboratories, library materials and host of other visual and audio teaching aids which enhance good performance in national examination.

John and Andrew (2007) used panel data of African countries from 1990 to 2002, paper studies to study the relationship between government expenditure on education enrolments, with illustration from Nigeria and other

SANE (South Africa, Algeria, Nigeria, and Egypt) countries at the primary and secondary school levels. The results showed that government expenditure on education has a positive and significant direct impact on primary and secondary education enrolment rates. Among the SANE, Nigeria had the greatest positive influence on increasing both primary and secondary education enrolment rates. The paper also found that other policy interventions, such as consolidating and sustaining democracy accelerating national income, and international community fulfilling its aid promises to Africa, can also be helpful in moving African countries (including the SANE) toward the Millennium Development Goals (MDGs). As such, higher expenditure alone is not sufficient to achieve the MDGs or to attain higher quantum and quality of human capital. This study was on the relationships between government expenditure on education enrolments and the researcher's focused on the increased enrollment and its implications on quality education provision. The reviewed study focused its study on South Africa, Algeria, Nigeria, and Egypt whereas the current study filled in the gap by studying Kenya.

Nicholas and Stephen (2013) studied trends in effective enrolment measuring access and basic-quality improvements in education for African countries (Namibia, Zambia, Uganda, Lesotho and Kenya) between the years 2000 to 2007. It was found that there was low average test score while at the same time, because of increased access there are more children achieving at each level than before the educational resources expansion. Different countries improve using different strategies. Looking at the starting points and the trajectories of each of the fastest improving countries, they concluded that there is no one method to increase effective enrolment. Some countries increased access to education substantially over the period (Lesotho, Tanzania), while others had stable enrolments but nevertheless managed to drastically increase effective enrolment (Namibia). Some improvements were more pro-poor, others more pro-rich. The improvements in effective numeracy and literacy enrolments were pro-poor in some countries (Namibia and Zambia for literacy), while they were pro-rich in others (Kenya and to some extent Uganda and Lesotho). Zambia is a special case. Zambia was the only country where enrolments expanded rapidly and effective enrolment did not keep pace. Although enrolment expanded by 25% for the poor over the 2000 to 2007 period, effective literacy enrolment for this group increased by only 15 percentage points and only 9 percentage points for effective numeracy enrolment. This being said, the fact that there was a positive increase in effective enrolment over the period means that the average grade-six aged child in Zambia was better off in 2007 than in 2000 as far as acquiring basic numeracy and literacy skills. For most countries, improving the quality of schooling for those enrolled is likely to be the primary challenge in the next phase of increasing effective enrolment. This may not be as easy as increasing access to schooling. Projections are dependent on assumptions. Under conservative assumptions about improvement, only five of the nine countries will reach 95% effective numeracy and literacy enrolment within 20 years of 2007. Under more ambitious assumptions about improvement - i.e. assuming other countries can improve as fast as Namibia, Tanzania and Lesotho - all nine countries will be able to reach 95% effective enrolment within 20 years of 2007.

Ministry of Education Statistics Yearbook (2012) cited in Pirozzi (2011) assert that Rwanda has the highest primary school enrolment rates in Africa. For both boys and girls, it is on track to achieve universal access to primary education by 2015. There has been sustained progress in access to education with the primary net enrolment rate increasing to 97 per cent in 2012. Gender parity at primary level has been achieved, with girls' net enrolment rate of 98 per cent, which is higher than for boys (95%). The overall completion rate at primary level is 73 per cent (2012), which is a dramatic increase from 53 per cent in 2008, with girls' completion rates at 78 per cent in 2012, and this reflects Rwanda's success at increasing access and retention of children in primary school. The qualified teacher to pupil ratio at primary level stands at 62:1, which is an improvement from the 2008 figure of 67:1. The secondary school net enrolment rate now stands at 28 per cent (30% for girls), up from 26 per cent (27% for girls) in 2011. Girls now make up 52 per cent of students in secondary education. The net enrolment rate for pre-primary education increased to 13 per cent (girls 13.2%) in 2012. With Rwanda's success of achieving near universal access to primary education, a strengthened focus has been placed in recent years on supporting the government to improve quality education and in building capacities to plan, implement and monitor programmes. Interventions aimed at ensuring equitable access to quality education, including early childhood education services also in place. The researcher studied increased enrollment in public primary schools and its implications on quality education in Kenya filling a gap that exists between this reviewed study and the researcher's.

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 Vol. 4, Issue 1, pp: (47-81), Month: January – February 2017, Available at: www.noveltyjournals.com

Hoop (2010) noted that education in most Sub-Saharan countries faces chronic shortages in physical and human resources. According to him rather than distributing the limited resources available for secondary education uniformly across schools, many governments allocate a relatively large share of available resources to a select number of secondary schools regardless of the enrollment. Similarly, findings by World Bank (2008) in a study on provision of textbooks and physical resources in secondary schools in sub-Saharan African countries: Botswana, Cameroon, Coted’vore, Ghana, Kenya, Malawi, Rwanda, Tanzania and Togo revealed that urban secondary schools have better textbook supplies and physical facilities than those in the rural areas.

Kinuthia (2009), Kiveu and Maiyo (2009), Kippra (2003) among other studies, indicated that availability of educational resources in Kenya have been elusive since independence though there has been a tremendous increase in the enrollment. The cost sharing policy officially launched in 1988 saw the burden of providing both physical and material resources passed on to parents and guardians. Further according to earlier research Orina (2001) with increased poverty levels many parents have not been able to meet the cost requirement under this policy leading to inadequate physical and learning resources in secondary schools. In this era of globalization, USAID (2004) noted that economic growth depends increasingly on an educated work force that is poised to take advantage of opportunities the reason why availability of educational resources cannot be over emphasized because of their role in the achievement of educational goals and objectives.

Mungai (2010) studied the Challenges faced by school administrators in implementation of subsidized secondary education in Mombasa sub county, Kenya. The purpose of carrying out this study was to examine the challenges faced by schools administrators’ in the implementation of subsidized education in public secondary schools in Mombasa sub-County. Descriptive research design was used in this study. Purposive sampling was also used to draw up a sample size of seven out of the 13 public schools in the district. Questionnaires were used as instruments for collecting data from the principals and head of departments. The data collected was processed and analyzed using SPSS package and output in Microsoft Word 2010. The findings revealed that the implementation of subsidized secondary education in Mombasa District faced many challenges which are attributed to high enrollment, high drop-out rate, low transition rate and inadequate funds among others and less resource for learning. This was a study on Challenges faced by school administrators in implementation of subsidized secondary education in Mombasa sub -county. The study used descriptive research design. This study focused on increased enrollment and its implications on quality education in public primary schools and also used sequential explanatory design that was employed within mixed methods approach. This study filled the gap in the literature.

Njoroge (2000) in a study on factors affecting availability and acquisition resources in the teaching of English in selected secondary schools in Kenya found that unavailability of educational resources is brought about by increased enrollment and it hinders provision of quality education. However, Kitheka (2005) noted that schools with abundant resources may not always utilize them efficiently and consequently fail to raise student’s level of performance. On the other hand schools with limited resources may utilize what they have efficiently and this may boost learning thus students should be able to maximize and utilize available resources so as to adequately achieve educational objectives and attain quality education. This is supported by Cohen et al (2003) who points out that it is not making resources available to schools that matters, but getting those resources utilized by teachers and students to get academic content learned.

Njuguna (2010) did a study on challenges faced by head teachers in the implementation of free Primary education in Gatundu district, Kiambu County of Kenya. The study consisted of forty five head teachers. The researcher used simple random sampling and purposive sampling techniques to identify the head teachers. A questionnaire for head teachers was employed in data collection for the study. The major findings of the study were inadequate funding, delay in disbursement of FPE funds, high pupil teacher ratio, lack of teacher commitment on FPE, and lack of financial management skills by the head teachers. This was a survey research and was about challenges faced by head teachers in the implementation of free Primary education in Gatundu district, Kiambu County of Kenya. The researcher used sequential explanatory design that was employed within mixed methods and focused on the effect of increased enrollment on quality education in Masaba South Kisii county of Kenya. These filled the gap.

Reche et al (2012) have noted that Kenya’s education system is dominated by examination oriented teaching, where passing examinations is the only benchmark for performance because there is no internal system of monitoring learning

achievements at other levels within an education cycle. Further, manifestations of quality education have to do with literary cognitive abilities, performance and progression to higher levels of learning. However, quality education cannot be achieved without educational resources which play an important role in the achievement of educational goals and objectives. According to Adeogun and Ofisila (2008), educational resources can be categorized into four groups that is human, material, physical and financial resources. Educational resources according to Usman (2007) are central to the educational process because they play an important role in the achievement of educational goals and objectives since they facilitate teachers' work and accelerate learning on the part of the student. He asserted that resources should be proportional to the number of pupils.

Republic of Kenya (1988) has indicated that financing physical and material resources in secondary schools in Kenya before 2008 was based on the cost sharing policy introduced officially in 1988 which required most costs in education to be met through partnership between public financing, non-governmental organizations, individuals, communities and the private sector. Within this funding policy framework, the overall government role included professional development of teachers, teachers' remuneration in public institutions, administration and management, and provision of bursaries and scholarships to needy students. Further the parents according to this policy were responsible for providing material resources like textbooks, supplementary readers and stationery, erecting and maintaining physical facilities such as classrooms, laboratories, libraries and workshops among others. Consequently, it seems that the government in the cost sharing policy shifted the responsibility of acquiring educational resources to the local communities and schools. However according to Kippra (2003), the cost sharing policy led to disparities in the availability of physical and material resources in secondary schools because of the poverty levels among households and the dwindling economy. This is supported by World Bank (2008) in a study on textbooks and library provision in secondary education in Sub-Saharan Africa which revealed that textbooks and libraries were not only inadequate but unevenly distributed among rural and urban schools in Sub-Saharan Africa. However, the government of Kenya has introduced programmes geared towards acquisition of educational resources thus enhancing accessibility to quality education among all households.

Sifuna (2011) in his study entitled the Illusion of Universal Free Primary Education in Kenya asserted that before the NARC pronouncement, the number of public primary schools in the country had increased steadily from 14,864 in 1990 to 18,901 in 2001/2 representing a 27.2% increase. Enrolment in absolute terms had also gone up from 5,392,319 to 6,314,726, being a 17.1% rise over the same period. The percentage of girls' enrolment also increased in the same period to 49.3%, implying that gender parity in enrolment in public primary schools at the national level had nearly been achieved. The study found out that following the NARC intervention in January 2003, it was estimated that the NER rose from around 6,314,726 to 7,614,326 by the end of the year, representing a 22.3% increase nationally. Sifuna noted that while free primary education has increased participation, it has at the same time created considerable problems. It has exacerbated the problem of teaching and learning facilities. As a result of the high influx of new pupils, classrooms are congested. Teachers complained of increased pupil teacher ratios. Many public primary schools are understaffed as a result of the free primary education programme. The study concluded that the implementation of FPE, like similar interventions by previous governments, has been a matter of political expediency rather than a well thought out and planned reform. The NARC government, like its predecessors, did not carry out a situation analysis prior to the implementation of FPE. The consequence: poor quality education as a result of overcrowding, lack of teachers and of learning materials. The inefficient administration at the MoEST, which attempts to deal with problems relating to funding and infrastructure in an ad hoc manner, only serves to exacerbate the situation. Sifuna considered Illusion of Universal free Primary Education in Rwanda while this current study filled the gap by focusing on the increased enrollment in primary education and its implications on quality education in Kenya.

According to Obunya (2008), subsidized secondary education introduced in 2008 is an intervention within which the government provides finances for the purchase of educational resources like textbooks to all public secondary schools according to their enrolment. Further the constituency development fund introduced in 2003 sponsors the development of school physical facilities like laboratories and libraries among others. These interventions are important milestones in the Governments efforts of enhancing equitable distribution of educational resources in secondary schools and therefore one expects that previously reported shortage of educational resources World Bank (2008) has since changed and there are adequate educational resources in secondary schools.

Ngaruiya (2012) conducted a study on the effectiveness of management strategies in the enhancement of pupils' access and participation in free primary school education in Githunguri Kiambu County of Kenya. The purpose of this study was to investigate the effectiveness of the management strategies in the enhancement of pupil's access to educational resources and participation in free primary school education in Githunguri, Kiambu County. The study was guided by the classical liberal theory of equal opportunity as advanced by Dewey in 1916. The study adopted descriptive survey design. The study population included all the 50 public day public primary schools in Githunguri District. The sample was drawn using stratified sampling technique. Simple random sampling was used to select 2 schools from each of the 4 zones thus making a sample of 8 schools (15%). Random sampling was then used to select pupils from the sampled schools. Convenient sampling was used to select school aged non attending children to be included in the study. The total sample was 8 head teachers (15%), 96 pupils and 40 school- aged non attending children. These constituted a total sample size of 144 respondents. The study used questionnaires and interview schedule to collect data. The results of the study indicated the cost of education, low income, child labour, illiteracy among parents and large family sizes are the major social economic variable affecting access and participation. The results of the study indicated that many children who fail to access primary school education come from large families of parents who have low income. These parents have no salaries occupation and majority of them never attended primary school hence they are still ignorant of the importance of primary education. Many children are also involved in child labour even when in school since some have to feed themselves and their younger siblings. Shortage of resources has also continued to effect access and participation resulting to overcrowding of pupils in classes and poor performance. The study was conducted in Githunguri sub-county whereas the researcher did it in Masaba Sub County. The study was on the effectiveness of management strategies in the enhancement of pupils' access and participation in free primary school education in Githunguri Kiambu County of Kenya whereas the researcher did a study on evaluation of selected factors on quality education. This study adopted descriptive survey design whereas the researcher used sequential explanatory design that was employed within mixed methods. All these fill the gap on the literature.

In Kenya, according to IEA (2002), the expansion of educational opportunities has been a long standing objective of the government of Kenya since independence in 1963 because education continues to be considered by different stakeholders as a basic necessity for progress. This commitment has been expressed in constant increase in financial resources allocated to education and the number of commissions /working parties established to review the education sector. However the greatest challenges faced in the area of education since independence of Kenya is to meet its goals within its meager resources given increased enrollment. According to World Bank (2011), the demand for secondary education is soaring due to progress towards universal primary education. However, the heightened demand for education is accompanied by the need to respond to the twin challenges of increasing access to and at the same time improving quality and relevance of secondary education in an environment where the national budgets are already constrained. Further, according to World Bank (2011), the financial reality is that many developing countries and transition economies lack the capacity to raise the additional financial resources necessary to address the new challenges in secondary education. Therefore, Nations in the Sub-Sahara must find new ways of increasing funding for secondary education through public, private, or community sources and at the same time maximizing efficiency.

Onsumu et al (2006) noted that the overall government role included professional development, teacher's remuneration in public institutions, administration and management, provision of bursaries and scholarship for needy students. According to this policy the parents/guardians were responsible for providing material resources like textbooks, supplementary leaders and stationery, erecting and maintaining physical resources such as classrooms laboratories, libraries and workshops among others. The government in the cost sharing policy shifted the responsibility of acquiring educational resources to the local communities and schools. According to Asayo (2009) the subsidized secondary education introduced in 2008 is an intervention within which the government provides finances for the purchase of educational resources like textbooks to all secondary schools according to their enrolment. Further the constituency development fund introduced in 2003 sponsors' development of physical facilities like laboratories, libraries among others. All these funds were meant to supply schools with the appropriate resources for learning. Commenting on the cost sharing policy Kippra (2006), noted that it led to disparities in the availability of physical and material resources in secondary schools because of the high poverty levels among households and the dwindling economy and sudden increase in enrollment.

3. RESEARCH METHODOLOGY

3.1: Introduction:

This chapter presents a description of the research designs, location of the study, target population, sample size and sampling techniques. The chapter also describes the research instruments, piloting, their reliability and validity, procedure for data collection, analysis and ethical considerations.

3.2: Research Design:

Bryman (2004) defines a study design as a structure that guides the execution of a research method and the analysis of the subsequent data. A study design is thus the framework for data collection and analysis, which enables systematic conduct of study. It can also be referred to as a procedural plan that is adopted by the researcher to answer questions validly, objectively, accurately and economically (Kumar, 2005). This study adopted a Sequential explanatory design employed within mixed methods approach. Bryman (2004) defines mixed method research approach as a methodology for conducting research that involves collecting, analyzing and integrating quantitative and qualitative research. This approach to research is used when this integration provides a better understanding of the research problem than either of each alone. The use of mixed methods approach overcomes the limitations of a single design, that is: explain and interpret data; explore a phenomenon to complement strengths of a single design. Creswell (2003) noted that Sequential explanatory design is a type in mixed method approach characterized by collection and analysis of quantitative data followed by a collection and analysis of qualitative data. Its purpose is to use qualitative results to assist in explaining and interpreting the findings of quantitative study.

The priority is given to the quantitative data and the findings are integrated during interpretation phase of study. The design helps to: explain and interpret quantitative findings and to examine in more detail unexpected results from a quantitative study. The design is easy to describe and results easy to present. However, the design required a length of time to complete all data collection given the two separate phases.

A frame of sequential explanatory design in mixed methods research approach is shown in figure 3.1

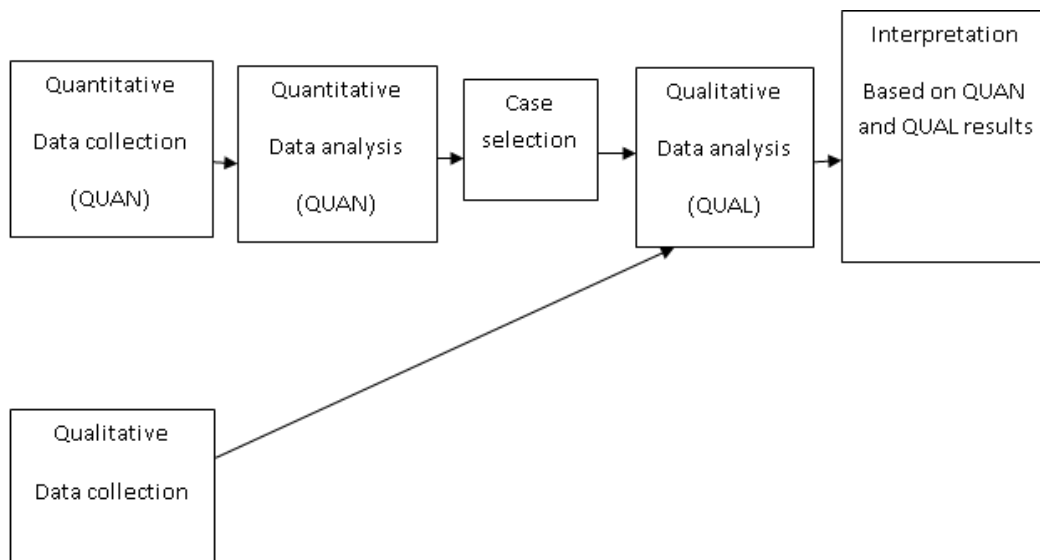


Figure 3.1: Figurative representation of a Sequential Explanatory Design

Source: Creswell, Plano Clark, Shope, McVea. (2003)

3.3: Location of the Study:

The study was conducted in public primary schools of Masaba South sub-County, Kisii County, Kenya. Masaba South sub-County borders Nyamache and Kisii central sub counties to the south, Trans Mara to the East, Bomet and Borabu to the north and Masaba North to the West. It is 5km South of Keroka town, Kenya. According to Meteorological department Kisii (2015), lies within a longitude of 330200 and 35020E and latitude of 0020 and 00500S. The sub county

has an altitude of 1690mm above sea level. It covers an area of 161.80 square kilometres. It lies on a highland and has an equatorial type of climate resulting into a bimodal rainfall pattern with an average annual rainfall of (150-200) cm. According to the Republic of Kenya (2009), has a total population of 152,282 with a population density of 941.17 persons per square kilometre contributing to 2.9 percent of the national population in the poverty assessment report for Masaba South Sub County. It was established that more than half the population was poor; the poverty level was found to be 53% and the poverty index 65.9%. It is endowed with natural resources which include arable land, wet lands and forests. In the sub county, most people are subsistence farmers relying on agricultural activities which include tea planting bananas and maize besides cattle rearing. The sub county is composed of two divisions which include; Masimba and Kiamokama divisions. According to the TSC county director it has a total enrollment of around 50,000 pupils with a total of 82 public primary schools with an average performance in national examinations. Its map is in appendix D.

3.4: Study Population:

Target population refers to a set of subjects or individuals having certain observable characteristics of a particular nature distinct from other population which a researcher wishes to make a statement about by means of empirical investigation of a sample (Kothari, 2004). Mugenda and Mugenda (2013), assert that population of interest is homogeneous and representative, with each person being offered equal chance to be included in the sample. Ary, Jacob and Rezavieh (2000), assert that population is used to refer to the entire group of individuals to whom the findings of a study apply. Units of analysis were public primary schools in Masaba South sub county Kisii County of Kenya with 2 divisions which are Masimba and Kiamokama. The target population for this study was 82 head teachers, 112 deputy head teachers in public primary schools, from 82 primary school teachers in Masaba South sub county Kisii County of Kenya. Accessible population was 82 head teachers’ and 112 deputy head teachers within the sub county. The distribution of the target population within two divisions is as shown in table 3.1

Table 3.1: The Distribution of the Population of the Number of Primary Schools, Head Teachers and Deputy Head Teachers

| Division | No. Schools | No. Head teacher | No. D.H. teachers |
|--------------------|-------------|------------------|-------------------|
| Masimba division | 44 | 44 | 66 |
| Kiamokama division | 38 | 38 | 56 |
| Total | 82 | 82 | 112 |

Source: Sub- county Education Office-Masaba Sub-county (2015)

3.5: Sample Size and Sampling Procedure:

3.5.1: Sample Size:

Kothari, (2004) indicates that it is not possible to test the whole population during a research. However, one can get accurate findings when a reasonably representative sample is used. Kothari indicates that larger sample sizes are necessary when groups must be broken into sub-groups as it is in this study. The sample constituted of 68 head teachers, 86 deputy head teachers, from the 68 sampled public primary schools. Krescie and Morgan’s formula shown below was used to obtain the sample size for the research study. Calculations are shown in Appendix D

$$S = \frac{X^2 NP (1-P)}{d^2 (N-1) + X^2 P (1-P)}$$

Where

S= required sample size

N= the given population size

P= population proportion that yields maximum possible sample size required (assumed to be 0.5)

d= the degree of accuracy as reflected by amount of error that can be tolerated (taken as 0.05)

X²= table value of chi-square equal to one degree of freedom relative to the desired level of confidence which is 3.841 for the 0.95. The sample sizes were calculated as shown below:

For the 82 primary schools, the sample size was calculated as:

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$$S = \frac{X^2 N P (1-P)}{d^2 (N-1) + X^2 P (1-P)}$$

$$S = \frac{3.841 \times 82 \times 0.5 \times 0.5}{\{0.05 \times 0.05 \times (82-1)\} + \{3.841 \times 0.5 \times (1-0.5)\}}$$

$$S = 68$$

For the 82 head teachers, the sample size was calculated as:

$$S = \frac{X^2 N P (1-P)}{d^2 (N-1) + X^2 P (1-P)}$$

$$S = \frac{3.841 \times 82 \times 0.5 \times 0.5}{\{0.05 \times 0.05 \times (82-1)\} + \{3.841 \times 0.5 \times (1-0.5)\}}$$

$$S = 68$$

For the 112 deputy head teachers, the sample size was calculated as:

$$S = \frac{X^2 N P (1-P)}{d^2 (N-1) + X^2 P (1-P)}$$

$$S = \frac{3.841 \times 112 \times 0.5 \times 0.5}{\{0.05 \times 0.05 \times (112-1)\} + \{3.841 \times 0.5 \times (1-0.5)\}}$$

$$S = \frac{107.548}{0.2775 + 0.96025}$$

$$S = 86$$

The distribution of the sampled population indicating the number of schools, head teachers and deputy head teachers who were the respondents in the study are shown in table 3.2

Table 3.2: The Distribution of Population and Sample Size of Schools, Head Teachers and Deputy Head Teachers

| DIVISION | NO. PRIMARY SCHOOLS | | NO. HEAD TEACHER | | NO. D.H. TEACHERS | |
|--------------|---------------------|-----------|------------------|-----------|-------------------|-----------|
| | N | N | N | N | N | N |
| Masimba | 44 | 35 | 44 | 35 | 66 | 46 |
| Kiamokama | 38 | 33 | 38 | 33 | 56 | 40 |
| Total | 82 | 68 | 82 | 68 | 112 | 86 |

Source: Sub- county Education Office- Masaba Sub-county (2015)

3.5.2: Sampling Procedures:

The researcher decided to use both stratified random sampling technique and simple random sampling. To obtain the desired sample in this study stratified random sampling technique was used in dividing the population into small groups known as strata. Cresswell (2002) states that; in stratified random sampling technique the population is divided into two or more groups using a given criterion and then a given number of cases are randomly selected from each of the population subgroup. Cohen, Manion and Morrison (2003) indicated in Avoke (2005) assert that to use stratified random sampling technique, one must first decide on the criteria under which the population and hence the sample will be stratified. In this way the desired sample in the study is satisfactory to the desired needs. Mugenda and Mugenda (2013) assert that stratified random sampling technique is a sampling technique that a random sample from each stratum is taken in a number proportional to the stratum's size when compared to the population. These subsets of the strata are pooled to form a random sample. From the schools' enrollment records, a school having the least population had 300 pupils and the highest was 1100. The researcher used pupil population in schools to classify them into four strata. The first stratum was schools having population between 300-500, the second stratum was having population between 500-700, the third one

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was having between 700-900, and the fourth one between 900-1100. Simple random sampling was then used to select the required sample sizes from the respective sub-groups proportionately. This was done in the ratio 400:600:800:1000 which is simplified as 2:3:4:5 representing the ratio of the first, second, third and fourth strata respectively. Using this ratio and given that the researcher needed a sample of 68 schools out of the 82 schools, calculations were done and found that the researcher was to select 10 schools from the first strata of the 12 schools, 15 schools from the second strata out of 18 schools, 19 schools from the third out of the 23 schools and 24 schools from the fourth out of the 29 schools. The lottery technique was applied where a symbol YES was placed on 10 schools from the first strata of the 12 schools, 15 schools from the second strata of the 18 schools, 19 schools from the third out of the 23 schools and 24 schools from the fourth out of the 29. Small pieces of paper of (of equal size, colour and texture) of the same number in each strata were folded into equal size and shape, was placed in each container representing the four strata. They were mixed well and then each head teacher was allowed to pick one piece of paper at a time in their respective categories. In this case, the head teachers who picked a yes, their schools were automatically included in the sample. This similar approach was used to select 86 deputy head teachers from the total population of 112. This technique was relevant because it provided participants with equal opportunities to be randomly selected and the sample method to be free from preconception and unfairness (Sidhu, 2002).

3.6: Instruments of Data Collection:

This research used a questionnaire for the deputy head teachers, document analysis and interview schedule for the head teachers to collect primary data for the study.

3.6.1: *Questionnaire for the Deputy head Teachers:*

According to Mugenda and Mugenda, (2013) states that a questionnaire is appropriate for studies of this nature since it collects information in a straight forward and less time-consuming manner for both the researcher and the respondents. Ary et al (2002) further state that a questionnaire is the basic way in which data is gathered in survey research. As the researcher desires to collect information on the effect of learning resources and teacher resource on quality education in public primary schools, a 5-point Likert scale questionnaire with a response format of Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree was developed to collect data for the research questions stated.

Teachers' questionnaire (Appendix C), self-administered, consisted of sections A and B. Section A had four items which elicited information concerning the background information. Section B, had 39 items which elicited information concerning the effect of selected factors on quality education in public primary schools in Masaba South sub-County, Kisii County, Kenya. The study was assessed through by a Five Point Likert Scale ranging from Strongly Disagree (SD) to Strongly Agree (SA). The questionnaires were delivered to the respective schools by the researcher, explained to the respondents and were given two weeks to respond. The researcher passed round the same schools to collect the data.

3.6.2: *Interview Schedule:*

Creswell (2002) defines an interview schedule as a form in which the researcher records answers supplied by the participant in the study. Ary et al (2002) also assert that an interview is used to gather information on subjects' opinions, beliefs and feelings about the situation in their own words. In-depth interviews were utilized since the use of such method has been advocated, as a means that is both rich in contextual information and deep in understanding (Harris & Brown, 2010). An in-depth interview was ideal for investigating, where researchers are seeking individual interpretations and responses. According to Mugenda et al (2013), interview schedule enables the researcher to obtain data required to meet specific objectives of the study. It also helps in standardizing the interview such that the interviewer can ask the same questions and in the same manner. Interview Schedule for Head teachers (appendix A) was used. The guide elicited information from head teachers concerning the effect of learning resources and teacher resource on quality education in public primary schools in Masaba South sub-County, Kisii County, Kenya. It was an interview schedule aimed at making it possible to obtain the data required to meet these specific objectives of the study. The researcher visited one interviewee in a day. In each day, the interviewer could arrive on time, smartly dressed and find balance between friendliness and objectivity. To start, the researcher introduced himself, re-confirm the purpose and assure confidentiality. Then the researcher asked questions softly but while audible and tape recorded at the same time writing short notes. This was

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administered to head teachers using four question items and was probed more deeply using open ended questions in order to obtain more complete data.

3.6.3: Document Analysis:

The researcher used four documents for analysis (Appendix B). The researcher examined primary school admission register, board of management minutes, school master timetable, stores records book to check on availability of school facilities. This was carefully studied with reference to the criteria in the document analysis guide developed by Frankel and Wallen (2009). The information obtained was discussed with the head teachers with the aim of collecting data.

3.7: Validity of Questionnaires:

Validity is the extent to which a test measures what it is supposed to measure, the form of the test, the purpose of the test and the population for whom it is intended, Onwuegbuzie, Dickinson, Leech, and Zoran (2007). To ensure validity of the questionnaire, assistance was sought from the expert judgment of researcher’s supervisors. They were also arranged from simple to complex for easy understanding. These allowed the respondent to approximate the exact response as close as possible. The researcher also took representative questions from each of the sections of the unit and then evaluated them against the desired outcomes. In addition, a detailed verbal descriptions and clear instructions were provided during the group administration, which the researcher personally conducted.

3.8: Reliability of Questionnaires:

Reliability is the degree to which a test consistently measures whatever it is supposed to measure (Bonet, 2010). To ensure the reliability of the questionnaire, the split half method was used. Split-half reliability is a measure of consistency where a test is split in two and the scores for each half of the test is compared with one another (Kasomo, 2006). Split-half method was used to ascertain the reliability of the questionnaires by dividing it into two halves. This was done by assigning the odd numbered items to one half and the even numbered items to the other of the test. Using Split-Half reliability by Spearman Brown Formula, the correlation between the halves was calculated as;

$$R_{hh} = \frac{2r_{hh}}{1 + r_{hh}}$$

Where r_{hh}= Pearson correlation of scores in the two half tests.

$$r_{hh} = r_{xy} = \frac{\sum(X - \bar{X})(Y - \bar{Y})}{\sqrt{[\sum(X - \bar{X})^2][\sum(Y - \bar{Y})^2]}}$$

Table 3.3: Correlations

| | | 1st Half | 2nd Half |
|-----------------|---------------------|-----------------|-----------------|
| 1st Half | Pearson Correlation | 1 | .692** |
| | Sig. (2-tailed) | | .021 |
| | N | 92 | 92 |
| 2nd Half | Pearson Correlation | .692** | 1 |
| | Sig. (2-tailed) | .021 | |
| | N | 92 | 92 |

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

$$R_{hh} = \frac{2r_{hh}}{1 + r_{hh}} = \frac{2*0.692}{1 + 0.692} = 0.818$$

An SPSS output shown in Table 3.3 indicates a correlation coefficient ($r = 0.818$) greater than 0.6 and according to George and Mullery (2003) it is considered appropriate. The measure had high reliability ($r = 0.818$) indicating very high consistence in measuring instruments used.

It was decided from the pilot study involving qualitative data that validity and reliability be ascertained through the qualitative paradigm: Trustworthiness which included; credibility, dependability and transferability.

3.8.1: Piloting of Research Instruments:

According to Connelly (2008), a pilot study sample should be 10 percent of the sample projected for the large parent study. Before the questionnaire was used to collect the actual data, a pilot study involving ten percent of the 86 deputy head teachers was used. This was conducted in nine schools from where the teachers were drawn within the sub-county. The selection of this was done using simple random sampling. This was done by giving a number to every member of the sampled population. Then placed the number in a container and picked nine numbers at random and the subjects corresponding to the numbers picked were used in the pilot study (Mugenda and Mugenda, 2013). The questionnaire was administered to the nine deputy head teachers. The researcher used deputy head teachers because they monitor pupils' attendance records and curriculum implementation. As school administrators, they have records about students' attendance and their unique socio-economic problems. The nine deputy head teachers were not included in the main study to avoid subjectivity of responses.

Mugenda and Mugenda, (2013) asserts that the purpose of carrying out a pilot study is to; Determine whether the questionnaire would provide the required data, identify the problems the informant might encounter in filling the questionnaire and determine whether the items in the instruments are clear to the respondents. The instruments were corrected as per the results of the pilot study. Improved versions of the questionnaires were then prepared so that only items considered relevant to the study adopted and considered for the study. This was done step by step as follows:

The questionnaire was administered in nine schools which included the class teachers', division educational officers', pupils', parents and head teachers'. The pupil's interview and questionnaire were evaluating the effect of learning resources and teacher resource on quality education. The researcher realized that this information could not be understood by the pupils and could not use them as respondents. The researcher also had both parent's questionnaire and interviews. On administering this instrument the researcher encountered a problem. Majority of the parents do not understand English hence language barrier. It was also noted that, most parents gave irrelevant information however much the researcher tried to explain. This was transferred to the deputy head teacher's questionnaire and the head teacher's interview. With the divisional education officers, it was noted that they were not ready to answer questions related to quality for it will appear as if the government has failed of which they are part. These items were integrated in the teachers' instruments and interviews. On the head teachers' and deputy head teachers' both had the questionnaires and interviews. They sought information on effect of learning resources and teacher resource, on quality education. The researcher realized that most of the items in the head teachers' repeated themselves in the deputy head teachers'. The researcher integrated the questionnaires together hence named them as deputy head teachers' questionnaires and so the interviews together hence termed as head teachers' interview. Finally document analysis was used to collect information on the enrolment trend since the inception of FPE, number of TSC teachers. This was found to be relevant and was adopted the way it was.

3.8.2: Trustworthiness of Qualitative Data:

In qualitative research credibility, dependability and conformability are sought to ensure that qualitative research process is reliable and dependable. To address for quality of qualitative study; credibility, dependability and conformability was addressed as indicated by Creswell and Plano (2007). Credibility within the arena of qualitative research; certain steps were taken to ensure credibility of research process based on guidelines: there was rigorous monitoring of progress and meetings with supervisors; thorough review of literature to determine the aim of the study and to verify results; thorough description of phenomenon that was being studied so that it can be understood within the relative context; honesty of participants is encouraged by the fact that researchers were open and sincere with them. Dependability indicates degree to which a study measures consequentiality of data (Creswell and Plano, 2007). Dependability was ensured by implementing the following steps: verification of the transcription of the questionnaire can be produced; In-depth discussion with experts in agreement on the codes that would be used for analysis of the data. Conformability indicates neutrality of the

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data set. Conformability (objectivity) can be defined as a measure of how well the inquiry's findings are supported by the data collected. It was based on the respective that the integrity of findings lies in the data and that the researcher must adequately tie together the data, analytic processes, and findings in such a way that the reader was able to confirm the adequacy of the findings.

3.9: Data Collection Procedures:

Permission to conduct the research was sought through the Director Board of Post graduate studies, Jaramogi Oginga Odinga University of Science and Technology. Before data collection was conducted, a research permit was sought from the National Commission of Science Technology and Innovation (NACOSTI). Permission was further sought from the County Education Officer. Subsequently, introductory letters from the sub county education office were sought. The head teachers of the sample schools to be included in the study were then consulted in advance to obtain consent. This gave the researcher the privilege of meeting the respondents and clearly explaining the purpose of the study. A set of questionnaires and document analysis were administered to the deputy head teachers and head teacher respectively by the researcher. In order to ensure a high level of response, the researcher visited the individual schools and in all cases the instruments administered by the researcher personally. The researcher explained how to fill the questionnaires and document analysis to the respondents. A period of two weeks was given in which to fill the questionnaires and document analysis after which the researcher collected them. The purpose of administering the questionnaires and document analysis for two weeks was to give the respondents enough time to go through them and clearly understand the items so as to give the most accurate answers. They were sorted out to see if there are incomplete ones. The instruments was then organized and then scored ready for analysis. Respondents were assured of confidentiality of their responses. At the same time the researcher conducted audio taped, face to face interview to the head teachers in their respective schools at different dates each lasting for around one hour. After the field, the data was taken for analysis.

3.10: Data Analysis:

Analysis is a process of evaluating data using analytical and logical reasoning to address the variables identified for the study and test the stated research hypotheses (Orodho, 2004). The researcher analysed data from various sources to discover information that was used in arriving at some conclusions. The quantitative data collected was analysed with the aid of the Statistical Package for Social Sciences while the qualitative data collected was analysed using the thematic analysis.

3.10.1: Quantitative Data Analysis:

Quantitative data collected was first edited and checked for completeness. During coding, the questionnaire which was for the deputy head teachers was assigned A. For section A of the questionnaire, question 1 on gender male was coded 0 and female coded 1. Those who did not specify their gender were coded 9, labeled unknown and the same code was used for those who ticked both male and female or had a missing specification. Question 2 on the teaching experience below 4 years was coded 1, between 4-6 years coded 2, 7-9 years coded 3 and above 9 years was coded 4. The missing was coded 9. Question 3, on the level of education p1 was coded 1, diploma coded 2, bachelors coded 3 and masters were coded 4. The missing level was coded 5. Finally, on the number of years in school, 5 years and below was coded 1, 6-11 years coded 2 and 12 years and above coded 3. The missing age was coded 6. For section B of this questionnaire, the responses to all the questions strongly agree were coded 1 agree coded 2, not sure coded 3, disagree coded 4 and strongly disagree was coded 5. The Statistical Package for Social Sciences (SPSS) version 22 was used to assist in data analysis. The quantitative data was analyzed using both descriptive and inferential statistics. The descriptive statistics was used to describe and summarize the data in form of tables, frequencies and percentages. The inferential statistics was used to help make inferences and draw conclusions. Statistical tests including Pearson correlation which is a measure of the linear correlation between two variables was used. In this study it was about selected factors and its effect on quality education. If it gave a value between +1 and -1 it meant inclusive, where +1 is total positive correlation, 0 is no correlation and -1 a total negative correlation. While doing this, the researcher found +1 which was a total positive correlation. Regression analysis was also used to test the hypotheses. Here the researcher compared the relationship between learning resources, teacher resource and quality education by running a regression. In this study the researcher found a value of +1 which was a perfectly positive relationship. The inferential statistics was mainly focused on the correlation analysis which was used to establish the relationship between the selected factors on one hand as the independent variables and quality education

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on the other hand as dependent variable. Inferential statistics allow us to make predictions across an entire population when given data from a certain sample of that population (Howell, 2002). It was also used to assess the relationship between the other variables in the study. All tests were computed at $\alpha = 0.05$ significance level. The Statistical Package for Social Sciences (SPSS) version 22 was used to aid in analyzing the data. The four objectives were analyzed as:

Objective one consisted of 10-itemed- Likert scaled questionnaire pre-designed to measure the constructs of effects of learning resources on quality education. Their responses were computed as percentages and frequencies and reflected. To establish whether there was any significant relationship between learning resources and quality education in primary schools, the researcher computed Pearson's Product-Moment Coefficient of correlation between the scores of the two variables. The results of the analysis were shown in descriptive statistics and correlation results. Finally the researcher compared the relationship between learning resources and quality education by running a regression.

Objective two was a 7-itemed-Likert scaled questionnaire pre-designed to measure the constructs of effects teacher resource on quality education in schools. The questionnaire was administered to deputy head teachers whose responses were computed as percentages and reflected. The relationship between teacher resource and quality education was investigated using Pearson product-moment correlation coefficient. Finally the researcher compared the relationship between teacher resource and quality education by running a regression.

3.10.2: Qualitative Data Analysis:

Qualitative research gathers information that is not in numerical form (Clarke (2006). Qualitative data is a set of observation; or a description; any single observation is a word, or a sentence or a description or a code that represents a category. Data from interviews was analyzed by using the thematic frame work and the following steps were considered; this research followed the principles of thematic analysis. According to Clarke, it is a method for identifying, analyzing and reporting patterns within data. It minimally organizes and describes data set in details. They assert that thematic analysis is not grounded in any particular theoretical and epistemological framework and can therefore be applied across a wide range of qualitative research approaches, making it flexible. Furthermore, thematic analysis gives an opportunity to understand the potential of any issue more widely (Marks and Yardley 2004).

In this study, the researcher gathered data based on two main themes on effect of selected factors on learning resource and teacher teachers on quality education. Thematic analysis of the two was performed through the process of coding in phases to create established and meaningful patterns. According to Raburu (2011) these phases consisted of familiarization with data in which the researcher transcribed the data by reading and re-reading the data and noted down initial ideas. Generating initial codes was done by coding interesting features of the data in a systematic fashion across the entire data set. The researcher did this manually and coded for as many potential codes as possible. Then searching for themes where the researcher focused on the broader level of themes and sorted the different codes into potential themes was done. Here themes were made up of subsets of codes in which some codes formed main themes and others sub-themes. At this stage the researcher made a collection of themes and sub-themes. Reviewing themes, which were checking if themes worked in relation to coded extracts and the entire data set and generating a thematic map of the analysis was also done. At this stage some themes collapsed into other themes while others broke down into smaller components. Defining and naming, themes which involved capturing the essence of what each theme was about and the aspect of data each theme captured was done by the researcher. An overall narrative with all the data was created and analysis of each theme was done and its individual narrative. Finally, the researcher produced the report. This was the final opportunity for analysis. Here the researcher selected vivid, extract examples, analyzed the selected extracts, related back the analysis to the research question and literature and produced a report of the analysis as shown in table 3.4

Table 3.4: Hand Coded

| Transcripts | Themes/sub themes | Codes for themes and sub-themes |
|--|--|---------------------------------|
| Departmental offices are available and adequate...HT1, HT9 laboratories are adequate for learners.HT4, HT5, HT6 classrooms for learning are adequate...HT3, HT8, HT9 with increased enrollment play. Electricity is enough | Offices, Classes, Library, Electricity, Clean Water, | OF CL LB EL |

| | | |
|---|---|--|
| and enhances learning...HT3, HT7playground is adequate for use...HT1 library is enough for use...HT5, HT6, HT8 there is adequate clean water in school...HT3 professional records are used in school..HT6. there is ICT integration in our school...HT2 latrines are available and adequate for use in school...HT4 | Playground, ICT Integration, Professional Documents, Latrines, Laboratory | CW PG ICT PD LL |
| Content covered is affected by the numbers... HT1,HT7, number of lessons per teacher is inadequate...HT3 workload has added since the inception of FPE...HT6,HT1,HT4, no adequate teacher-student individual attention...HT6 Teachers attend workshops/seminar rarely...HT4 teachers do not cover syllabus at the right time...HT6 There is no continuous evaluation,...HT1 | content, adequacy, work load, pupil teacher ratio, capacity building, syllabus and testing policy | CT AD WL PT CB SL TP |

Having coded the transcripts, themes and sub themes were identified in the process of analysis and interpretation as was in Raburu (2011).

3.11: Ethical Considerations:

Ethics refers to a complex of values standards and institutional schemes that help to constitute and regulate scientific activity (Kombo & Tromp, 2006). Adherences to relevant ethical aspects of research, which are embodied in individual and professional codes of conduct in schools were accounted for during development and conduct of empirical investigation. The rights and expectations of the participants were respected, anonymity and confidentiality were granted, deception was avoided and the purpose of research was made clear to the participants. The research was also conducted in such a manner so as to minimize any intrusion or disruption to educational welfare of the participants. Permission was obtained from the university, (JOOUST) in order to conduct this research. The qualitative questionnaire was filled in voluntarily and it was explained to the participants. The researcher acknowledged information obtained from other authors to support the relevance of this study in the form of references. The researcher provided adequate and clear explanation to each respondent on the purpose of the study, and assured them that their participation is voluntary. There was a specific plan in place for the protection of data, in order to ensure the confidentiality and anonymity of the participants in this study. The plan was as follows: the uses of unique identifiers instead of names; storing all data in a locked file and care in disposing of all information that could identify a participant from all researchers. Participants were assured that other than the researcher and supervisors, no other person will have access to their answers. For the participants consent, the questionnaire and interview schedule contained an opening instruction that will require each respondent's consent before proceeding with anonymous completion of the questionnaire.

4. FINDINGS, INTERPRETATION AND DISCUSSION

The study sought the views of the deputy head teachers with respect to the likert scale pertaining to learning resources in schools. It also used interviews from head teachers to elicit information on effect of learning resources on quality education in public primary schools on. Physical and material resources, its importance, need and relevance towards the success of every education programme cannot be overemphasized. The availability of adequate school buildings, classrooms, chairs, desks and other facilities are necessary for the attainment of educational objectives hence quality education. Educational facilities are the major factors contributing to quality education in the school system. These include the school buildings, classrooms, furniture, libraries, laboratories, recreational equipment and other instructional aids. These physical facilities are essential materials that must be put in place and into consideration for the objectives of the school system to be accomplished for quality education. Table 4.6 shows the descriptive analysis of learning resources variable using frequency, total frequency, total score, average and percentages.

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Table 4.1: Effect of learning Resources on Quality Education in Public Primary Schools (n=86)

| Item | 1 | 2 | 3 | 4 | 5 | TF | TS | AV | %SCORE |
|--|----|----|---|----|----|----|-----|----------|----------|
| 1. Departmental offices are available and adequate, | 4 | 1 | 0 | 62 | 1 | 68 | 259 | 3.808824 | 76.17647 |
| 2.Laboratories are adequate for learners | 12 | 8 | 0 | 6 | 52 | 78 | 312 | 4.00000 | 80.0000 |
| 3.Classrooms for learning are adequate | 18 | 8 | 0 | 46 | 5 | 77 | 243 | 3.155844 | 63.11688 |
| 4.With increased enrollment playground is adequate for use | 13 | 1 | 0 | 6 | 52 | 72 | 299 | 4.152778 | 83.05556 |
| 5. Library is enough for use | 1 | 2 | 0 | 10 | 61 | 74 | 350 | 4.72973 | 94.59459 |
| 6. There is adequate clean water in school | 10 | 4 | 0 | 50 | 13 | 77 | 283 | 3.675325 | 73.50649 |
| 7. Electricity enhances learning | 10 | 46 | 0 | 15 | 11 | 82 | 217 | 2.446341 | 52.92683 |
| 8. Professional records are used in school | 10 | 18 | 0 | 40 | 13 | 81 | 271 | 3.345679 | 66.91358 |
| 9. There is ICT integration in our school | 5 | 6 | 0 | 70 | 3 | 84 | 312 | 3.714286 | 74.28571 |
| 10. Latrines are available and adequate for use in school | 8 | 10 | 0 | 56 | 13 | 87 | 317 | 3.643678 | 72.87356 |

Key: Strongly Agree (1), Agree (2), Not sure (3), Disagree (4) and Strongly Disagree (5),

Table 4.1 shows that, although (23.8%) of deputy head teachers who took part in the study held the view that the departmental offices are available and adequate in their schools, a significant proportion [4 (76.2%)] others held the belief that the offices are generally inadequate. The state of laboratories was not any better either; whereas only (20.0%) of the deputy head teachers who were sampled for the study held perception that laboratories were adequate in meeting the needs of the students in their schools, a significant majority of 4 (80.0%) of the deputy head teachers said the science laboratories are quite inadequate, as shown in table 4.6. It also emerged that most of the schools had adequate classrooms for learning, as confirmed by a few (36.9%) of the deputy head teachers whereas most of the deputy head teachers vehemently negated the assertion that the classrooms are adequate as the view was shared by 4(63.1%).

Further findings reveal that some of the facilities may be available but not in enough. This was attested by many 4 (83.1%) of the deputy head teachers who took part in the study who eluded that their schools have playground that is inadequate for use. This state of inadequacy was replicated in the other teaching and learning infrastructural facilities; in library only (5.4%) of the deputy head teachers who participated in the study alluded that the library in available and well equipped for learners use, but most [4 (94.6%)] of the deputy head teachers insisted that the libraries are far from being sufficient according to the needs of the students and teachers. Similarly, the state of the toilets is worse off in most of the primary schools more than three out of every five [4 (72.9%)] of the deputy head teachers who were sampled for the study asserted that toilets are not sufficient at all. Further, it was revealed from the findings of the study that water supply in most of the schools in the sub-county is inadequate; only (26.4%) of the deputy head teachers were satisfied with adequate clean water in their schools. However, nearly three out of every four [4 (73.5%)] deputy head teachers who were asked about the status of their water said they did not have adequate and clean water in their schools.

The use of ICT is another area where the study established that there is high inadequacy; it emerged that whereas only (33.9%) of the deputy head teachers who participated in the study confirmed that ICT is integrated in teaching/learning activities in their schools, an overwhelming majority of them 4 (66.1%) revealed that ICT is never integrated in teaching/learning in their schools. On the contrary, electricity in most of the schools was established to be available and enhances teaching/learning. This was confirmed by nearly half [4 (52.9%)] of the deputy head teachers who took part in the survey said that their schools have electricity. On the same note, it emerged that many 4 (66.9%) of the deputy head teachers confirmed that their teachers do not use professional documents in teaching/learning. The results and discussions

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of data collected from in-depth interview schedules with the head teachers on effect of increased enrollment on learning resources in public primary schools was as follows:

Head teachers said:

Congested classrooms, limited physical facilities and shortage of qualified teachers have negatively impacted on the quality of teaching and learning on one hand and contributed to indiscipline in schools

Head teachers said:

“There is overstretching of library and classroom as resources in schools due a sudden increase in the population of pupils. This has compromised quality.” (HT5),

Head teachers said:

“From 2003 to 2008, the population of pupils attending primary school expanded. This has put huge strains on the library as a resource available in our school” (HT6, NT8)

Head teachers reported;

“Classes were manageable at 40 or 50 students, but some classes have expanded to over 100 students. This is due to the number of pupils who had missed the opportunity before and now even class rooms, latrines and are small in number”. (HT3, HT4, HT8,)

Head teachers reported;

“Lack of enough learning resources hinders many children from attending school regularly; in the end, these children give up education. The frustrations these pupils go through affect their academic performance.”(HT9)

This study found that there is overstretching of library and classroom as resources in schools due a sudden increase in the population of pupils. This has compromised quality. This is in agreement with (UNICEF and World Bank, 2009) which asserts that challenges have bedeviled the implementation of the FPE policy.

Also congested classrooms, limited physical facilities and shortage of qualified

teachers have negatively impacted on the quality of teaching and learning on one hand and contributed to indiscipline in schools on the other (Okwach and George, 1997). Lucas and Mbiti (2010) noted that there is an association between the physical capacity of a school and the teachers’ motivation of students to learn. It offers a suggestion as to how overcrowding influence what goes on in the classroom. Similarly, community involvement and support can be expressed by material support funds, labor, food, etc., by parents’ moral and material support to their children to attend school, by participation in governance of the school, and in classroom activities as aides and instructors. The availability of learning materials in schools, especially textbooks, is impressive. Three head teachers said;

“enrolment has overloaded school laboratory”. (HT4, HT5, HT6)

Alexander, (2008) noted that the number of classrooms has not increased correspondingly to the increase in students. Classrooms that were built for students to sit comfortably are now packed with three times the number of students. The shortage of desks forces two or sometimes three students to squeeze onto a small bench. The learning environment has become uncomfortable, encouraging students to become distracted. In some cases, the number of classrooms is not enough, so classes need to be held outside on the field while teachers conduct them with megaphones Offices and other schoolrooms have been converted to classrooms for the children. Facilities have been much more difficult to maintain and have led to deterioration of the quality of education offered. This agrees with Siegel (1999:4) who found that decent facilities make additional contributions to teachers work. Siegel has found there was a direct relationship between architecture and the collaboration of teachers. The arrangement of space has immediate and far reaching consequences for teacher's ability to effectively and efficiently accomplish daily activities, the formation of social and professional relationships, and the sharing of information and knowledge. Another head teacher said;

“These large and heterogeneous classes challenge use of learning resources”(HT5)

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With increased enrollment, delivery of the curriculum has become a problem agreeing with the findings that large and heterogeneous classes, possibly driven by the out flux of poorly prepared learners (Lucas and Mbiti 2010).

Head teachers said;

“When the government implemented FPE in 2003, it stated that all children had a right to a free education from standards 1 through 8. There were no guidelines or restrictions in admissions. As a result, many students with no previous educational background enrolled in schools and this has strained the offices, latrines water and the playground”. (HT2, HT9, HT3,)

Another head teacher said;

“Head teachers had no record on how much school experience these children had and placed them in classes they did not belong in. A large number of older children who could not afford education before enrolled in standard 1 with children 8 years younger than them. This has added work load hence difficulty in the making of the professional records.” (HT6)

Another head teacher said;

“Many more children may be completing primary school, but as a proportion of cohorts which start class 1, not much has changed over the years because of poor coverage of the content”(HT1)

Another head teacher said;

Analysis of this study reveals a trend pointing to inefficiencies in the education system resulting from high enrolment suggesting that as children progress through schooling proper learning does not take place. This agrees with the study that their brief schooling experience consists frequently of limited learning opportunities in overcrowded classrooms with insufficient learning materials and under-qualified teachers (Alexander, 2008). Alexander asserted that when learners attend school, they are supposed to add value in terms of getting the relevant skills and attitudes. Failure to do so or complete a basic cycle of primary school not only limits future opportunities for children but also represents a significant drain on the limited resources that countries have for the provision of primary education.

One head teacher said;

“Children are registered in school, participate but fail to learn, are enrolled for several years but fail to progress and a few drop out from school and end not gaining much in terms of content to assist them in life (HT9)

One head teacher said;

“The shortage of desks forces two or sometimes three students to squeeze onto a small bench. The learning environment has become uncomfortable, encouraging students to become distracted. In some cases, the number of classrooms is not enough, so classes need to be held outside on the field while teachers conduct them with megaphones Offices and other schoolrooms have been converted to classrooms for the children”.(HT4)

One head teacher said;

“The availability of learning resources and use determines the quality of instruction and performance of students in the school.”(HT2)

This study found that a few pupils do not attend school adequately. This implies that they do not gain the relevant skills values and attitudes. This agrees with Levine et al. (2003) who asserts that if primary school enrollment and completion rates are high, but the quality of education is low, then education has not conferred the skills and knowledge that are the source of the hoped-for greater earnings, better health, and more engaged citizenship. Lack of enough learning resources hinders many children from attending school regularly; in the end, these children give up education. The frustrations these pupils go through affect their academic performance. They lose interest in education and the pressure under which pupils in primary schools work is a lot. They are taught in congested classes and have short holidays. These burdens have reduced children’s playing time, and affected their motivation for learning. The consequences are that they achieve low education quality.

4.1 Testing Hypothesis on Learning Resources

In this study learning resources parameters (Laboratory, playground, classrooms, latrines, administration offices, library, water, electricity, professional documents and latrines) were converted into continuous ratio scale, with values ranging from 1 to 5. It was therefore suitable to establish the input between the parameters and quality education using correlative methods. Therefore the hypothesis was tested using inferential statistics mainly based on correlation and regression analysis. A bivariate correlation (zero-order correlation) was used to explore the relationship between the parameters by computing a Pearson Product-Moment Correlation Coefficient. All data was analyzed at a level of confidence of 99.5% (p.v = 0.05). This value chosen was the most popular and acceptable level of significance test (Creswell, 2002). By this testing level, the researcher allowed 5% percent error margin. This meant that the results were 95% true as was found. The availability of learning resources and use determines the quality of instruction and performance of students in the school. School plant is classified into site, building and equipment, which includes permanent and semi- structures such as machines, laboratory equipment, the chalkboard and office assistants’ tools such as brooms and clearing materials. School building is said to have positive impact on the comfort, safety and academic.

Table 4.7 shows the correlation on elements of learning resources using a zero order correlation matrix.

Table 4.2: Correlations on Elements of Learning Resources (Zero Order Correction Matrix)

| | | Offices | Laboratory | Classes | Playground | Library | Clean Water | Electricity | Professional Documents | ICT Integration | Latrines |
|------------------------|---------------------|---------|------------|---------|------------|---------|-------------|-------------|------------------------|-----------------|----------|
| Offices | Pearson Correlation | 1 | | | | | | | | | |
| | Sig. (2-tailed) | | | | | | | | | | |
| | N | 68 | | | | | | | | | |
| Laboratory | Pearson Correlation | .221 | 1 | | | | | | | | |
| | Sig. (2-tailed) | .070 | | | | | | | | | |
| | N | 68 | 78 | | | | | | | | |
| Classes | Pearson Correlation | .193 | .633** | 1 | | | | | | | |
| | Sig. (2-tailed) | .115 | .000 | | | | | | | | |
| | N | 68 | 77 | 77 | | | | | | | |
| Playground | Pearson Correlation | .284* | .662** | .668** | 1 | | | | | | |
| | Sig. (2-tailed) | .019 | .000 | .000 | | | | | | | |
| | N | 68 | 72 | 72 | 72 | | | | | | |
| Library | Pearson Correlation | .308* | -.166 | -.121 | -.186 | 1 | | | | | |
| | Sig. (2-tailed) | .011 | .158 | .303 | .118 | | | | | | |
| | N | 68 | 74 | 74 | 72 | 74 | | | | | |
| Clean Water | Pearson Correlation | .441** | .363** | .425** | .623** | -.219 | 1 | | | | |
| | Sig. (2-tailed) | .000 | .001 | .000 | .000 | .061 | | | | | |
| | N | 68 | 77 | 77 | 72 | 74 | 77 | | | | |
| Electricity | Pearson Correlation | .497** | -.037 | .193 | .173 | -.022 | .588** | 1 | | | |
| | Sig. (2-tailed) | .000 | .746 | .092 | .147 | .850 | .000 | | | | |
| | N | 68 | 78 | 77 | 72 | 74 | 77 | | | | |
| Professional Documents | Pearson Correlation | .493** | .654** | .716** | .673** | -.145 | .511** | .504** | 1 | | |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .218 | .000 | .000 | | | |
| | N | 68 | 78 | 77 | 72 | 74 | 77 | 81 | 81 | | |
| ICT | Pearson Correlation | .564** | .481** | .303** | .562** | -.166 | .545** | .473** | .548** | 1 | |

| | | | | | | | | | | | |
|--|---------------------|--------|--------|--------|--------|-------|--------|--------|--------|--------|----|
| Integration | Sig. (2-tailed) | .000 | .000 | .007 | .000 | .158 | .000 | .000 | .000 | | |
| | N | 68 | 78 | 77 | 72 | 74 | 77 | 82 | 81 | 84 | |
| Latrines | Pearson Correlation | .411** | .605** | .547** | -.234* | .883* | .725** | .421** | .709** | .662** | 1 |
| | Sig. (2-tailed) | .001 | .000 | .000 | .000 | .045 | .000 | .000 | .000 | .000 | |
| | N | 68 | 78 | 77 | 72 | 74 | 77 | 82 | 81 | 84 | 87 |
| <p>*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).</p> | | | | | | | | | | | |

From Table 4.2, showing the Product Moment Correlation Coefficients, all the parameters were significantly positively (PV < .05) correlated to learning facilities. Most of the correlation coefficients of the parameters associated with learning resources, an effect of quality education in public primary schools in Masaba sub- County were all fairly average but had statistical significance. From the table of correlations, there was a significant correlation of .883 between latrine and the Library. Effective school libraries provide additional reading opportunities for students which in turn improve reading skills, comprehension and writing clarity of expression which in turn support quality education in all other curriculum subjects. This was followed by a correlation of .725 between Latrines and Clean Water; all at P-value, 0.01. This shows that they had a positive association in the model of Learning Resources. Further; there was also a positive correlation of .716, .673 and .668 between Professional Documents and Classes, Professional Documents and Playground and Playground and Classes respectively. They also showed a positive association of the model learning resources. However, there was a negative association between the correlation of Latrines and Playground, a correlation of -.234 at a P-value, 0.05. This also explains the negative association in the model of the parameters in the model.

In conclusion, a decision was reached on the null hypothesis;

H₀1: There is no significant relationship between learning resources and quality of education in public primary schools. Given that level of significance was attained in all the variables, the null hypothesis was rejected. Hence, from this analysis a conclusion was reached that; **Ha1:** There is a statistically significant relationship between the learning resources parameters (laboratory, playground, classrooms, latrines, administration offices, library, water, electricity, professional documents and ICT) and quality of education. This implies that the significant increase in primary school enrolment puts pressure on the existing school resources, leading to poor performance. Rapid expansion in enrolment also exacerbate problems of teaching and learning facilities, overflowing classrooms, high pupil-teacher ratios, shortage of text books and other learning materials and affects inflow of pupils. These conditions are un-conducive to good learning environment which deteriorates the quality of education in public primary schools. Measuring the quality of learning is a challenge the government has admitted facing but no action has yet been taken to arrest the situation. While the impact of the free learning programme might not be reflected on the actual numeracy and literacy tests, concern is rising over the continued decline in the quality of education. There are serious discrepancies between expectations and reality in the education system. Gaps in skills levels among pupils is a warning signal that all may not be well even despite the big investments we are making in education.

Table 4.3 shows the model summary for learning resources variable which was generated by the researcher. It indicates that the coefficient of multiple determination (R squared), a statistical measure of how close the data are fitted to the regression line.

Table 4.3: Model Summary for Learning Resources Variable

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|------|----------|-------------------|----------------------------|
| 1 | .637 | .406 | .395 | .0000417945 |
| Learning resources (Constant), Offices, Classes, Library, Electricity, Clean Water, Playground, ICT Integration, Professional Documents, Latrines, Laboratory | | | | |

It was noted that the total R squared value for the model of Learning Resources Variable was .406 (or 40.6 per cent explained variance). The total R squared value, included the unique variance explained by each variable and also that shared. R squared = 40.6%, this implies that the learning facilities in question accounts for 40.6% variability in quality education and the unexplained variation 59.4% are the learning resources not considered in the equation that would

contribute to the impact of quality education. The independent variables were reasonably strongly correlated; hence there were a lot of shared variance that was statistically removed when they were all included in the model.

Availability and adequacy of educational resources affect the quality education positively. Effective teaching and learning depends on the availability of suitable adequate resources such as books, laboratories, library materials and host of other visual and audio teaching aids which enhance good performance in national examination. Similarly, the availability of textbooks in school appears so consistent with higher level of students’ achievement that they are worth of close scrutiny as instruments of quality education.

Table 4.9 shows coefficients of parameters that were used in making comparisons on their unique contributions to the school learning resources variable. Comparing the different parameters of learning resources, a standardized coefficient was used because the values for each of the different parameters were converted to the same scale so that they could be easily compared. However, in constructing a regression equation, the unstandardized coefficient values listed as B were used. Given that the interest was to compare the contribution of each independent variable the Beta values were considered.

Table 4.4: Coefficients of Learning Resources Variable

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|--|------------------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .020 | .000 | | .324 | .000 |
| | Offices | .061 | .014 | .074 | 4.379 | .000 |
| | Laboratory | -.067 | .202 | -.088 | -.332 | .041 |
| | Playground | .056 | .240 | .054 | .234 | .016 |
| | Electricity | .270 | .023 | .341 | 11.505 | .000 |
| | ICT integration | .103 | .055 | .125 | -1.878 | .005 |
| | Clean Water | .092 | .018 | .106 | 5.230 | .000 |
| | Classrooms | .076 | .016 | .006 | .386 | .031 |
| | Professional Documents | .189 | .041 | .146 | 4.603 | .000 |
| | Latrines | .069 | .028 | .094 | 2.446 | .018 |
| Library | .327 | .081 | .391 | 4.051 | .000 | |
| Dependent Variable: Learning resources | | | | | | |

From table 4.4 the largest Beta coefficient was .391 which was for library implying it made the strongest unique contribution to explaining the dependent variable; the second largest Beta coefficient was .341 which was for electricity, implying it made the second strongest unique contribution to explaining the dependent variable, when the variance explained by all other variables in the model was controlled for. This was followed closely by the professional documents, ICT integration, water, latrines, administration offices, playground, classrooms and Laboratory with Beta values of .146, .125, .106, .094, .074, .054 and -.088 respectively. All the parameters were significant at a P-value of <0.05.

4.1 .3: The Regression Model of Learning Resource:

A regression model for the relationship between the Learning resources variable and the parameters is shown below.

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \beta_9 x_9 + \beta_{10} x_{10} + \epsilon$$

Where: Y is the Learning resources

- x₁ Offices
- x₂ Laboratory
- x₃ Classrooms
- x₄ Playground
- x₅ Library

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x_6 Clean Water

x_7 Electricity

x_8 Professional Documents

x_9 ICT Integration

x_{10} Latrines

$$= .020units + .061x_1units - .067x_2units + .056x_3units + .270x_4units + .103x_5units + .92x_6units + .076x_7units + .189x_8units + .069x_9units + .327x_{10}units + \epsilon$$

From the regression model, the parameter of library had a highest input of .327 towards learning resources. It was followed by electricity which had an input of .270 units. This was followed closely in input contribution by the professional documents, ICT integration, water, latrines, administration offices, playground, classrooms and laboratory with Beta values of .146, .125, .106, .094, .074, .054 and -.088 respectively. The above findings imply that since the introduction of FPE, there has been expansion in terms of enrolments without revitalization. At the moment, the government seems to be more concerned with numbers than with the type of education being offered in schools. Parents' aspirations have been to send their children to school with the expectation that they would come out literate with employable skills. However, their expectations have been dashed. After investing heavily in education, schools are churning out large numbers of either illiterate or semi-literate primary school leavers. Schools still lack essential materials and facilities despite households' contributions especially books. It means that despite investment in education by the government, households, private individuals, NGOs and the donors, crises facing the education sector still persist. Students cannot find places in schools; those who are admitted are overcrowded in classrooms, have no materials for work and are forced or fail or drop-out because parents cannot provide the requisite materials and teachers cannot meet all their individual differences. This implies that the experience across many schools indicates that progress towards the education MDG has not translated into progress in terms of actual learning and hence quality greatly affected.

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1: Effect of Learning Resources Quality Education:

From the regression model, the parameter of library had a highest input of .327 towards learning resources. It was followed by electricity which had an input of .270 units. This was followed closely in input contribution by the professional documents, ICT integration, water, latrines, administration offices, playground, classrooms and laboratory with Beta values of .146, .125, .106, .094, .074, .054 and -.088 respectively.

The descriptive analysis results of the study established from the respondents that the offices, science laboratories and playground are generally inadequate. Teachers insisted that the libraries and toilets are far from being sufficient according to the needs of the students and teachers. There was no adequate and clean water in their schools, that ICT is never integrated in teaching/learning in their schools. This was agreement with the qualitative aspect of the findings which indicated that; there is overstretching of resources in schools due to a sudden increase in the population of pupils. Classrooms that were built for students to sit comfortably are now packed with three times the number of students. The shortage of desks forces two or sometimes three students to squeeze onto a small bench. The learning environment had become uncomfortable, encouraging students to become distracted. In some cases, the number of classrooms was not enough, so classes need to be held outside on the field while teachers conduct them with other schoolrooms which had been converted to classrooms for the children. That children are starting primary school in greater numbers than ever before but dropout rates are significant and lead to lower levels of primary school completion. It was also realized that many children are registered in schools but fail to attend, participate but fail to learn, are enrolled for several years but fail to progress and drop out from school since there were no guidelines or restrictions in admissions.

5.2 Effect of Learning Resources Quality Education in public Primary Schools

It was concluded from the correlation regression model of that the parameters of learning resource affected quality education in order of importance as were factored in the regression model.

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The parameter of library had a highest input towards learning resources with a Beta coefficient of .391 implying it made the strongest unique contribution to explaining the dependent variable. The second largest Beta coefficient was .341 which was for electricity, implying it made the second strongest unique contribution to explaining the dependent variable, when the variance explained by all other variables in the model was controlled for. This was followed closely by the professional documents, ICT integration, water, latrines, administration offices, playground, classrooms and Laboratory with Beta values of .146, .125, .106, .094, .074, .054 and -.088 respectively. This means that learning resources variable had an effect on quality education.

5.3 Recommendations:

In light of the findings about effect of learning resource on quality education in primary schools Strengthen and create more learning facilities and provide sponsorships through government or Civil Society Organisations to minimize costs on poor parents. The departmental offices and laboratories should be made available and adequate in the schools to meet the needs of the pupils. The science laboratories and classrooms for learning should also be built to accommodate the high numbers in schools. Further, still the schools should have libraries and playgrounds that are adequate for use. Similarly, the state of the toilets is worse off in most of the primary schools which means more should be built to cope with the large numbers. Water supply in schools should be sufficient. Funds should be spent in purchase of learning equipment used in ICT and installation of electricity.

5.4: Suggestions for Further Research:

- a) The researcher suggests a study to done on the effect of the selected factors on quality education.
- b) This study focused on evaluation of selected factors on quality education provision. It is imperative to conduct similar studies covering pre-primary, secondary and higher education levels.

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