

Implications of Increased Enrollment on Teacher Resource in Public Primary Schools Quality Education 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 ascertain the implications of increased enrollment on teacher resource in public primary schools in Masaba south sub-county, Kisii county, Kenya affect 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: Quality 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-centered 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 by discrimination against any particular group is not fulfilling its mission.

The European Union in its report on the quality of school education has highlighted that the quality of education is the concern of all member states of the highest political priority. High levels of knowledge, competencies and skills are considered to be the very basic condition for active citizenship, employment and social cohesion (European Commission, 2000).

Nikel and Lowe (2010) approach on 'fabric' of quality in education proposes seven conceptual dimensions; effectiveness, efficiency, equity, responsiveness, relevance, reflexivity, and sustainability arranged so as to emphasize that the quality of education is much like a 'fabric' that is, it is at its strongest when it is stretched or maintained in tension. The framework emphasizes the need to seek a contextually relevant balance among the seven dimensions, where 'balance' does not imply a simple equalizing across all dimensions, even if that were conceptually possible. The needs and the possibilities for action within different educational contexts will vary and decisions must be made over what is desirable and feasible within a specific situation. The model represents a radical departure from the input-process-output model, in that it conceptualizes quality improvement in education as attempts undertaken in a context defined by tensions between different dimensions and on different systemic levels.

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

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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).

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).

The Sub-Saharan Africa continues to lag behind amongst the developing countries in providing access to primary school education (Easterly, 2009; Majgaard and Mingat, 2012). Nevertheless, the various drives towards universal primary education, first in the 1960s and 1970s and more recently given momentum through the Millennium Development Goals, have led to a considerable improvement in access to schooling in many African countries. This is particularly true of Southern and Eastern Africa. In some countries, notably Kenya and Tanzania, national campaigns to improve primary school access in the 1970s were followed by declining enrolments in the 1980s (Sifuna, 2007). Since the late 1990s there has been a renewed wave of expansion. This again involved national campaigns and the abolition or re-abolition of fees, for example Malawi in 1994, Uganda in 1997, and Tanzania in 2000, (Chimombo et al, 2005; Zuze and Leibbrandt, 2011; Hardman et al, 2012; Dubeck et al, 2012). In other countries, such as Mozambique and Zambia, the end of civil war or periods of economic decline led to fairly sudden and rapid expansions in school participation.

Bray, Clarke and Stephens (2002) discovered that quality education is fruitful when there are adequate quantity and quality of physical resources; and that unattractive school buildings, crowded classrooms, non-availability of playing ground and surroundings that have no aesthetic beauty can contribute to poor academic performance. To emphasize further the issue of physical facilities underscores the importance of developing adequate and appropriate physical facilities for quality of education to be realized.

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.

Sifuna, (2005) asserts that as a result of FPE, the teachers complain of increased pupil teacher ratios, low participation of pupils in co-curricular activities and many public primary schools are understaffed. Besides this gender parity has not been adequately achieved. Many school management committees are of the opinion that as a result on the ban of levies, they are unable to recruit extra teachers through the PTAs. Republic of Kenya (2014) publication of the Ministry of Education outlines the policy framework to improve quality of education. The programme noted that wastage arising from dropout is a serious challenge that must be addressed so as to ensure that resources put to education system which improve education quality in terms of time, energy, money and opportunity cost are not wasted. Further, it noted that the declining participation rates and wastage that result from dropping out are issues of concern in provision of quality education. Enrolment and dropout by gender in primary education in Kenya 2013 and 2014 has highlighted that the national rates tend to mask regional disparities, which show some districts, recording participation rates below 35% with correspondingly high dropout rates. The report further noted that in 2001, the national average for dropout rates was 7.8% and from this percentage there was 2.2% and 6.6% for boys and girls respectively. Against this, the main urban centers were better off with an average dropout rate of 4.3%. The incidence of dropping out or non-enrolment has been on the rise

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attributable to a large extent to the Structural Adjustment Programme (SAP) which eroded the economic capacity of most families, thus rendering them unable to meet the education costs of their children. This is an indication that wastages exist in all levels of education system in Kenya and therefore there is need to carry out research and possibly implications policy formulation in an attempt to curb wastage levels in primary education. The report further indicated that while developing countries have done remarkably well in terms of expanding educational quality to an appreciably large percentage of their school going population, school performance as measured by dropout rates, progression rates and examination results has been quite discouraging and questionable.

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 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.

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 Statement of the Problem:

The Kenya's education system is dominated by examination oriented teaching where by passing examinations is the only benchmark for quality education. In Masaba South County, quality education has remained poor. According to the ministry of education Masaba South sub-county, with the introduction of FPE thousands of children locked out of school suddenly turned up to be enrolled. The head teachers argue that the new pupils had brought a great strain on facilities and teachers for these do not march with the numbers. The sub county has had the opportunity to improve enrollment but the quality of the education has not been addressed adequately. Parents in this sub-county also argue that following the declaration of free primary education by the government, it was notable to fund the construction of the extra classrooms needed for the increased enrolment to match with the quality of education supposed to be provided. Many schools are grossly understaffed due to poor staffing and provision. The teachers complain of inadequate educational resources heavy workload and overcrowded facilities as a fact compounding the problem of lack of quality education. This has lowered the quality of education in the sub-county. While studies done in Kenya have also attempted to address the issue, they did not isolate and evaluate the effect of the selected factors on quality education provision in terms of the effect of learning resources and a teacher as a human resource. The data collected and analysed in the sub-county has concentrated on the result of FPE and have left out evaluating the selected factors on quality education in public primary schools. This study therefore sought to do an evaluation on selected factors on quality education in public primary schools in Masaba South sub-County, Kisii County, Kenya.

1.3 Purpose of the Study:

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

1.4 Objectives of the Study:

The specific objectives to guide the study were:

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To determine the effect of teacher resource on quality education in public primary schools in Masaba South sub-County, Kisii County, Kenya

1.5 Research Hypotheses:

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

H₀: There is no statistical significance between teacher resource and quality education

H_a: There is a statistical significance between teacher resource and quality education provision in public primary schools.

1.6 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.

1.7 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.

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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

2. LITERATURE REVIEW

2.1 Effect of Teacher Resource on Quality Education in School:

Tooley and Dixon (2006) did a study on the role of FPE in reaching the Millennium Development Goals (MDGs). Research was conducted in the District of Hyderabad, Andhra Pradesh, India. Government lists were used to locate all government, private government aided, and fully private schools. The area of interest was defined as notified slums where sanitation, water supply, roads, and electricity were all lacking. Eight researchers walked the streets locating additional schools that were not on the government list. This was done primarily to identify schools that are fully private but are not officially by the government. Once identified, researchers then informally interviewed the head teacher regarding enrollment, teacher to student ratio, fees, gender balance and age of school. The researchers then reappeared unannounced for a classroom observation of Class 4 where they used a checklist regarding teaching methods, teacher behavior, material inputs, and physical structure. The authors found that out of the 918 schools identified, 335 were fully private unrecognized schools. Additionally, school quality ended to be higher in all types of private schools and offered free or concessionary seats to approximately 17% of students. Research was conducted in the District of Hyderabad, Andhra Pradesh, India and this study was done in Masaba South sub-county, Kisii County, Kenya hence filling the gap in the present literature. It was about the role of FPE in reaching the Millennium Development Goals whereas the researcher's study was on the increased enrollment in primary education and its implications on quality another gap filled. The reviewed study was done in slum schools whereas the current study focused on rural setting filling the gap in the literature.

There are certain input characteristics that determines teachers' effectiveness as far as students overall performance is concerned. They include: teacher/pupil relationship, teacher training, teacher experience teachers' salaries and expenditure per pupil (UNESCO, 2000). As regards the developing countries, the EFA report states that there are grounds to believe that many African countries included in SACMEQ (Southern and Eastern African Consortium for Monitoring Education Quality) had much poorer reading skills than IEA (International Association for Evaluation of Educational Achievement) countries. Moreover, a comparison of SACMEQ I (1995-1996) and II (2000-01) showed that 5 of the 6 countries had declines illiteracy achievement scores though these were significant only in Malawi, Namibia and Zambia (Unesco 2005). A recent national level survey conducted in India by EI (Educational Initiatives) and WATIS (Wipro Applying thought in Schools) on student learning in top schools found a dismal gap in learning in key subjects. Learning was mechanical and rote based. Moreover, Indian students of class 4 performed far below average in math and science compared to their international counterparts in 43 other countries (India Today Nov. 2006)

Mikako (2007) wrote a paper discussing on Sierra Leone's commitment to EFA and the possibility of unintended consequences if its success is measured only by results showing quantitative gains while downplaying the decline in the quality of the education offered. The participants included 125 teachers, 454 parents, and 488 pupils from 27 public primary schools in five towns and questionnaires from pupils, parents and teachers in 27 schools in five towns. It

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showed that the quality of the education provided had been compromised due to the rapid increase in the number of enrolled children; a high teacher-pupil ratio, a shortage of teaching and learning materials, school buildings and furniture, and low motivation on the part of teachers. This study was on Sierra Leone's commitment to EFA whereas the researcher's was on quality education provision in Kenya a gap which has been filled in the literature. Methodology involved a literature review, an observation of schools, interviewing teachers, government officials and NGO staff, and distributing questionnaires to teachers, parents, and pupils, the researcher's involved head teachers and deputy head teachers using questionnaires, interviews and document analysis. The participants included 125 teachers, 454 parents, and 488 pupils from 27 public primary schools in five towns and questionnaires from pupils, parents and teachers in 27 schools in five towns and this study used 86 deputy head teachers and 68 head teachers a gap filled.

OECD (2010) asserted that what matters is not solely the level of resources, but how countries invest these and how well they succeed in directing teacher resources to where they can have the most impact for quality education provision. For instance school systems often make trade-offs between smaller classes and higher salaries for teachers. The findings from PISA suggest that systems prioritizing higher teacher salaries over smaller classes tend to perform better (OECD, 2010). Adequately resourcing policies and programmes to reduce school failure in terms of quality education provision requires significant amounts of both financial resources and human capital. The importance of costing the resource requirements of initiatives and assessing costs against anticipated outcomes and impact is critical, particularly in the present resource-constrained environment. However, transparent, detailed and accurate estimates of costs are an all-too-rare phenomenon and resources are not always well spent. There is a general lack of high quality cost/benefit analyses of different educational policies and programmes at school and educational authority levels, meaning that schools and governments often make decisions with minimal attention of their likely education outcomes (Hattie, 2009; Woessmann, 2008 in Faubert, 2012).

According to De Ketele, (2000), academic achievement is often used as an indicator of school quality because it is easily measurable using standardized tests, while other outcomes may be more complex and less tangible. These include education for teachers participating in and contributing to the community, learner confidence and self-esteem and skills for behavioral development and change. Such outcomes are possible to evaluate teacher performance. De Ketele further noted that one approach distinguishes four levels of citizenship education outcomes: first, students' knowledge of areas such as human rights, the rights of the child and governmental institutions; second, students' ability to analyse social situations related to citizenship values; third, the degree to which students are able to work cooperatively and demonstrate curiosity and autonomy, an outcome related to teachers' use of participative pedagogy and fourth, the degree to which students demonstrate responsibility to each other and to the community, an outcome related to student and teacher participation in school management and decision-making.

Dramatic expansions of primary school completion can only be accomplished with a comparable expansion in the number of teachers. Yet teacher salaries constitute the largest component of an expansion- usually averaging over 80 per cent of education budgets in major developing nations- and they are recurrent costs. As a result, countries hesitate to hire the extra teachers necessary to expand quality education because of lack of resources and a lack of certainty about the durability of those resources (UNESCO, 2000).

Despite what some might believe, in the current crisis governments need to ensure that all students receive high quality education and that students do not drop out of the system before obtaining the skills they need to successfully integrate into the labour market and society. In these circumstances, public investment in education can be a sensible way to counterbalance unemployment and invest in future economic growth by building needed skills (OECD, 2011). However, increasing teacher resources alone does not necessarily result in school or student improvement (Faubert, 2012; Woessmann, 2008; Faubert and Blacklock, 2012). There is a weak relationship between net levels of spending in education and student performance. For example, Estonia and Poland, which spend around USD 40 000 per student, perform at the same PISA level as Norway and the United States, which spend over USD 100 000 per student. Similarly, New Zealand, one of the highest performing countries in reading, spends well below the average per student (OECD, 2010). This means that performance on international comparisons cannot simply be tied to financial resources and that many other qualitative elements- in particular cultural and contextual ones have to be taken into account. Researchers in education finance have identified several areas in which education funds are misspent - inputs like unnecessary or inadequate textbooks, supplies or computers, poorly developed professional learning programmes, and attempted

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reforms backed by insufficient resources (Faubert, 2012). Pritchett (2004) noted that the completion of primary schooling or higher in itself does not guarantee that a child has mastered the needed skills and competencies. His findings showed that in nearly all developing countries the levels of learning achievement are strikingly low hence achievement of low educational quality is due to overload on the side of teacher as a resource.

Within the east African region, the country of Malawi took the early queue by introducing FPE in October 1994 following an earlier announcement in June that year by the newly elected government that came into power during the country's first multi-party elections. The problem of enrollment followed the Kenyan script in the 1970s as it increased by 79% from 1.9 million in 1994 to 3.4 million in 1995. The increase of such magnitude challenged the already weak system where some schools already had a pupil - teacher ratio of 70:1 and the presence of 13% unqualified teachers (Abbey, 2003).

Though the FPE program in Kenya has received extensive support for making it possible for many children to afford learning, many scholars are still pessimistic that the challenges facing the sector are bound to remain arguing that the program was born out of political expedience rather than the desire to improve access to free education. Many commentators who argue on this line maintain that the introduction of FPE in 2003 caught Kenya's education system completely off guard and the government did not make adequate preparations for policy implementation. They accuse the government for promising the country free primary education without consulting education stakeholders like education ministry officials, field education officers, school administrators and teachers. They point that the number of teachers was not increased to cater for the increased enrolment and the head teachers were not equipped with ample financial management skills in order to easily take care of the extra responsibilities that came with FPE; and the communication between various stakeholders in regard to the implementation of FPE was poor (Chuck, 2009).

A survey on FPE program in Kenya carried out by UNESCO in 2005 found that some of the major challenges facing the free primary education initiative included increased number of pupils, shortage of teachers, lack of clear enrollment guidelines, insufficient teacher consultations and expanded roles for head teachers. Though the study appreciated that teachers played a pivotal role in the implementation of FPE, it was short in pointing out how this impacted on school results (UNESCO, 2005). A study in India, sampled 59 schools and found that of these only 49 had enough teachers in comparison with the enrollment (Carron & Chau, 2006). In this case, the quality of the learning environment was strongly correlated with pupils' achievement in Hindi and mathematics. In Latin America, a study that included 50,000 students in grades three and four found that children whose schools lacked classroom materials and had an inadequate teachers were significantly more likely to show lower test scores and higher grade repetition than those whose schools were well equipped (Willms, 2000). Physical learning environments or the places, in which formal learning occurs, range from relatively modern and well-equipped schools with the enrollment. The quality of teachers seems to have an indirect effect on learning, an effect that is hard to measure. Some authors argue that empirical evidence is inconclusive as to whether the nature of staff is related to higher student achievement after taking into account student's background (Fuller, 2009).

(UNESCO 2005 observes that without significant contingent commitments from donors, those countries that undertake a major expansion of access to education can suffer serious declines in quality- the student-teacher ratio may zoom to 100:1 from 50:1 in ill-equipped classrooms. While millions of poor children have clearly benefited from the elimination of these financial barriers to schooling, such dramatic expansions without an equivalent boost in resources to compensate for lost fees and support the increased numbers of students can create a quality dilemma. In Uganda, for example, while more students gained access, the explosion in class sizes without more external assistance- caused a significant drop in the percentage of students receiving satisfactory scores in Mathematics and English. The answer to this dilemma is neither to forego such admirable efforts to eliminate fees nor to discourage such leaders from seizing critical political moments to push their nations towards universal basic education. Instead, what is needed is substantial continent donor funding to encourage well-planned expansions (UNESCO, 2005). EFA can only succeed if teachers are treated as participants and not just as employees. Educators need to develop greater self-awareness of both strengths and weaknesses, and how they may influence students and the learning process. Emotionally secure, competent and committed teachers are one of the most important assets for qualitative education in the future (UNESCO, 2000).

The shortage of teachers in Kenya saw the pupil- teacher ratio in all public primary schools rise above 50:1 with some past 70:1 making it impossible for teachers to give learners individual attention or give them satisfactory assignments as they could not cope with marking (UNESCO, 2005). Thus while Kenya aimed to use FPE program to attain Universal Primary

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Education (UPE) by year 2015, the massive enrolment of pupils in 2003 and the subsequent years and the impact on teacher-pupil ratio became a headache that is yet to be resolved to date. While FPE has done well in giving opportunities to children from less privileged backgrounds to get basic education and all major stakeholders expect the program to succeed, the quality of education under the program is being questioned (UNESCO, 2005). Serious challenges like congested classrooms, limited physical facilities and shortage of teachers, as mentioned earlier in the paper continue to hamper the quality of teaching (Yieke, 2006).

According to Akala(2002), learning demands for example, that teachers have reasonably sized classes. The MOEST recommends a PTR of 35:1 which would give the teacher adequate time to give personalized attention to each pupil, to supervise class work and mark books and examinations. Moderate numbers would also allow the teacher time to plan lessons and execute their plans more efficiently. Unfortunately, for Kenya the achievement of this standard PTR of 35:1 has been an uphill task all along since independence. The World Bank (WB) complicated matters even further when it recommended a PTR of 40:1(Akala, 2002). Whatever the case, the PTR in Kenya has shown an upward trend due to somewhat constantly increasing enrolment rate in primary schools as compared to a declining or almost stagnant number of teachers. Mwendwa (2011) states that though FPE gave more pupils from poor backgrounds an opportunity to access primary education which had eluded them for several decades, the resulting pupil-teacher ratio is critical to the implementation of the program as it has some drawbacks on academic performance (Mwendwa, 2011). As such, the goal of FPE to equip pupils with quality education continues to be threatened because pupils continue to lack enough quality assessment (UNESCO, 2005).

Quality in education must include a change in the teachers. Teachers, next to students are the largest most crucial inputs of an educational system. There is need for enough and qualified teachers if education standards are to be maintained. Education is a lifelong process through which people acquire the necessary knowledge and skills to improve their wellbeing (Njiru et al, 2007). According to the Economic Survey 2009 (KIPPRA, 2009), the number of teachers in primary schools fell by more than 3,000—from 173,157 in 2007 to 170,059 in 2008. The ratio of pupils to teachers moved from 44:1 in 2007 to 45:1 in 2008. But the ratios vary from district to district ranging from 24:1 to 94:1. On average, 87 out of the 158 districts have a higher pupil teacher ratio than the national average. It means that there are major disparities in the teacher distribution across districts countrywide.

In Kenya FPE has increased enrolment, but many students' learning remains inadequate. A recent nationwide survey comprising over a 100,000 students aged between 3 and 16 in over 2,000 schools, found that only 33% of children in class 2 can read a paragraph at their level. The survey further found that a third cannot read a word and 25% of class 5 students cannot read a class 2 paragraph (Uwezo, 2010). Uwezo has noted that with the advent of FPE, enrolment increased in the classes in the lower grades were often are very large, and the children arrived with wide-ranging levels of preparedness. These large and heterogeneous classes can challenge pedagogy and teachers in most cases use lecture method of instruction. For example, at the beginning of 2005, the average first grade class in some areas in Western Province was 83 students, and in 28 percent of the classes it was more than 100.

Performance of pupils is critical in evaluating the quality of education. The performance of pupils in primary schools has been attributed to the fact that enrolment has far exceeded the school's resources. Since schools are unable to charge levies and offer teachers incentives to teach overtime, which have also been banned, there has been little extra coaching to address the needs of slow learners (Kigotho, 2009:31). However, it is important to ensure that academic standards are maintained and that schools produce quality graduates.

Roger, Xiao and Seren,(2004) did a study entitled Reducing Poverty, Sustaining Growth. They assert that in Kenya, Lesotho, Malawi, and Uganda, free primary education (FPE) was viewed as a step toward achieving universal basic education and as part of scaling up poverty reduction. These forms have produced some unintended and unforeseen negative consequences. Quality issues are of concern in all four countries. Indications showed that overcrowding in classrooms is pushing out pupils with special needs, an issue that needs further research. Teachers are over loaded. Survival rates, which are the percentage of a cohort of children enrolled in the first grade expected to reach each successive grade have also been affected. In Uganda, the survival rate has dropped to 37 percent, down from 59 percent before the introduction of free primary education. This was a study on Reducing Poverty, Sustaining Growth in Kenya, Lesotho, Malawi, and Uganda whereas the researcher's study is on the increased enrollment in primary education and its implications on quality education in Kenya. Therefore the present study filled the gap in the literature.

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According to Akala (2002), the practice of using the PTR used by TSC in Kenya is defective and unrealistic. For instance, a school with only 100 pupils will still need teachers for all subjects irrespective of the number of students enrolled in each subject. These teachers will take all recommended teaching hours but the PTR may be as low as 5:1. This is not a justification for a teacher in another populous school to teach a class of 60 students (60:1). Yet this is how ratios work! He further noted that increased enrolment rates have over-burdened teachers. In many schools, teachers are forced to do shift work with separate groups of children in the mornings and afternoons, for no extra pay.

Republic of Kenya (2005) asserted that the huge influx of pupils aggravated an already bad situation with many public schools already short of teaching staff and learning facilities. In some schools there were so many children that parents and teachers agreed on double shifts with one lot of pupils learning in the morning and another in the afternoon. However, despite the hiccups, Kenya is now on its way to achieve its goal of FPE and basic education for all by 2015 (UNESCO, 2005). In the year 2002 the then Minister for Education, George Saitoti said that he had no illusions about the challenges ahead and added that the success of FPE programme depended heavily on the government's ability to mobilize resources and efficiently manage those resources (Akala, 2002). Otieno (2003) adds that poverty levels and staffing problems as other reasons behind unsatisfactory performance in the primary school system.

Planning performance involve hiring qualified personnel while supporting performance involves providing adequate HR for better results through constant evaluation and monitoring (reviewing performance). In order to increase teachers' effectiveness, there is need to increase the length of initial teacher education and to recruit teachers with higher academic qualifications. In this matter, the Government should undertake reforms in teacher education (Njiru et al, 2007). Structured diploma programmes that would enable holders to improve their learning processes as primary teachers should replace P1 certificate courses. Besides, the current Bachelor of Education degree should be reformed to enable holders to have more teaching units. The issue is that teacher education needs to offer a flexible teaching career ladder based on skills, responsibilities and performance. (Kigotho, 2009:31).

Republic of Kenya, (2005) noted that for Kenya to maintain high academic standards in public schools it is expected that an almost similar increase in the supply of teachers is offered. Unfortunately, this has not been the case. By the time FPE was being introduced, teacher recruitment had been frozen in 1998 by the government due to external pressure from the donor agencies-World Bank (WB) and International Monetary Fund (IMF) (UNESCO, 2005). This forced Government of Kenya (GOK) to maintain a teaching force of 230,000 teachers in both primary and secondary schools. Out of this, there are 180,000 teachers serving in 18,000 primary schools in the whole republic (Republic of Kenya, 2005). There was a very high Pupil-Teacher Ratio (PTR) in sample districts in the year 2004, as an indicator of stagnation in the number of teachers' visa-vis a rapidly growing enrolment in the year 2004.

Kasiva (2012) did a study on evaluating provision of quality education in Embakasi District in Nairobi County. In collecting data on provision of quality education, survey research design was employed. This study targeted 13,500 pupils, 144 teachers and 3 quality assurance officers. The study used purposive, stratified and simple random methods to derive a suitable sample population. The suitable sample comprised of 96 pupils, 48 teachers in six public primary schools and three quality assurance officers. To collect data, questionnaires, interviews and observation checklists were used. The findings showed that despite many children living with both parents who had a stable income to support their basic needs, they were routinely obstructed in the neighborhood, and this did not facilitate proper acquisition of skills and good performance. Parents' attitude and busy schedules did not synergize their inter-action and nurturing. The study also found out that teachers had high experience, advanced professional qualification, attended in-service courses regularly, had skills in guiding and counseling, as well as adhered to code of ethics on teaching. In addition, the study found that schools with available, adequate and in good condition facilities gave learners encouragement and satisfaction which promoted their skill and knowledge acquisition. This was a study on evaluating provision of quality education in Embakasi Sub-county in Nairobi County whereas the focused on increased enrollment and its implication on quality education provision in Masaba sub county, Kisii county of Kenya. This fills the gap.

Muthoni(2014) carried out a study on efficiency implications of free education policy on quality of public day public primary schools in Kyeni Division, Embu County, Kenya. The study was premised on the Systems Theory. A descriptive survey research design was adopted. Purposive sampling technique was used to select 10 public day public

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primary schools out of the 35 schools in Kyeni division. Simple random sampling was used to select a sample size of 521 subjects comprising 10 Head teachers, 10 School Management Committee (SMCs) chairpersons, 400 students, 100 teachers and one Area Educational Officer (AEO). Questionnaires, Interviews Focus Group Discussions (FGDs) and Observations were used in data collection. Data was processed and analyzed using descriptive and inferential statistics with the aid of Statistical Package for Social Sciences. The major findings were that; schools lacked enough teachers as one of the resources which negatively impacted on the quality of teaching learning thus lowering achievement of learners and education in study locale was characterized within creased drop-out and repetition cases and low completion and transition rates. Muthoni's study was guided by Systems Theory; this study was guided by Classical Theory of Equal Opportunity, Classical Liberal theory and Social Darwinism theory filling the gap in literature. This study focused on efficiency implications of free education policy on quality of public day public primary schools in Kyeni Division, Embu County, Kenya and the researcher's study is on the increased enrollment in primary education and its implications on quality education in Masaba South sub-county, Kisii County-Kenya. The reviewed study used simple random sampling and purposive random sampling the current study used purposive filling the gap in literature.

Fredrik (2009) carried out a study whose aim was to investigate the impact of free education for all on the public primary schools in Babati, Tanzania. The study was based on the fieldwork carried out in Babati district Tanzania, where information was gathered through qualitative methods. The empirical findings were analysed using a World Bank model of how educational inputs affects welfare outcomes. The study examined the millennium development goal with respect to giving every child an education. The study showed that a bigger impact can be seen in an increased enrolment in schools. That was the result of removing the primary school fees. This has resulted in overcrowding in the primary schools, lack of enough teachers, classrooms and learning materials. It was also noted that because of these large enrollment teachers decided to use lecture method in teaching. In the short term, the removal of school fees increased enrolment but resulted in poor quality of the education. In the long term, these problems are decreasing and the educational sector can now provide education to children that could not afford it before. This study was done in Tanzania whose aim was to investigate the impact of free education for all on the primary school based on the fieldwork and the researcher did it in Kenya based on increased enrollment and its implications on quality education provision in primary hence filling the gap in the present literature.

Lynn (2010) carried out a study which sought for the influence of the education policy in Kenya vision 2030 on the provision of quality education in public secondary schools in Nakuru District, Kenya. The study was guided by Dale's cone of experience theory. The study used descriptive survey design targeting all the 24 principals and 308 teachers from the 24 public secondary schools in Nakuru District. Stratified random sampling was used to select 10 principals and 32 teachers to participate in the study. Data was collected using two questionnaires; one for the principals and one for the teachers. An interview schedule with a district quality assurance officer was also conducted. The study established that the education policy influences the provision of teaching and learning resources. This may positively imply that the goals of Kenya vision 2030 will be achieved through the provision of quality education. These findings have important implications for the structuring of education policies in the country. Since the achievement of the education policy affects the provision of teaching and learning resources, the findings of this study suggest that proper policies regarding teaching and a teacher as a resource should be put in place as the country strives to achieve Kenya vision 2030 in its entity. This study did the influence of the education policy in Kenya vision 2030 on provision of quality education for realization of the vision objectives in Nakuru District whereas the researcher did increased enrollment and its implications on quality education. The study was guided by Dale's cone of experience theory and the researcher used classical liberal theory hence filling the gap in literature. Descriptive survey design was used in this study and the current study used mixed method concurrent approach hence also filling the gap.

Njenga (2010) carried out a study whose purpose was to assess the influence of (FSE) on provision of quality education in public day secondary schools in Nakuru North District. This study was guided by Human Capital Theory. The study adopted the descriptive survey design. The study population included all head teachers and student leaders of day secondary schools in Nakuru North District. The study targeted all the head teachers of the day schools and student class representatives (Form 3 and Form 4) in the target day secondary schools. The study sample was made up of 19 head teachers and 364 students, thus totaling to 383 respondents drawn from 19 public day secondary schools. Secondary data for the study was collected from school records and the District Education Officer's office, Nakuru North District. This

study used questionnaires to collect primary data. The questionnaires were pilot tested and a Cronbach coefficient alpha of 0.708 was obtained. The collected data was coded, edited for errors and then analysed. Descriptive statistics and non-parametric tests were computed with the aid of SPSS version 12.0. The study found out that despite the four years FSE has been in operation, its objectives have been focused more on the universal access rather than quality of education offered. It was found out those resources especially teacher were over stretched. It also appeared that very little review has been done to establish whether the FSE goals other than access, have been achieved. The study assessed the influence of (FSE) on provision of quality education in public day secondary schools in Nakuru North District whereas this study focused on the increased enrollment in primary education and its implications on quality education in Masaba South sub-county, Kisii County, Kenya. The study adopted the descriptive survey design whereas the researcher filled the gap by using sequential explanatory design that was employed within mixed methods. The reviewed study was carried out in Nakuru using secondary schools and the current study filled the gap by doing it in Kisii using primary schools.

Yegon (2007) did a study to investigate the school related determinants of pupils' dropout rates in public primary schools in Kabarnet Municipality Baringo County. The study was guided by ERG (existence, relatedness and growth) theory of Hierarchy needs. The target population was 21 public primary schools, 90 teachers and 315 pupils. The researcher used purposive sampling and simple random sampling to select the respondents. Piloting was done to test the reliability and validity of the instruments so as to improve the reliability. Data collection was done using questionnaires and interview schedule for both the teachers and the pupils. The study used both primary and secondary data. The study used both qualitative and quantitative data which was analysed using descriptive statistics such as frequencies, percentages and tables. The study established school curriculum, physical facilities and teachers' attitude as the determinants of pupils' dropout rates. The reviewed study was about school related determinants of pupils' dropout rates in public primary schools in Baringo district whereas the current study focuses on the increased enrollment in primary education and its implications on quality education in Kisii district. This study was guided by human capital theory and the social system theory of management whereas Yegon's was guided by EGR theory of Hierarchy needs.

Njeri (2011) studied the effect of free secondary education funding policy on transition rates from primary to secondary sub-sectors in the larger Gatundu District in Kenya. The study targeted the two DEOs of the larger Gatundu and 20 principals, 10 from each of the two districts curved from the larger Gatundu and QASO officers 4 from each district. The study combined purposive and random sampling techniques. The study used a questionnaire, document analysis and, in-depth interviews schedules as data collection tools. Before the actual data collection procedure, a pilot study was carried in three schools to pre-test the data collection tools. Descriptive statistics including frequency counts and percentages were used to analyze the quantitative data. Qualitative data obtained through interviews was analyzed thematically based on research objectives. The study established that: FSE funding policy increased enrollment in secondary schools whereas the teacher capacity remained almost the same number. This has increased the work load. It was also established that the major factors which contributed to this decline included financial constraints, poor academic performances, negative attitude towards education and peer influence. The study also established that high inflation rates, understaffing, delayed disbursement of funds, insufficient funds, were other challenges that affected implementation of FSE policy. As a result, FSE negatively affected the quality of education where most schools experienced understaffing, overcrowding in classrooms, inadequacy of teaching and learning resources and eventually poor academic performances. This was a study on the effect of free secondary education funding policy on transition rates from primary to secondary sub-sectors in the larger Gatundu District whereas the researcher's study focused on the increased enrollment in primary education and its implications on quality education in Masaba South sub-county, Kisii County-Kenya. Thus the study filled the gaps in literature.

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

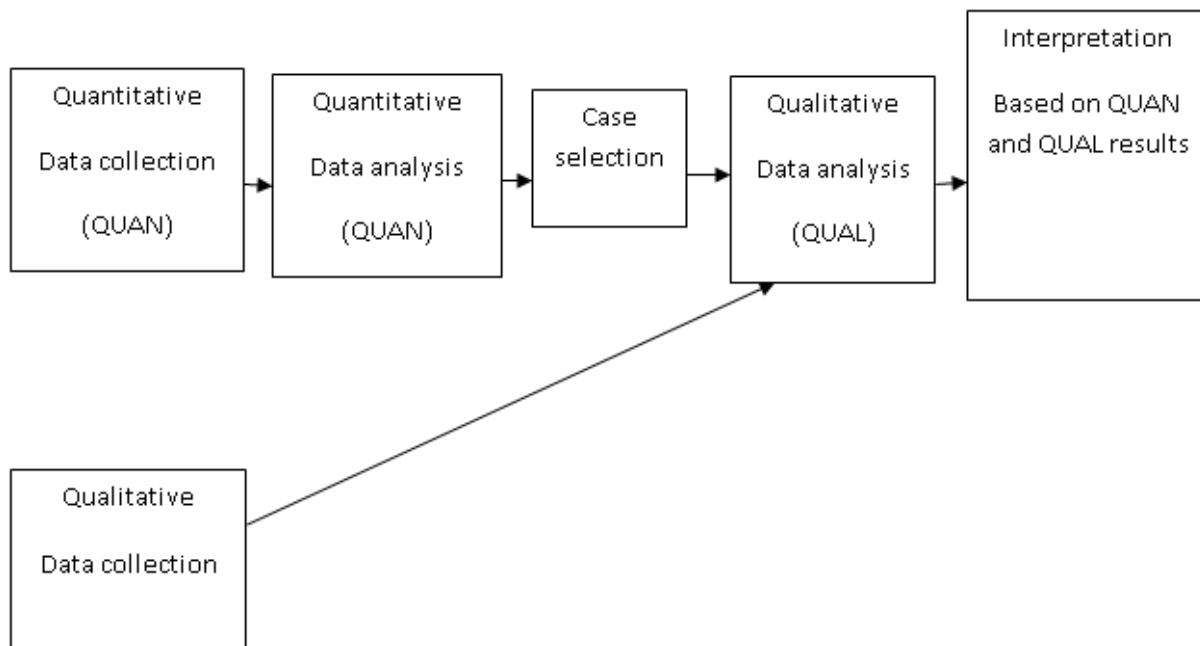


Figure 3.1: Figurative representation of a Sequential Explanatory Design

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

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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: Distribution of Primary Schools, Head Teachers and Deputy Head Teachers

Division	No. public	No. Head teacher	No. Deputies
Masimba	44	44	66
Kiamokama	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

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

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)

X^2 = 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:

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

$$d^2 (N-1) + X^2 P (1-P)$$

$$S= 3.841 \times 82 \times 0.5 \times 0.5$$

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

$$S= 68$$

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

$$= X^2 N P (1-P)$$

$$d^2 (N-1) + X^2 P (1-P)$$

$$S= 3.841 \times 82 \times 0.5 \times 0.5$$

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

$$S= 68$$

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

$$S= X^2 N P (1-P)$$

$$d^2 (N-1) + X^2 P (1-P)$$

$$S= 3.841 \times 112 \times 0.5 \times 0.5$$

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

$$S= 107.548$$

$$0.2775 + 0.96025$$

$$=86$$

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 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

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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 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.

Pearson correlation is calculated by: $r_{hh} = r_{xy} = \frac{\sum(X - X)(Y - Y)}{\sqrt{[\sum(X - X)^2][\sum(Y - Y)^2]}}$

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).

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

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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

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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 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 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

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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 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	Offices, Classes, Library, Electricity, Clean Water, Playground, ICT, Integration, Professional Documents, Latrines, Laboratory	OF CL LB EL 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, (JOUST) 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

4.1 Demographic Information of the Respondents:

4.1.1: Gender of the Respondents:

The study sought to explore the distribution of gender amongst deputy head teachers in Masaba sub-county. This was presented in table 4.1.

Table 4.1: Demographic Information of the Deputyhead teacherss (n = 68)

Information	Gender	%
Male	50	73.5
Female	18	26.5
<i>Source: Survey data (2015)</i>		

It was found from the study of the survey data that there was disparity in gender in public primary schools. Majority (73.5%) were male whereas female were 26.5%. This study shows that deputy head teachers positions are dominated by male teachers. Inappropriate design and practices of education systems allow educational inequities and gender disparity (Hanushek and Wöessmann, 2010). Some system level policies, such as grade repetition or early tracking, tend to amplify socio-economic disparities and are conducive to disengagement and dropout, whereas other policies seem to mitigate them (Causa and Chapuis, 2009). It takes time to implement change, for national and regional education policies to reach schools. Not only is the policy making process long, but schools are complex organizations with specific cultures and composed of many different people turning them around is not easy. It implies designing appropriate strategies and then changing the expectations, beliefs cultures and practices of many diverse individuals as well as changing collective systems, structures and values to accommodate both genders in our primary schools.

Table 4.2: Experience among the Respondents

	Deputy head teacherss	
Below 4 Years	11	13.9
4- 6 Years	8	7.9
7- 9 Years	29	33.8
Above 9 Years	38	44.4
Total	86	100.0

Source: Survey data (2016)

The findings show that only 11 (13.9%) of the deputy head teacherss had an experience below four years. The findings of the study reveal also only, 8 (7.9%), of the teachers in Masaba sub- County had 4-6 years of experience while those with experience of 7-9 years andabove 9 years formed 33.8% and 44.4% respectively of the deputy head teacherss who participated in the study. This shows that most of the deputy head teacherss are experienced. Teachers’ experience contributes a great deal towards quality of education because these teachers have mastered the content and acquired classroom management skills to deal with different types of classroom problems. Experienced teachers are considered to be more able to concentrate on the most appropriate way to teach particular topics to students who differ in their abilities, background and knowledge. Furthermore, experienced teachers have a richer background of experience to draw from and can contribute deeper and ideas to the course of teaching and learning, are open to correction and are less dictatorial in classroom hence provision of quality education. According to Lai (2011), teacher experience has a significant effect on pupils’ quality education in primary schools. This means if other requirements are, met quality education can be provided in Masaba sub-county.

4.1.2: Educational level per Gender:

The study sought to establish the participants’ level of education, as this information was considered key in quality of response that was expected to be received for study. The knowledge of the level of education of the respondents was also considered necessary for the study. This was so because the educational level of the respondents was the key to

understanding of the factors that influence quality of education. Qualified staff must be employed and proper monitoring system for developing human resources must be put in place to ensure school quality education. The situation whereby unqualified and inexperienced teachers are made to teach the students get discouraged and the need for recruitment of qualified teachers with relevant teaching experience intensified. The distribution of the deputy head teachers’ educational level per gender was shown in table 4.4

Table 4.3: Distribution of Deputy Head teachers’ Educational level per Gender

		Educational level			Total
		P1	Diploma	Bachelor	
Gender	Male	24 (52.2%)	11 (55.0%)	2 (100%)	37 (54.4%)
	Female	22 (47.8%)	9 (45.0%)	0 (0.0%)	31(45.6%)
	Total	46 (67.6%)	20 (29.4%)	2 (2.9%)	68 (100%)

Source: Survey data (2015).

From the exploratory data analysis it shows that more than two out of three (67.6%) 46 of them were P1 certificate holders, while the rest 29.4% (20) of them held diploma qualifications and 2.9% (2) held bachelor’s degree. However, the exploratory data analysis shows that male deputy head teachers dominated all category of level of education. In particular, significant majority of each level of education were males; for example 52.2% (24), (55.0%) 11 and 100% (2) of P1, Diploma and Bachelor respectively were males whereas for the female 47.8% (22), 45.0% (9) and 0.0% (0) represent those with p1, diploma and bachelors respectively. It was therefore evident from this study that in Masaba South Sub county, deputy head teachers are well trained to handle primary level. It therefore implies that if there is no any other interferences quality education can be provided. In order to increase teachers’ effectiveness, there is need to increase the length of initial teacher education and to recruit teachers with higher academic qualifications. In this matter, the Government should undertake reforms in teacher education (Njiru et al, 2007). Structured diploma programmes that would enable holders to improve their learning processes as primary teachers should replace P1 certificate courses. Besides, the current Bachelor of Education degree should be reformed to enable holders to have more teaching units. The issue is that teacher education needs to offer a flexible teaching career ladder based on skills, responsibilities and performance (Kigotho, 2009:31).

4.1.3: Length of stay in School:

The study sought to explore deputy head teachers’ length of time they had taken in their current schools. This was considered important because the length of time in the same institution signifies a teacher’s experience and understanding of the school. Quality response in the questionnaire is anchored on this experience, hence the need for the researcher to know this information. Table 4.5 shows the distribution of deputy head teachers’ stay period in the current school

Table 4.4: Distribution of Deputy head teachers’ stay Period in the Current School

		Years of Experience			Total
		Less 5 Years	6-11 Years	12 & above	
Gender	Male	18 (60.0%)	15 (45.5%)	4 (80.0%)	37 (54.4%)
	Female	12 (40.0%)	18 (54.5%)	1(20.0%)	31(45.6%)
	Total	30 (44.1%)	33 (48.5%)	5(7.4%)	68 (100%)

Source: Survey data (2015)

The findings of this study show that 44.1% (30) of the deputy head teachers who had participated in the study had served in the same institution between zero and five years. A significant majority [48.5% (33)] of them had served in their current schools for between 6-11 years, while those who had served in their institution for 12 years and more only formed 7.4% (5) of the deputy head teachers who took part in the study. From Table 4.4 it was evident that four out five [80% (4)]and three out of five [60% (18)] of the deputy head teachers participants who had served in their institutions for at least for 12 years and 0-5 years respectively were male teachers. On the flip flop, the females dominated the category of teachers who had served in their institutions for 6-11 years; whereas 54.5% (18) of them were females only 45.5% (15) were males. This study shows that most male teachers had stayed longer in their stations than female deputy head

teachers. When a teacher has stayed long enough in a school he/she understands better the internal systems of the school and even the outside environment. This assists in a more accurate response given to the study items. This implied that using them as respondents in the study meant getting reliable information.

4.1.4: Staffing of Schools in Masaba sub- County:

The study sought to find out the position of staffing in secondary schools in Masaba sub- County, as the information on staffing is useful in understanding quality of education in schools. This was gathered using document analysis and the curriculum based establishment in the various public primary schools. This was shown in figure 4.1

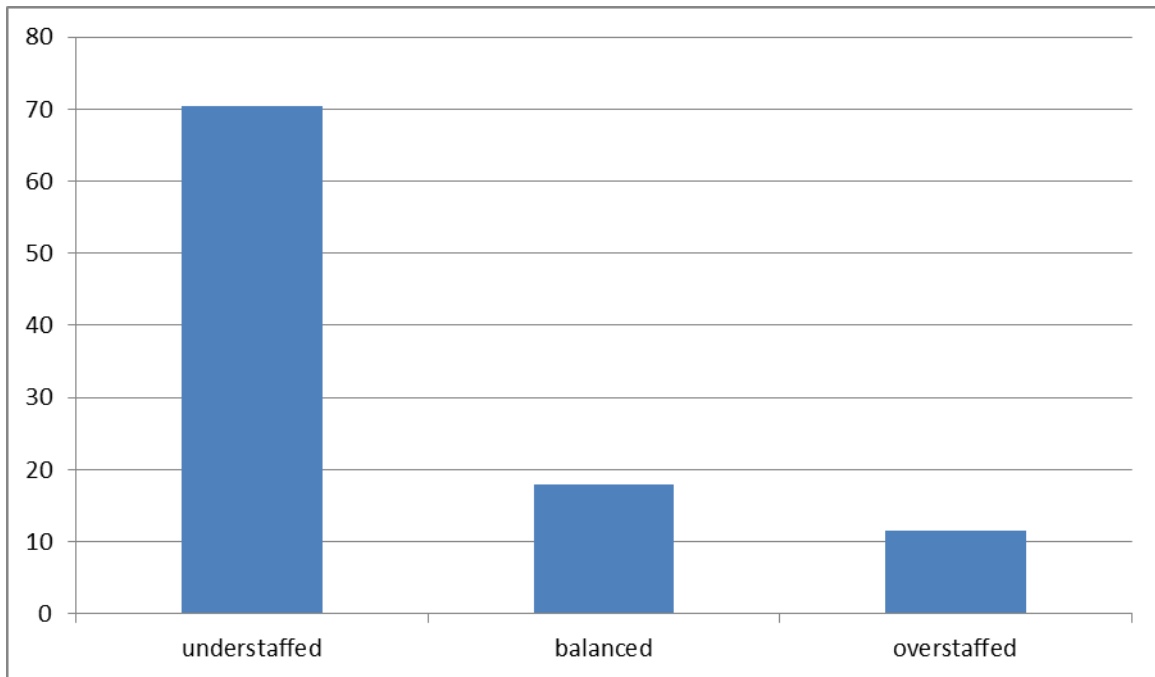


Figure 4.1: Staffing Position in Public Primary Schools

It is evident that a significant majority (70.4%) of public primary schools in Masaba South Sub County is understaffed, while overstaffed schools only formed about 11.6% of all the schools from which the deputy head teachers came from. There is severe shortages currently existing, and there is a gap between demand and supply of teachers needed to ensure quality education in the Sub- County. Teacher shortages have become a major concern to educational authorities and should be addressed continuously by policy makers (Levine et al, 2003). In Kenya, weaknesses in human resource planning has affected training and deployment of teachers and thus distorted their distribution and utilization (GoK, 2006). Consequently, there exists an unbalanced distribution of teachers, teacher shortages, teacher surplus and inefficient utilization of teachers. This is an indication of the absence of enough teachers who can implement the curriculum in Masaba sub-county however much they are qualified and experienced.

4.2 Findings on Effect of Teacher Resource on Quality Education in Public Primary Schools:

4.2.1: Analysis of the Study:

In the second objective, the study sought the views of the deputy head teachers with respect to the likert scale pertaining to teacher as a resource in schools. It also used interviews from head teachers to elicit information on effect of increased enrollment in public primary schools on teacher as a resource.

4.2.1.1: Teacher population:

The study sought to explore how the number of current teacher population compares with the expected ideal teacher number in those schools using document analysis. It was established that there was significant difference in current and expected teacher number in public primary schools within Masaba south sub-county. Table 4.10 shows the group statistics on teacher mean number of teachers.

Table 4.1: Group Statistics on Teacher Mean Number of Teachers.

	Education Payments	N	Mean	Std. Deviation	Std. Error Mean
Teacher Number	Actual teacher number	66	11.9697	3.33268	.41022
	Expected teacher number	96	15.6515	4.50809	.55491

This teacher mean number of teachers was reflected by the independent-samples t-test results, which was conducted to compare the mean number of current and expected teachers per school within Masaba sub-county. This is shown in table 4.11

Table 4.2: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Teacher Expected Number	Equal variances assumed	1.879	.173	-5.335	130	.000	-3.68182	.69008
	Equal variances not assumed			-5.335	119.707	.000	-3.68182	.69008

Table 4.6 depicts that there was a significant difference between the actual number (M=11.97, SD=3.33) and expected number [M=15.65, SD=4.51; t(120)=-5.34, p<.05], with the actual teacher numbers being significantly lower than the expected number of teachers in the schools within the sub-county as revealed by group statistics. This therefore implied that teacher/pupil ratio was quite disproportionate in disfavor of the current teacher staffing in most of the schools in the sub-county.

Teachers' attitudes towards their work and pupils, their classroom management and their interaction with pupils have great impacts on the academic achievement and the retention in school of their pupils. Few classroom observations in schools indicate that there are cases where teachers' negative attitudes make pupils drop out of school. These pupils are sometimes neglected, abused, mis-handled, and sent out of class during teaching learning periods. This atmosphere is not conducive to learning and makes some children hate school. The need to increase pupils' enrolments has not taken into account their growing up needs in order to retain them in school.

Table 4.7 shows the findings of the effect of increased enrollment in public primary schools on teacher resources

Table 4.3: Effect of Teacher Resource on Quality Education in Public Primary Schools (n=86)

ITEM	1	2	3	4	5	TF	TS	AV	% SCORE
1.The content covered is affected by the numbers	5	5	0	58	20	88	347	3.943182	78.86364
2. The number of lessons per teacher is inadequate.	2	12	0	54	6	74	272	3.675676	73.51351
3. The workload has added since the inception of FPE	1	5	0	62	6	74	303	4.0946	81.8918
4. There is no adequate teacher-student individual attention	5	7	0	51	12	75	283	3.773333	75.46667
5. Teachers attend workshops/seminar rarely	1	30	0	50	5	86	286	3.325581	66.51162
6. teachers do not cover syllabus at the right time	5	4	0	62	11	82	316	3.853659	77.07317
7 There is no continuous evaluation	12	5	0	49	10	76	268	3.526316	70.52632

Key: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1), P- principals, ST-DH teachers, R – respondents

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Table 4.7 depicts that, although (21.1%) of deputy head teachers who took part in the study held the view that the content covered adequate in their schools, a significant proportion [4 (78.9%)] held the belief that the content is generally inadequate. The state of the number of lessons taught adequacy was not any better either; whereas only (26.5%) of the deputy head teachers who were sampled for the study held perception that lessons were adequate in meeting the appropriateness of the teachers in their schools, a significant majority of 4 (73.5%) of the deputy head teachers said that the number of lessons taught are quite inadequate, since they are too many as shown in table 4.9. It also emerged that most of the schools had heavy workload, as confirmed by most 4 (75.5%) of the deputy head teachers whereas a few of the deputy head teachers vehemently agreed with assertion that the workload are heavy as the view was shared by 4(63.1%).

Further findings reveal that there is no adequate teacher-student individual attention. This was attested by many 4 (75.4%) of the deputy head teachers who took part in the study who alluded that pupil teacher ratio has gone high since the inception of FPE. This state was replicated in the other parameters; in capacity building only (33.5%) of the deputy head teachers who participated in the study alluded that teachers attend workshops/seminar but most [4 (66.5%)] of the deputy head teachers insisted that the teachers attend workshops/seminar rarely. Similarly, the state of the syllabus coverage is worse off in most of the primary schools more than three out of every five [4 (77.1%)] of the deputy head teachers who were sampled for the study disagreed with the fact that teachers cover syllabus at the right time. Further, it was revealed from the findings of the study that the testing policy was not characterized by continuous evaluation in most of the schools in the sub-county; only (29.5%) of the deputy head teachers were satisfied with testing policy as they had it that they had continuous evaluation. However, nearly three out of every four [4 (70.5%)] deputy head teachers who were asked about the testing said they did not have adequate and continuous evaluation.

It emerged that many 4 (74.9%) of the deputy head teachers confirmed that structured and inclusive pedagogy has not improved minority (25.1%) had the opinion structured and inclusive pedagogy has improved that while The results and discussions 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: Lucas and Mbiti (2010) have noted that teacher resource is one of the most important inputs in the education system and therefore their efficient management and utilisation is critical to the quality of learning outcomes. Continuous improvements in the quality of educational services should also entail continuous skills upgrading for teachers. The teachers should also be enough, have clear vision, and set achievable goals and objectives and achieve them. Teachers' preparation for their lessons and their evaluation of students has particularly strong associations with student outcomes. A head teacher said;

“Due to high enrolment and congested classrooms, teachers are unable to teach well and pupils were unable to concentrate hence the content covered in a problem” (HT3)

A head teacher said

“FPE has created significant problems like overcrowded classrooms, high pupil -teacher ratio, scarcity of learning materials and overworked teachers”(HT3)

The above agrees with a research done which asserts that many primary schools were therefore over -crowded leading to a shortage of books and teachers. The schools also faced the problems of discipline as older children returning to school became a source of negative influence to the younger ones and this impacted on how teachers handled the classes (Boy, et al, 2006). Similarly, due to high enrolment and congested classrooms, teachers were unable to teach well and pupils were unable to concentrate (Nkinyangi, 2005). Another head teacher said;

“Teachers are conducting classes in a lecture format, which does not hold the attention of young primary students. Less homework is being assigned due to the inability of teachers to mark 100 papers every night.” (HT6)

This means that quality of education has suffered as teachers have become overburdened and stopped being able to provide students with the attention they need.

Another head teacher said

“Teachers’ attitudes towards their work and pupils, their classroom management and their interaction with pupils have great impacts on the academic achievement and the retention in school of their pupils”. (HT4)

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One head teacher said;

*“There is sudden increase in enrollment till teachers are nowadays attending up to 100 pupils in a class and syllabus coverage is an issue”*HT6

This statement is in agreement with UNESCO that sampled of 162 public primary schools in Kenya in 2005 to carry out a survey that showed that the average pupil-teacher ratio stood at 58:1 against the recommended average of 40:1. The survey revealed that FPE program had put a lot of pressure on teachers such that some in the rural areas were handling 100 pupils while some of their counterparts in the urban slums were teaching 120 pupils in a class (Republic of Kenya, 2005; Bold, et al, 2009) and hence there was very little teacher-pupil interaction and teachers opted to attend bright pupils at the expense of slow ones. Traditionally teachers in private primary schools handle smaller class sizes (UNESCO, 2005) which has enabled most of the schools to produce very good end of school exams to an extent that owners of the institutions are complaining that the ministry of education is discriminating their pupils when it comes to placement in form 1 class under the pretext that these pupils have been spoon fed with knowledge all along.

Another head teacher said;

*“The pupil teacher ratio which has gone up made teachers have extra work which they do not now attend to adequately and even evaluation now is a problem”*HT1

The above findings agree with Boy (2006) who observed that the FPE program is to blame for poor academic standards in public primary schools in Kenya. However, Vreede (2003) notes that the problem of high pupil- teacher ratio is not unique to Kenya as Uganda too experienced similar problems when it introduced free primary education in 1997. In Kenya the enrolment in public primary schools increased from 5.8 million in 2002 to about 7.2 million in 2003 following the introduction of free primary education and stood at 7.5 million by 2004. Despite this, the number of teachers remained unchanged (MOEST, 2004). A head teacher quoted;

*“Teachers were not ready for such large numbers and we were not take not taken for seminar for orientation.”*HT4

The above agrees with Fleshman (2005) who noted that teachers were not psychologically prepared to accommodate these large numbers. Other researchers also agree that FPE has created significant problems like overcrowded classrooms, high pupil -teacher ratio, scarcity of learning materials and overworked teachers (Itunga, 2011; Mushtaq, 2008; Sifuna, 2005

The schools also faced a shortage of desks for the newly enrolled pupils and making slightly well off parents opt to transfer their children from public primary schools to private schools in search of quality education. Aduda (2005) documents some areas in Kenya where public primary schools pupils still learn while seated on the floor and others under trees. Still many schools teachers admit that they cannot master the faces of all their pupils (Aduda, 2005).

According to Akala (2002), learning demands for example, that teachers have reasonably sized classes. The MOEST recommends a PTR of 35:1 which would give the teacher adequate time to give personalized attention to each pupil, to supervise class work and mark books and examinations. Moderate numbers would also allow the teacher time to plan lessons and execute their plans more efficiently. Unfortunately, for Kenya the achievement of this standard PTR of 35:1 has been an uphill task all along since independence. The World Bank

(WB) complicated matters even further when it recommended a PTR of 40:1(Akala, 2002).

Whatever the case, the PTR in Kenya has shown an upward trend due to somewhat constantly increasing enrolment rate in primary schools as compared to a declining or almost stagnant number of teachers.

4.2.2: Testing the Hypothesis on Teacher Resource of Study (Zero order correlation matrix):

In this study teacher resource parameters (content, adequacy, work load, pupil teacher ratio, capacity building, syllabus and testing policy) were converted into continuous ratio scale, with values ranging from 1 to 5. It was therefore suitable to establish the input between the parameters using correlative methods and quality education. 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). By this testing level, the researcher allowed 5% percent error margin. This meant that the results were 95% true as was found.

Table 4.8 shows the correlation on elements of teacher resource using a zero order correlation matrix.

Table 4.4: Correlations on Elements of Teacher Resource (Zero Order Correction Matrix)

		Content	Adequacy	Work load	Pupil teacher ratio	Capacity building	Syllabus	Testing policy
	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	85						
Content	Pearson Correlation	.418**	1					
	Sig. (2-tailed)	.000						
	N	78	78					
Adequacy	Pearson Correlation	.587**	.831**	1				
	Sig. (2-tailed)	.000	.000					
	N	69	69	69				
Work load	Pearson Correlation	.497**	.003	-.345**	1			
	Sig. (2-tailed)	.000	.979	.004				
	N	85	78	69	86			
Pupil teacher ratio	Pearson Correlation	.647**	.330**	.502**	.277*	1		
	Sig. (2-tailed)	.000	.003	.000	.013			
	N	80	78	69	80	80		
Capacity building	Pearson Correlation	.695**	.629**	.749**	.217*	.558**	1	
	Sig. (2-tailed)	.000	.000	.000	.050	.000		
	N	82	78	69	82	80	82	
Syllabus	Pearson Correlation	.509**	.686**	.865**	-.163	.232*	.540**	1
	Sig. (2-tailed)	.000	.000	.000	.151	.039	.000	
	N	79	78	69	79	79	79	79
Testing policy	Pearson Correlation	.332**	.71**	.931**	-.418**	.332**	.538**	.875**
	Sig. (2-tailed)	.003	.000	.000	.000	.003	.000	.000
	N	77	77	69	77	77	77	77
Pearson Correlation		.733**	.542**	.637**	.531**	.132	.616**	.630**

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

**. Correlation is significant at the 0.01 level (2-tailed).

From the table of correlations, there was a significant correlation by a correlation of .979 between work load and adequacy followed by a correlation of .931 between syllabus and work load; all at P-value, 0.01. This shows that they had a positive association in the model of Teachers as a Resource. Further; there was also a positive correlation of .875, .865, .749, syllabus and testing policy, syllabus and work load, capacity building and work load respectively. They also showed a positive association of the model teacher resource variable. However, there was no negative association between the parameters

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

H₀2: There is no significant relationship between teacher resource 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; **Ha2** There is a statistically significant relationship between the teacher resource parameters (content, adequacy, work load, pupil teacher ratio, capacity building, syllabus and testing policy) and quality of education. Without proper grounding in the proper teaching methods, teachers will continue to be ill equipped to

handle the curricula. It implies at school, there is no emphasis and support to teach literacy skills, especially in the basic years of schooling, thereby resulting to under-teaching at classes 1, 2 and 3. Primary school teachers face specific challenges in trying to provide quality education. In this case there are no clear set practical guidelines on how to interpret and teach the content in the syllabi, and consolidate and assess the mastery of knowledge and skills learnt at different grade levels. The curriculum has been found lacking in some of the information needed for proper implementation. The concept of mastery of literacy is not clearly articulated beyond the general and specific objectives of the syllabus. There is also an assumption by teachers that all children have gone through pre-school that is erroneous. Many learners, especially those in rural areas, do not attend pre-school before joining class one. This assumption has created a misconception among teachers that children enter school having acquired reading skills from pre-school. They, therefore, ignore starting with the basic reading skills like the phonics, which is disadvantageous to those who have not acquired such skills.

Table 4.9 shows the model summary for teacher resource 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 4.5: Model Summary for teacher Resource Variable

	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	1	.700a	.490	.423	.0000520065

Teacher resource (Constant), content, adequacy, work load, pupil teacher ratio, capacity building, syllabus and testing policy

It was noted that the total R squared value for the model of Teacher Resource Variable was .490 (or 49.0 per cent explained variance). The total R squared value, included the unique variance explained by each variable and also that shared. R squared = 49.0%, this implies that the teacher resource in question accounts for 49.0% variability in quality education and the unexplained variation 51.0% are the teacher resource 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.

Table 4.9 shows coefficients of parameters that will be used in making comparisons on their unique contributions to the school teacher resource variable. Comparing the different parameters of teacher resource, 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 4.6: Coefficients of Teachers Resource Variable

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.017	.000		2.786	.007
	Content	.088	.029	.120	3.018	.004
	Adequacy	.024	.031	.031	.779	.039
	Work load	.260	.035	.380	7.428	.000
	Pupil teacher ratio	-.130	.048	-.065	-2.714	.009
	Capacity building	.084	.036	.082	2.314	.024
	Syllabus	.209	.021	.290	9.865	.000
	Testing policy	.079	.058	.079	1.365	.008

Dependent Variable: Teachers Resource

From table 4.10, the largest Beta coefficient was .380 which was for work load implying it made the strongest unique contribution to explaining the dependent variable Teachers as a Resource Variable; the second largest Beta coefficient was .290 which was for syllabus, implying it made the second strongest unique contribution to explaining the dependent

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variable; this was followed closely by content with a beta coefficient of .120, implying it made the third strongest unique contribution to explaining the dependent variable, when the variance explained by all other variables in the model was controlled for. The parameter pupil teacher ratio had a lowest Beta value of -0.130 which shows that it had the least contribution to the model. Adequacy, capacity building had beta of .031, .079 and .081, respectively. All the parameters were significant at P-value <0.05.

4.2.3: The Regression Model for Teacher Resource:

Of all the pre-requisites for effective management of a school, the most vital is the teacher resource. The success of any type of organization, be it social, political religious or economic, depends to a large extent on the human beings that make up the organization. Teachers take decisions, which provide the knowledge, energy and the co-operation through which schools objectives are achieved hence attainment of quality education. A regression model for the relationship between the teacher resource variable and the parameters is shown below.

In this model: $Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \epsilon$.

Where: Y is Teachers resource

x_1 content

x_2 adequacy

x_3 work load

x_4 pupil teacher ratio

x_5 capacity building

x_6 syllabus

x_7 testing policy

$= .017x_1 + .088x_2 + .024x_3 + .260x_4 - .130x_5 + .084x_6 + .209x_7 + \epsilon$

From the regression model, the parameter of 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 of had the lowest input of -.130 units. The content, work load, testing policy, capacity building, and adequacy had inputs of .017 units, .024 units, .079 units, .084 units, .088 units respectively. Effective teachers are highly committed and care about their pupils and they need supportive working conditions to maintain these positive attitudes. The condition of infrastructure, availability of textbooks and learning materials and class sizes all influence the teacher's experience as an educator. In the schools under study, teachers are de-motivated and less able to address the needs of individual pupils, effectively discipline children or create opportunities for interactive learning. They also give fewer assignments and sometimes conduct classes in lecture format, which does not hold the attention of the young primary school pupils. Meeting quality benchmarks in schooling in the sub-county remains a challenge.

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1: Effect of Teacher Resource on Quality Education:

From the regression model, the parameter of 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, work load, testing policy, capacity building, and adequacy had inputs of .017 units, .024 units, .079 units, .084 units, .088 units respectively.

The descriptive analysis results of the study established from the respondents that significant proportion held the belief that the content covered is generally small. The state of the number of lessons taught adequacy was not any better either besides the appropriateness of the teachers in their schools, a significant majority of the deputy head teachers said that the number of lessons taught is quite inadequate, since they were too many. It also emerged that most of the schools had

heavy workload, as confirmed by most of the deputy head teachers. Further findings revealed that there is no adequate teacher-student individual attention as was attested by many of the deputy head teachers who took part in the study who eluded that pupil teacher ratio has gone high since the inception of FPE. In capacity building most of the deputy head teachers insisted that the teachers attend workshops/seminar rarely. Similarly, the state of the syllabus coverage is worse off in most of the primary schools more than three out of every five of the deputy head teachers who were sampled for the study disagreed with the fact that teachers cover syllabus at the right time. Further, it was revealed from the findings of the study that the testing policy was not characterized by continuous evaluation in most of the schools in the sub-county as agreed by nearly three out of every four of the deputy head teachers who were asked about the testing policy. It emerged that many of the deputy head teachers confirmed that structured and inclusive pedagogy has not improved. Similar findings were revealed from qualitative analysis which had it that; the specific programs being implemented have not been very effective in enhancing quality education. The teachers had become overburdened and stopped providing students with the attention they needed and hence challenging the pedagogy. As a result of substantial rates of drop out and non-completion of primary school many children left school without acquiring the most basic skills.

5.2: Effect of Teacher Resource on Quality Education in public Primary Schools:

It can be concluded from the correlation regression model of that the parameters of teacher resource were affected had contributed to quality education in order of importance as were factored in the regression model.

The parameter of work load had a highest input towards teacher resource with a Beta coefficient of .380 implying it made the strongest unique contribution to explaining the dependent variable quality education. The second largest Beta coefficient was .290 which was for syllabus, implying it made the second strongest unique contribution to explaining the dependent variable; this was followed closely by content with a beta coefficient of .120, implying it made the third strongest unique contribution to explaining the dependent variable, when the variance explained by all other variables in the model was controlled for. The parameter pupil teacher ratio had a lowest Beta value of -0.130 which shows that it had the least contribution to the model. Adequacy, capacity building had beta of .031, .079 and .081, respectively.

The model is 49.0% explained by the parameters on quality education. This means that teacher resource variable had an effect on quality education.

5.3 Conclusion:

In light of the findings about effect of teacher resource on quality education in primary schools

There is need to improve the quality of education through consolidation of schools rather than spreading resources thinly and encourage participation of private individuals to support education. The MOE should address the teacher resource shortage as well as put in place effective quality assurance mechanisms to enable schools get timely disbursement of funds. The possibility of synchronizing the school calendar with GoK fiscal year should be considered. The MOE should develop and implement comprehensive frameworks for mobilization of adequate funds and implementation of all policies addressing inclusive and equitable basic education. Teachers should be attending workshops/seminar to keep on upgrading them as per changes in the needs of the curriculum. Capacity building of teachers should be regular and structured and inclusive pedagogy should be improved.

5.4 Suggestions for Further Research:

- a) The findings of this study indicated that policies developed to address the effect of the selected factors on quality education provision have not been effectively implemented. Specifically challenges affecting implementation of Gender in Education, Special Needs Education, HIV and Aids in Education, and School Health and Nutrition policies need to be studied.
- b) The researcher suggests a study to done on the effect of the selected factors on quality education.
- c) 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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