

School Based Factors Affecting Quality of Education in Primary Schools in Kakamega North Sub County, Kenya

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Abstract: Quality of education and retention of learners should be the commitment of every educational system. Yet institutions have their unique characteristics that either facilitate or hinder the achievement of universal primary educational goals. Individual schools therefore initiate their own mechanisms, unique or used by other institutions to ensure quality in schools. The study focused on school based factors influence quality of education in primary schools. This is because much of the research done has focused mainly on the challenges faced by school in addressing Free Primary Education (FPE). The specific objectives of the research were to establish school based factors that influence quality of education in primary schools. The study was conducted in Kakamega North District with head teachers and teachers of all primary schools within the District forming study population. A descriptive survey research design was applied. The respondents were selected using probability sampling techniques. The sample size represented 30% of the total study population. This comprised of 33 head teachers and deputy head teachers and 357 teachers selected from 110 schools within the district. Questionnaires, observation checklists and document analysis were used to collect data. Data collected was organised, coded and entered with the aid of Statistical Package for Social Sciences (SPSS). Data was analysed descriptively using frequencies, percentages, mean and standard deviations. The presentation of data is made through use of tables, pie charts and graphs. The study findings show that quality and retention challenges brought by the implementation of free primary education in Kakamega primary schools are still prevalent. Understaffing, overcrowded classrooms, inadequate syllabus coverage, inadequate classrooms, inadequate instructional materials and inadequate lesson preparations as some of the factors that impacted on quality of education in schools. The study recommends that head teachers, teachers, parents and government need to put measures that will address quality challenges in schools to ensure the realisation and sustainability of Universal Primary Education (UPE) and Millennium Development Goals (MDGs).

Keywords: school based factors, quality of education & retention.

1. INTRODUCTION

In the wake of the Jomtien conference, it became evident that a major constraint to Universal Primary Education (UPE) in Sub-Saharan Africa (SSA) was the cost of schooling, which poor families could not afford. The direct costs of primary education materials, examinations, uniforms, meals, sports and cultural events could include school fees, parent-paid supplements to teacher salaries, textbooks, activities, and contributions requested by local schools. These costs were high even before policies introduced as part of structural adjustment programs forced poor families to shoulder a larger share of them. In addition to the direct costs of schooling, households bear an indirect cost: the lost value of children's work, at home, in the fields, fishing, or in family or other business (World Bank, 2004).

Achievement of UPE was one of the commitments of the nations to achieve the Millennium Development Goals (MDGs) free and compulsory education for all. Free and compulsory primary education for Kenyan children was one of the key pre-election promises that led the NARC government to ascend to power in December 2002. Since then, an

estimated 1.5 million children, who were previously out-of school, have turned up to attend classes. The Minister for Education was quoted saying “We will not be content until every child of primary school age is enrolled...By educating the children we are investing in the future of this country. In the long term, educating children is one way to eradicate poverty” (GoK, 2003:13). Parents and children alike have greeted the move with euphoria (Kimani, 2008). The numbers speak for themselves. United Nations Children Education Fund (UNICEF) figures show that by 2006, the number of children enrolled in Kenya's 18,000 primary schools had doubled, and that now almost 80 percent of girls and boys are enrolled. According to United Nations Development Programme (UNDP) figures, the overall literacy rate has shot up to 74 percent. However, encouraging these numbers may be, they do not tell the full story. As free primary education has increased participation and provided children from the poorer strata of society with hope, it has at the same time created significant problems (UNDP, 2004).

Rapid expansion of enrolment has overcrowded classrooms and increased the number of pupils to each teacher to such a high rate that it has resulted in a decline in the quality of education and retention challenges (Mwiria, 2004). Key issues in introducing Free Primary Education (FPE) included maintaining the social contract with the electorate, establishing quality education, and developing the capacity to implement and sustain FPE. Criticism of FPE in Lesotho, Uganda, Malawi and Kenya has raised questions about its sustainability, the lack of time for planning, slowness to deliver, and problems in quality education (World Bank, 2004). However, introducing FPE as an urgent task shows what major changes are needed in an educational system to redirect it to Education For All (EFA). In each country, immediate support from at least one major donor/lending agency was needed to ensure confidence in the process. As part of democratization processes, FPE must not be seen to fail (World Bank, 2004).

Quality is a key issue at the primary level. According to the 2005 EFA Global Monitoring Report, the quality of education remains very poor in most sub-Saharan African countries, including Kenya. Performance of Kenyan students in absolute terms is low. Kenya is on track to meet the Universal Primary Education (UPE) MDG, but only if its new policies continue to be implemented effectively and high-level commitment is sustained. Special attention should be given to the achievement of the gender equity MDG for primary and secondary education. The gains of the last eight years are at risk without further investment in the short to medium term to restore quality in the system and pro-poor reforms are vital, to achieve equity, efficiency and sustainability.

Research Objectives:

1. To establish school based factors that affect quality of education in primary schools in Kakamega North District.

2. LITERATURE REVIEW

The concept of quality is very evasive. It is perplexing to define and often difficult to come by an agreed formal definition for the term. One person's idea of quality often conflicts with another and, as we are all too aware, no two experts ever come to the same conclusions when discussing what makes an excellent school, college or university. As Sallis (1996) puts it:

We all know quality when we experience it, but describing and explaining it is a more difficult task. In our everyday life we usually take quality for granted, especially when it is regularly provided. Yet we are all too acutely aware when it is lacking. We often only recognized the importance of quality when we experience the frustration and time wasting associated with its absence (p. 13).

The quality in education faces definitional problems. It becomes more problematic when quality is conceptualized in terms of a particular aspect of education because as Dare (2005) observes, ‘all the elements associated with educational quality are interrelated. A serious defect in one element is likely to have implications for quality in others’. Moreover, questions regarding quality may be posed about any important aspect of the educational system: infrastructure, school buildings, administration, leadership, management, teacher training, educational materials, teaching, or student achievement.

More problems arise when the outcomes of education are the focus for defining quality. This is because purposes of education are culturally bound and value-laden. For example, for some people, the purpose of education is to foster students cognitive, moral, and social development; for others it is a means of promoting social cohesion and nation

building; while for some others, it is a preparation for the world of work. This complex situation makes even agreement on quality assessment results problematic. This is reflected in ADEA's (2004) observation that "Quality assessment is one of the thorniest governance issues in most universities partly because most universities cannot agree on the mechanisms for the assessment" (p.63-64).

Perhaps, a more simplified solution to the definitional problem lies in Harvey's (1995) linkage of quality to transformation. In this sense, quality education is narrowed to "qualitative change." Yet this does not resolve the problem. Viewed this way, the notion of quality becomes more perplexing when applied to education (Elton, 1992). This is because Education is an ongoing process of transformation of the participant: the student, learner or researcher. In this light, the achievement of universal participation in education will be fundamentally dependent upon the quality of education available. A plethora of studies have shown that how well pupils are taught and how much they learn, can have a crucial impact on the effectiveness of school education they get. Furthermore, whether parents send their children to school at all is likely to depend on judgments they make about the quality of teaching and learning provided. As an example, many parents want their daughters who go through the Basic Education Certificate Examination (BECE) in Ghana to attend Wesley Girls Senior Secondary School in the Central Region just because this school has been at the top of the country's league table for three consecutive years. By being on top of the league table, it is assumed that teaching and learning in the school is of higher quality.

The World Declaration on Education for All (EFA), in 1990, identified quality as a prerequisite for achieving the fundamental goal of equity. While the notion of quality was not fully developed, it was recognized that expanding access alone would be insufficient for education to contribute fully to the development of the individual and society. Emphasis was accordingly placed on assuring an increase in children's cognitive development by improving the quality of their education.

Similarly, the 2000 Dakar Framework for Action affirmed that quality was at the heart of education; a fundamental determinant of enrolment, retention and achievement. Its expanded definition of quality set out the desirable characteristics of learners (healthy, motivated students), processes (competent teachers using active pedagogies), content (relevant curricula) and systems (good governance and equitable resource allocation). Although this established an agenda for achieving good education quality, it did not ascribe any relative weighting to the various dimensions identified. Thus, the Dakar forum emphasized the need to "improve all aspects of quality of education to achieve recognized and measurable learning outcomes for all-especially in literacy, numeracy and essential life skills" (Dakar Framework for Action, Article 7, World Education Forum 2000).

The literature suggests that quality is both a quantitative and a qualitative issue (Dare, 2005). Its indicators should therefore convey notions of quantity and quality. Van den Berghe (1997) defines quality indicators of education as performance indicators that refer to a quality characteristic or objective, thus alluding to the broad context of performance evaluation in which the learners operate. It may also be understood in terms of a figure that describes quality characteristic or the achievement of quality objectives. In matters of indicators therefore, concepts such as efficiency, relevance, importance and adequacy cannot be ignored. In his presentation at the EdQual National Consultative Workshop, Ankomah (2005) provides a continuum comprising three main steps necessary for identifying

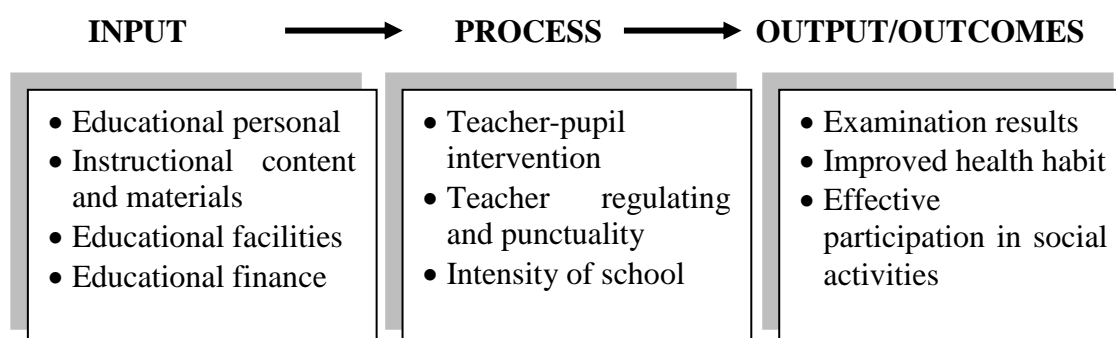


Figure 1 Educational Quality Continuum

Source: EdQual (2005).

Educational quality has been reviewed in most countries across the world. For example in South Africa, Wamahiu (2008) said quality education was not about how well a child was performing in school but a number of factors that enrich the wellbeing of a child in school. She cited the issues of administration of discipline, corporal punishment, sexual harassment, child abuse and child labour as some of the things that lead to exclusion of groups of students from accessing quality education.

At primary school level in Tanzania, the PSLE performance and NER (enrolment) are evaluated as outcomes using correlation and multiple regression analysis based on the following assumption: overcrowded classes are associated with poor performance in examinations, quantity and quality of teaching contribute to good performance in PSLE, the level and quality of staffing encourage enrolment and overcrowded classrooms discourage enrolment because they are not child friendly.

Kenya has acceded to several international agreements that explicitly suggest that children have the right to a quality education. Whereas the comments to several treaties explicitly state that education must be acceptable (e.g. relevant, culturally appropriate and of good quality), (CRC, 1990) comments of other treaties suggest that education is directed at “the holistic development of the full potential of the child (CEDAW, 1990). These international agreements also include the obligation to eliminate discrimination against women (CEDAW, 1990). In the field of education and to eliminate stereotyped concept[s] of the roles of men and women...in all forms of education (CRC, 1990).

Development literature also suggests that quality is an essential component of education. For example, these obligations state that “all children...must be given the opportunity to achieve and maintain an acceptable level of learning (UNESCO, 1990). In reference to girls’ education, this literature reaffirms the commitment to eliminate gender disparities in education and explicitly states that the most urgent priority is to ensure access to, and improve the quality of, education for girls (UNESCO, 2000).

Although the MDGs make no explicit reference to educational quality, quality is an essential component of educating students. Additionally, it is a prominent aspect of international development frameworks as well as national legislation; thus one can infer a quality requirement implicit in MDG goals 2 and 3 (GoK, 2005). This inference is further supported by the literacy indicator for MDG goal 2; because a quality education is essential to achieving literacy, quality is implicit in MDG goals 2 and 3. Furthermore, MDG goal 2 requires that a full cycle of primary education be completed by 2015. This implies that the education be of an acceptable quality to parents and students because if education was not acceptable, then there would be little motivation for parents to require their children, or for students themselves, to complete a full cycle.

Poor quality was not cited as a reason for dropping out in Lesotho, Uganda, Malawi and Kenya (World Bank, 2004). But some of the reasons classified as pupil-related, such as failure, had enough, and disability or illness, may rather be problems arising from poor quality. The fact that in Malawi a third of non-attenders did not attend school at all because of lack of interest may also suggest a problem of quality. These statistics show that school systems are failing to include and educate all pupils.

Despite the high percentage of Malawian parents believing education has improved since FPE, a relatively high proportion of Malawians reported frequent problems with various aspects of the education system. According to the 2005–2006 Afrobarometer public opinion surveys, 40 percent of Malawians reported having problems with textbooks or supplies, 37 percent reported problems with teaching, 33 percent reported problems with absent teachers, 42 percent reported problems with overcrowded classrooms, and 40 percent complained about the poor conditions of facilities. What accounts for the incongruity in these findings is unknown but suggests that parents’ evaluation of quality is an area in need of further investigation (Logan, Fujiwara & Parish, 2006).

KESSP (2005) observed that the success of FPE in Kenya programme is not guaranteed. There are still remaining more than a million children in urban slums who are still not enrolled in schools. The country needs money to pay the teachers; there are not enough textbooks, not enough space in schools, the infrastructure in the majority of schools is falling apart and not safe. Many of the schools do not even have the necessary sanitation facilities which are needed by the girls. The quality of primary education in schools with shortage of teachers and limited textbooks is well known. In many schools, the teacher-pupil ratio is very high, thus making quality teaching difficult. The scrutiny and regulation of the implementation of free primary education is difficult because district officials are not even able to reach many rural

schools. Besides access, the schools also have no way of forwarding reports back to the Ministry. The lack of transport and no postal system have left many schools operating without guidelines. And to make matters worse, there are thousands of young Kenyan children on the streets who are orphans/drug addicts and others who have to work for a living (Yetu, 2003a; KESSP, 2005).

In an attempt to meet these international and national obligations, the MoEST embarked on reform by developing Sessional Paper No. 1 of 2005, which states that the long-term objective of the Government is to provide every Kenyan with basic quality education. Additionally, MoEST developed the Kenya Education Sector Support Program (KESSP) in order to implement the policy framework contained in the Sessional Paper using a sector-wide approach to planning (KESSP, 2005). In terms of national legislation, the 2001 Children's Act Cap 586 Laws of Kenya provide that every child is entitled to quality free and compulsory basic education (MOEST, 2005).

In addition to the government's commitment to current and future interventions to increase the quality of education, it is important to note that Kenyan children, parents, and teachers who were interviewed also identified the need for a quality education as a component of self-realization (KESSP, 2005). These stakeholders explained that a high-quality education was not only a source of inspiration for the future, but was essential to the achievement of their goals. Specifically, primary school students recognized the connection between educational quality, learning, and life goals, which included supporting themselves and their families in the future.

Following the January, 2003 launch of free primary universal education in Kenya, an estimated 1.2 to 1.5 million non-enrolled children entered primary schools – with drastic and consequential results on class sizes and pupil-teacher ratios. While Kenya's national pupil/teacher ratio is 40:1, pupil/teacher ratios vary greatly by region. For example, the average pupil/teacher ratio in the Northeast province is 60:1; in Kwale, the average pupil/teacher ratio is 55:1; and, in Nairobi, the average pupil/teacher ratio is upwards of 80:184. Furthermore, there is significant variation in the pupil/teacher ratios for upper and lower standards. Many schools offer lower primary schools classes with more than 70 pupils per teacher while upper primary school classes may have as few as 20 pupils per teacher. Such high pupil/teacher ratios negatively impact teachers, students, the learning process, and the acceptability of the education offered (UNICEF, 2008).

Poor staffing and provisioning have also adversely affected the attainment of UPE in Kenya. Many schools are grossly understaffed. There have been conflicting estimates of the extent of the teacher shortage with the government claiming that the number of teachers needed is 45,000 while the Kenya National Union of Teachers puts the estimate at 60,000 (Kimani, 2008). UNICEF estimates a required 31,000 teachers (UNICEF, 2005). Despite the obvious evidence of inadequate personnel audit mechanisms, the undisputed point is that there is a huge teacher shortage for primary schools. The teacher shortage is even more severe in remote rural schools. The 2006 Economic Survey reported that the teacher-student ratio in Kenya rose from 1:40 in 2003 to 1:44 by 2005 (GoK, 2006). The situation is grimmer for schools in the arid and semi-arid areas, as well as those in the slums of urban areas, where the ratio could be as high as 1:100 (UNICEF, 2005).

Undoubtedly, the teacher hiring freeze severely limits the availability of solutions to this problem. While MoEST estimates that 30,000 additional teachers are needed to decrease pupil/teacher ratios, the (DFID, 2005). Rather than fixating on or targeting an exact ratio, in the short term, MoEST should continue to invest in alternative strategies which will alleviate some of the pressures of high teacher-pupil ratios and deliver significant returns on the acceptability of primary education classrooms. In the medium-term, assuming that the hiring freeze continues, MoEST should consider policies which might redistribute the teaching corps so that the various regions have a more equitable and adequate level of certified teachers (DFID, 2005). Under such circumstances, school authorities have to make hard choices between spending the little money they have on teaching and learning facilities or on hiring teachers. Oft times, head teachers have resorted to diverting funds for supplies and construction to hiring more teachers (Fleshman, 2005).

Muganda (1999) has also made similar observations about the quality of education and the negative effect reflected from the employment of under-qualified teachers in primary schools, implying that the quality of teachers has a direct influence on the motivation of children to enrol and to remain at school. Muganda (1999) further argues that when the future of the children does not seem to be determined by their performance at school, children would soon "choose" alternative attractions outside the school.

Teachers have been labelled the single most important tool for educational effectiveness (Hernes, 2001) and the case of UPE in Tanzania should not be an exception. In as much as the teachers command of their field is vital, so is their perception of how they are treated, managed and supported professionally. In Tanzania the record for teachers support in primary schools has been wanting for a long time and in recent years the situation has experienced even further decline (Alphonse, 1993, 2000). It may be argued, therefore, that when teachers are poorly remunerated, ill-trained, and inadequately supported for career advancement and professional growth, they may not offer their services at the most optimal levels, thus leaving students and parents dissatisfied with school experience.

The researches have demonstrated that increased class sizes negatively affect knowledge and skill acquisition in primary schools; ECED total testimonials provided in field interviews confirmed such a trend in Kenyan primary school classrooms (UNICEF, 2004; Mwaniki, 2008). With the introduction of free primary education and the subsequent increase in class sizes, the variation of abilities and ages within the Kenyan classroom has increased, thus it is very difficult for one teacher to effectively teach, and provide specialized attention when necessary, to each child. As a Garissa district primary school teacher noted, “a class period is too short to even give each child one minute of individual attention;” this, a Kibera Primary School teacher noted, “results in teaching to those who are first to learn” because “reaching every child is impossible.” For many teachers, the responsibility of knowing that they cannot adequately serve every child results in decreased morale. While fundamentally supportive of FPE, many teachers interviewed noted feeling as though they “carry the burden of FPE (Mwaniki, 2008).

3. METHODOLOGY

The study investigated school initiated strategies which head teachers and teachers of Kakamega North District primary schools are applying in ensuring retention and education quality in their school. The study applied a descriptive survey research technique in getting head teachers responses on the study subject matter. The respondents for the study included head teachers, deputy head teachers and teachers of sampled primary schools within Kakamega North District. Questionnaires, observation checklist and document analysis techniques were used as instruments for data collection.

4. RESULTS

School Based Factors Affecting Quality Education in Primary Schools:

The main objective was to determine school based factors affecting quality of education delivery in primary schools within Kakamega North District. The information was sought using questionnaires for head teachers and teachers and observation checklists. Several factors that could impact on quality education delivery in schools were determined in subsections below.

Number of Teachers in School:

The number of teachers in a school determines the delivery of quality education in school (White, 2004). A teacher forms the basic pillar for teaching and learning in schools. The study sought from the headteacher respondents the number of teachers in their schools. The results showed that schools have between 7 and 19 numbers of teachers with an average of 13 teachers per school. The number is inadequate as most schools surveyed had double streams thereby affecting quality delivery of education in most primary schools within Kakamega North District. The results coincides with UNESCO (2009) monitoring and evaluation results on EFA goals that established that staffing problems in many sub – Saharan African countries is the major factor affecting quality of education in primary schools. The result also agrees with Kimani (2008) assessment where poor staffing adversely affected the attainment universal primary education in Kenya.

Number of Pupils per Class:

The number of pupils in a class determines how effectively a teacher can cater for differences among the learners, organise and supervise learning (Hernes, 2001). Large classes demand a lot on the teaching while small classes allow teachers to give attention to students. This means that the quality of education can be affected by the presence of large or small classes. This study sought to establish the average number of pupils in a class from head teachers’ questionnaires.

The respondents were asked to state the average number of pupils per class in 2011. The findings are presented in Table 1

Table 1 Headteacher Responses on Average Number of Pupils per Class

Class size	Frequency	Percent
60 and above	20	60.6
50-59	10	30.3
40-49	3	9.1
Total	33	100.0

The study found out that 20(60.6%) of primary schools in Kakamega North District classes had more than 60 pupils, 10(30.3%) had 50 to 59 pupils while 3(9.1%) had 40 to 49 children. The results show that classes are overcrowded with many pupils thereby influencing effective delivery of curriculum by teachers; this has been necessitated by the implementation of FPE programme in primary schools for some time. The result implies that only 9.1% of schools have the standard class size population in Kakamega North District. This is because overcrowding poses a challenge in ensuring quality since learners cannot get individual attention. The results also imply that large classroom sizes can affect retention since unique individual needs will not be addressed hence drop out. The result coincides with Kenya (2008) findings on free primary education sustainability in Migwani Division Kenya where 65% of schools class sizes were between 50 – 60 pupils in a class.

Teachers Responses on Average Number of Pupils per Class:

The Kenya government has set a maximum number of students per class to be 45. However, as a result of the implementation of free primary education, enrollment increased and this resulted to increase in pupils' class average in schools. Based on the head teachers responses above, the teachers were also asked to indicate the average number of pupils in their class to find if there are similarities and differences on their responses. The findings are presented in Figure 1.

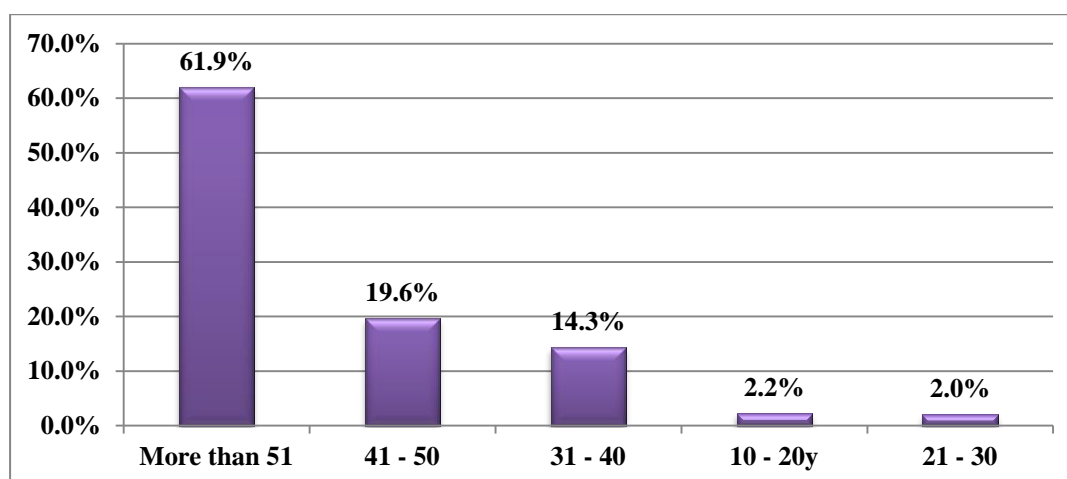


Figure 1 Teachers responses on number of pupils per class

From the responses 61.9% of teachers said their classes had more than 51 pupils, 19.6% indicated that they had 41–50 pupils, 14.3% said that they had 31–40 pupils, 2.2% had 10–20 pupils while 2.0% have 21–30 pupils. This implies that teachers responses correspond with head teachers responses that the average pupils in class was more than 50 and this could affect teaching and learning process in classrooms since one teacher is overworked. The result is in contrast UNESCO (1999) report on Ethiopia where average class sizes were below 50. This shows that Ethiopia is far much ahead of Kenya in attaining the goals of the universal primary education.

Teacher to Pupil Ratio:

Teacher to pupil ratio is an indicator of how quality education is being delivered in public primary schools so as to ensure syllabus and maximum teacher – pupil interaction. Actual class size may be larger than measured pupil-teacher ratios because of teacher absenteeism and specialization. On the other hand, class sizes would be lower than observed pupil-teacher ratios in multiple-shift systems (where students attend school on double or triple shift rather than at the same time). Some researchers argue that measured pupil-teacher ratios are reasonable approximations of actual class sizes, especially, at primary schools (Lockheed *et al.*, 1991). Therefore, the head teachers were asked to state what was teacher to pupil ratio in their schools. Table 2 shows the descriptive statistics for the responses.

Table 2 Teacher to pupil ratio

	N	Minimum	Maximum	Mean	Std. Deviation
State teacher to pupil ratio	31	21	100	55.7742	18.26054
Valid N (Listwise)	31				

The mean teacher to pupil ratio was found to be 56:1 with a standard deviation of 18.26. The least recorded was 21 and the maximum was 100. The result implies that teacher to pupil ration is high in primary schools within Kakamega North District as opposed to the average requirement of between 40 – 45 pupils in a class per teacher; this is a big challenge that could impact on achievement of Millennium Development Goals of Education (MDGs). The findings correspond with Galabwa *et al.*, (2000) findings on quality of education in Tanzania schools where they observed that most classes were overstretched forcing some pupils to perform poorly in examination while others opted to drop out. Therefore, high pupil to teacher ratio is an impediment of achieving quality education in primary schools within Kakamega North District.

Teachers' Qualification:

Primary school teacher professional training and qualification has a bearing on the degree of understanding strategies through which educational quality can be improved. The head teachers were asked to indicate the qualifications of the teachers in their schools. The study established that 46% of teachers had P1 certificate, 24% had diploma, 20% had undergraduate degree, 5% had P2 certificate, 2 had P4 certificate, 2% also were untrained while 1.0% had masters level of education. Most of the respondents have received some training but advanced training is rare`. The result implies that the number of teachers having advanced qualification is very minimal in primary schools, which could influence curriculum delivery as teachers could be using old teaching methods that they learnt in college many years back without considering that curriculum has changed and new teaching methodologies have evolved. The rest is similar to Kenya (2008) observation in Migwani Division where teachers' low level of training influenced their utilisation of FPE education funds. Kenya (2008) suggested that the government need to retrain primary school teachers often so that they could match the changing global dynamism in education.

Textbook Ratio in School:

Textbook is one of the main instructional materials that teachers and learners depend on to get knowledge and skills required in education. Determination of textbook ratio in lower and upper classes in primary schools within the study area was important in determining their influence on quality of education being delivered in schools. This study sought information from the head teachers about the textbook ratio in their schools based on two clusters; lower classes and upper classes. Descriptive statistics (means and standard deviation) were used to analyse the data. The result showed that on upper classes the average pupil–textbook ratio is 3.6 as compared to lower classes where pupil–textbook ratio is 3.3. The result suggest that books for lower classes are inadequate as opposed to those in upper classes who they share one book amongst four pupils. The head teachers' responses on pupil – textbook ratio in schools within the district is high. This is supported with Economic Survey (2011) where government has been increasing budget on primary education curriculum in aid of purchase of more instructional materials. This is in contrast to other countries like South Africa where Wamahu (2008) observed that the textbook pupil ratio is 1:2.

Teachers Responses on Textbook–Pupil Ratio:

Textbook–pupil ratio is an indicator of how educational quality goals can be achieved in schools. The teachers were also asked to state the textbook ratio in their classes. The findings are presented in Figure 2.

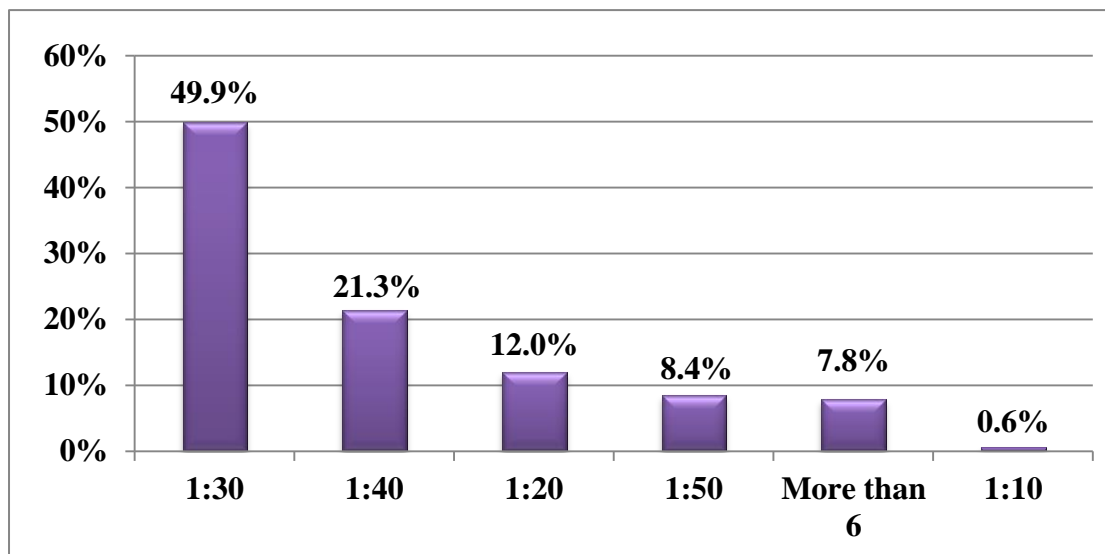


Figure 2 Textbook ratio in classes

The results show that 49.9% of teachers indicated that they have textbook: pupil ratio of 1:3, 21.3% have a ratio of 1:4, 12.0% have book ratio of 1:2, 8.4% have book ratio of 1:5, 7.8% have book ratio of 7:1 while only 0.6% indicated that they have textbook–pupil ratio of 1:1. The result coincides with head teachers' responses where most indicated that textbook ratio is 1:3 or 1:4 in most schools surveyed by the researcher. The findings of the study are similar to EdQual (2005) result where most schools in Sub Saharan Africa were found to have textbook ratio of 1:4. The textbook ratio is encouraging and therefore helps in addressing quality education in primary schools in Kenya and Kakamega North District at large.

Teaching Workload:

Teaching workload of a teacher could influence the learning and understanding of pupils in schools. The teachers were asked to indicate their weekly teaching load based on the several options provided to them. Findings showed that 119 (33.3%) of the respondents said they teach between 31–35 lessons per week, 91 (25.5%) teach between 26–30 number of lessons, 62 (17.4%) said that they teach between 21–25 lessons, another 56 (15.7%) of the respondents have 36–40 lessons, 16 (4.5%) indicated that they teach around 16–20 lessons in a week, 9 (2.5%) also said that they teach more 40 number of lessons in a week while 4 (1.1%) said that they teach less than 15 lessons per week. Cumulatively, it is clear that 275 (77%) of teachers surveyed teach more than 25 lessons in a week, which is high thereby affecting the quality of education being delivered in schools. Some of teachers indicated that they cannot look at pupils' homework and assignments since they attended many lessons they do not get any extra time for pupils assessment except during examinations. Kimani (2008) also asserted that as a result of introduction of FPE in Nairobi primary schools had rescheduled their school timetables by allocating more subjects to teachers to manage the increased enrolment in their schools.

The teachers were further asked to give their views on their workload, most, 197(72%) of the teachers said that their workload was high, 78(28%) said that their weekly teaching workload was too high. This is justified with earlier results where most of the teachers indicated that their teaching workload comprise of more than 25 lessons in a week. This could have significant effects on pupils learning in schools thereby impacting on quality of education being delivered. UNESCO (2009) monitoring and evaluation results on the achievement of universal primary education underscores that the teaching workload for teachers need to be addressed by government through the recruitment of new teachers to cover the ones who have retired, promoted and those who resigned to join private schools that have good manageable classes.

Class Capacity:

Standard carrying capacity of classrooms will enhance quality education delivery while classrooms which carry more pupils beyond their carrying capacity will impact on educational quality negatively. The teachers were asked to indicate the status of classrooms they teach in terms of pupils' numbers. The findings are presented on Figure 3.

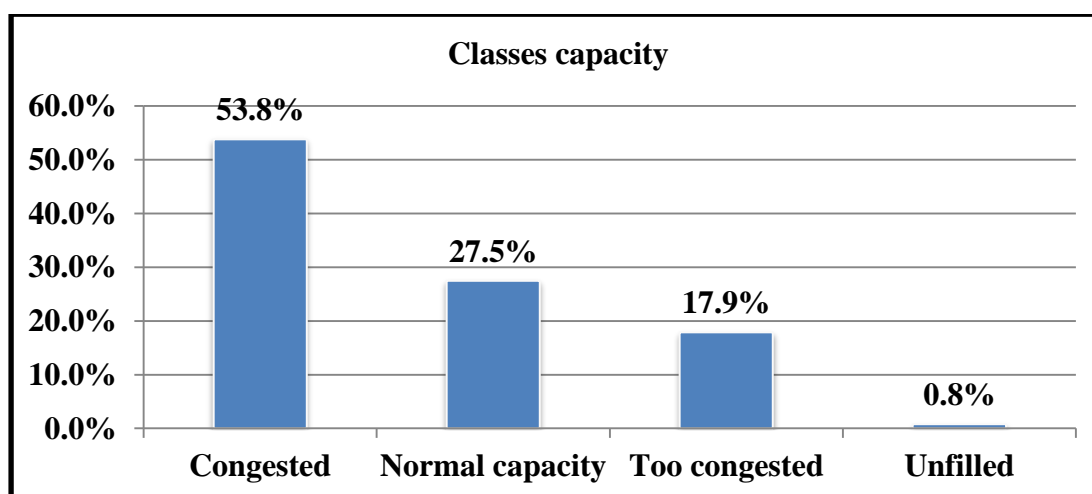


Figure 3 Capacity of classrooms

The result shows that 53.8% of classrooms are congested, 27.5% of classes on normal capacity, 17.9% of classes are too congested while 0.8% of classrooms are unfilled. The result therefore implies that most classrooms are congested and this affects quality education delivery in schools. The same situation of congested classrooms was observed by Galabwa *et al.*, (2000) in Tanzania schools where students were forced to study outside their classrooms since the classes were too small to accommodate the increased number of pupils enrolled in primary schools. The result is also similar to Kenya (2008) findings in Migwani Division that showed that most government of schools had overcrowded classrooms. This shows that overcrowding of classrooms influence quality education delivery in schools.

Nature of Classroom Environment:

The features of classroom environment are important in ensuring quality of education is achieved. Conducive environment and safety are necessary in schools and they are important in ensuring teaching and learning in primary schools. The research focused on the nature of classroom facilities; walls, floors, desks, windows, doors, chalkboards, and roof. The summaries of results are presented in Table 3.

Table 3 Nature of Classrooms Environment

Nature of facilities	Very un-conductive		Not conducive		Undecided		Conductive		Very conducive	
	f	%	f	%	f	%	f	%	f	%
Walls	20	5.6	99	27.7	20	5.6	192	53.8	26	7.3
Floors	33	9.2	132	37.0	19	5.3	163	45.7	10	2.8
Desks	12	3.4	92	25.8	21	5.9	210	58.8	22	6.2
Windows	28	7.8	142	39.8	18	5.0	156	43.7	28	7.8
Doors	33	9.2	111	31.1	21	5.9	176	49.3	33	9.2
Chalkboards	17	4.8	87	24.4	11	3.1	214	59.9	28	7.8
Roof	8	2.2	58	16.2	19	5.3	247	69.2	25	7.0

On the conditions of the walls in primary schools surveyed, 192(53.8%) of the respondents stated that the walls were conducive while another 26(7.3%) said they were very conducive only 99(27.7%) of the respondents said that the walls were not conducive. When probed to indicate the nature of classroom floors, 163(45.7%) of the respondents thought that they were conducive while 132(37.0%) said their classroom floors were not conducive. The result agrees with Kenya (2008) results on survey of primary schools in Migwani Division where dilapidated walls caused serious risk to pupils as

they were in deplorable state. This showed parents negligence in supporting physical infrastructure in schools as recommended by MOEST (2003) guidelines on implementation of FPE policies. The nature of walls and floors pose significant risk to pupils as damaged walls could cause death, severe injury and damaged to school properties.

On the condition of desks to which pupils sit on, 210(58.8%) of the respondents said that desks were conducive. Another 92(25.8%) found desks not conducive. On the conditions of windows, 142(39.8%) of the respondents said that desks in their schools were not conducive with only 156 (43.7%) of the respondents indicating that their pupils desks were conducive. The responses on the conditions of school doors was that 176(49.3%) of the respondents found doors in their schools conducive but 111(31.1%) of the respondents said the schools doors in their schools were not conducive. The result shows a mixed opinion on the nature of desks, windows and doors. This is supported by Kenya (2008) findings on the sustainability of free primary education who observed that School Management Committees (SMC) faced huge task of repairing and purchasing new desks, classrooms and windows. The deplorable natures of classrooms environment affect the delivery of quality of education in schools.

About the chalkboards, 214(59.9%) of the respondents thought they were conducive while 247(69.2%) of the respondents thought that the roofs of their schools were conducive. Therefore it is clear that most classroom facilities are in good conditions in the following order; roof, chalkboards, desks, walls, doors, floors and windows in that order respectively. The result implies that most schools have tried to improve the nature of their classrooms through using various resource mobilisation strategies.

Syllabus Coverage:

Another aspect that was researched from the respondents was on syllabus coverage in time as this would give learners enough time for revision thereby improving their academic performance. The government through Kenya Institute of Education provides for basic curriculum to provide across all primary schools in a particular academic year (KIE, 2002). Teachers are required to complete syllabus in one academic year. However as a result of the introduction of Free Primary Education, concerns were raised by educational stakeholders about failure of completion of the syllabus. Therefore, the study sought from teachers how fully they covered syllabus in their schools. Their responses are displayed on Table 4.

Table 4 Syllabus Coverage

Coverage	Frequency	Percent
Fairly covered	180	50.4
Fully covered	86	24.1
Average covered	84	23.5
Poorly covered	7	2.0
Total	357	100.0

Teachers responses reveal that 139(49.5%) of the teachers said that their syllabus is fairly covered, 69(24.6%) said that their syllabus is averagely covered, 67(23.8%) opined that their syllabus is fully covered while only 6(2.1%) of teachers said that syllabus coverage within their school is poor. The result shows that syllabus coverage is a hindrance to quality delivery of curriculum knowledge and skills to pupils in primary schools within Kakamega North District. The same situation was observed by Chimombo (2005) in Malawi where most teachers complained of not adequately covering the syllabus on time thus influencing pupils' performance in national examinations.

Testing of Pupils:

The form in which pupils are examined in school is a factor that determines quality education delivery in primary schools. Based on the government policy, pupils are supposed to be examined three times in a year (Term I, II and III). Testing of pupils is done to determine their understanding and level of performance. The study sought from teachers how often they tested their pupils in terms of giving them examinations based on; weekly, monthly, termly, quarterly, half a year or yearly. The results are illustrated in Figure 5.

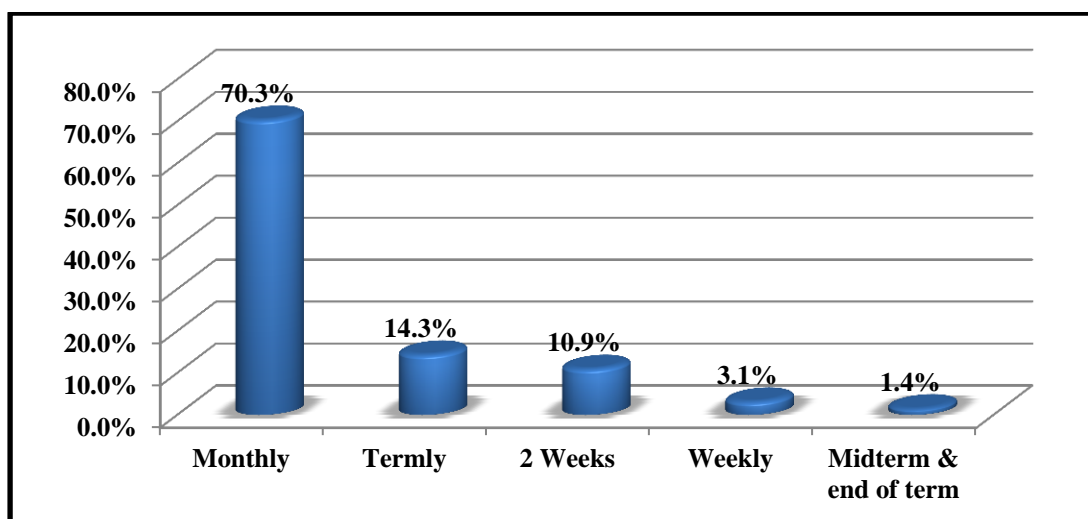


Figure 5 Frequency of Testing Pupils

The findings reveal that 70.3% of the respondents said they tested their pupils' on a monthly basis. 14.30% said that they tested their pupils on termly basis, 10.9% indicated that testing was usually done once a fortnight, 3.1% said it was done weekly basis and only 1.4% of the respondents said testing was done two times in a term (midterm and end of term). The results show that schools within the study area emphasize on monthly tests to test students understanding of the knowledge they have been taught thereby improving quality education delivery in schools. The result disagrees with Lloyd, Mench and Clark (2000) who established that weekly and monthly exams forced some pupils to dropout of schools in Kenya.

Head teachers Responses on School Factors that Influence Quality of Education:

The study wanted to get head teachers opinion towards school based factors that impact on quality education delivery within their respective schools. The respondents were asked to rate their responses on a five point Likert scale that was Strongly Disagree-1 to Strongly Agree-5. Descriptive analysis was conducted to present the result which ranked the major factor to the least factor that impacted on quality of education being delivered in schools. The study sought from the head teachers the school based factors that affected quality. The statements herein sought to find out how the respondents agreed with the statements on factors impacting on the quality of education. The results are presented on Table 5.

Table 5 Schools Based Factors Influencing Quality Education

Factor	N	Mean	Std. Deviation
Lack of instructional materials	33	3.1515	1.41689
High absenteeism attributed to low commitment	33	2.4242	1.27550
Low staff morale	33	2.3030	1.01504
Inadequate lesson preparation	33	2.3030	.95147
Inadequate teachers	33	1.6364	1.31857
Valid N (listwise)	33		

The results show that lack of instructional materials ($M=3.15$ & $SD = 1.41$) is the major factor influencing quality of education delivery in schools. The other factors; absenteeism ($M=2.42$ & $SD=1.27$), low staff morale ($M=2.3$ & $SD=1.01$), inadequate lesson preparation ($M=2.3$ & $SD=0.95$), and inadequate number of teachers ($M=1.6$ & $SD=1.32$). The results coincide with previous result where textbook-pupil ratio was found to be high thereby affecting quality education being delivered in schools.

The results imply that inadequate number of teachers is not a factor influencing quality of education being delivered in schools but instructional materials (textbooks, chalks, exercise books) and students' absenteeism cases are the major

factors influencing quality of education in schools. The results agree with UNESCO (2009) monitoring report that inadequate supply of educational materials, shortage of classrooms and desks affected the quality of education in Sub Saharan primary schools. This is also reinforced by Bururia (2010), Kenya (2008) and Chimombo, (2005) who observed that inadequate instructional materials, physical infrastructure and staffing issues influenced the implementation of free primary education in African countries.

5. CONCLUSIONS

The findings of the study showed that most schools are understaffed. For example the lowest number of teachers recorded per school was 7 and the highest 19. This shows that the distribution of teachers across schools was not normal. Some schools especially in the rural areas had fewer teachers as opposed to the ones which were located in urban settings. It was established that more than half of the classrooms were congested with only a number having normal capacity. On the teacher to pupil ratio, the findings showed that most schools had 1:50 ratio against the standard of between 1:40 or 1:45 recommended by ministry of Education. The results of the study showed that most of the teachers said that their teaching workload was high suggesting that most schools do not have the required number of teachers. This was justified with the fact that half of respondents said that the syllabus is fairly covered as a result of inadequate teachers. Therefore, teacher factor was found to be an impediment affecting quality of education in primary schools within Kakamega North District.

The attributes of concern on educational quality included number of teachers available, pupils-teacher ratios, and the personal characteristics of the individual teachers. The personal characteristics include academic qualification, pedagogical training, content knowledge, ability or aptitude, as well as years of service/experience. The availability and use of instructional facilities were found to impact on quality of education being offered in primary schools within Kakamega North District. This is because the content of education is critical in determining learning outcomes. The materials that support teaching and learning, their type, quality and quantity impact significantly on the quality of education. This evident with the fact that the respondents indicated that most classrooms facilities (walls, floors, desks, windows, doors, chalkboards and roof) were not conducive.

6. RECOMMENDATIONS

The following recommendations are made;

1. There is need for the government to increase educational funding to primary schools to improve on quality and retention
2. The government also needs to employ more teachers to reduce the teacher pupil ratio which was found to be high in the current study
3. Schools need to devise new measures of resource mobilisation to cushion against quality and retention challenges in schools as a result of inadequate funding of FPE programme.
4. Parents need to increase their support to schools in procurement and purchase of school facilities (desk, classrooms, land), purchase of instructional materials (books, pens, charts) and hiring of new teachers to improve on quality

REFERENCES

- [1] Bururia E. C. (2010). Challenges facing effective implementation of free Secondary education in public secondary schools in Kangundo district, Kenya. Unpublished Med Thesis, Chuka University College, Kenya.
- [2] Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), (1982). Art 2, 3, 10; International Convention on the Elimination of All Forms of Racial Discrimination (CERD), 3 September 1981, Art 1, 5; CRC, Art 2.
- [3] Dare, A. L. (2005). Indicators of quality. A paper presented at the National Consultative Workshop on Educational Quality Implementation in Low Income Countries. Ghana.

- [4] DFID, (2005). *Girls' Education Strategy Girls' Education: Towards a Better Future for All*. First progress report. London; DFID.
- [5] EdQual (2005). *Group report: National consultative workshop on implementing quality education in low income countries*. Held in Accra.
- [6] EFA (2000). *Education For All, Meeting our Collective Commitments, The Dakar Framework for Action*. World Education Forum, Dakar, Senegal.
- [7] EFA (2000). *Statistical Document: World Education Forum. International Consultative Forum on Education for All*.
- [8] Elton, L. (1992). *University teaching: A professional model for quality and excellence*. Paper Presented at the "Quality by Degrees" Conference at Aston. University.
- [9] Galabawa, J.C., F. E. M. K. Senkoro, & Lwaitama, A.F. (2000). *The Quality of Education in Tanzania*. Dar-es-Salaam: Institute of Kiswahili Research.
- [10] Harvey, L. (1995). *Editorial: The quality agenda*. *Quality in Higher Education*, 1(1), 5–12.
- [11] Hernes, G. (2001). "Management Learning by Managing Teachers", *Editorial HEP News Newsletter*, 19(2), 2.
- [12] KESSP (2005). *Delivering Quality Education and training to all Kenyans*. Kenya Education Sector Support Program 2005. "http://www.education.nairobi-unesco.org/PDFs/keydocs/Kenya_Education_Sector_Support_Program_ame.pdf".
- [13] Kimani, M. (2008). *State plans to recruit 28000 teachers*. *Business Daily*, 201.
- [14] Lloyd, C.B., Mench, B. & Clark, W. H. (2000). 'The Effects of Primary School Quality on School Dropout among Kenyan Girls' and Boys', *Comparative Education Review*, 44(2), 113-147.
- [15] Lockheed, M. Vespoor, A. (1991). *Improving the quality of primary education*. New York: Oxford University Press.
- [16] Ministry of Education, Science and Technology (2005a). *Sessional Paper No. 1 of 2005 on A Policy Framework for Education, Training and Research*. Nairobi: Government Printer.
- [17] Ministry of Education, Science and Technology (2005b). *Kenya Education Sector Support Programme 2005-2010: Delivering quality education and training to all Kenyans*. Nairobi: MoEST.
- [18] Muwanika, F.R. (2009). *Inequalities in Retention on Universal Primary Education in Uganda*. Economic Policy Research Center (EPRC).
- [19] Mwiria, K. (2004). *The Challenge of Implementing Free Primary Education in Kenya*. Presentation at the World Bank NETF Seminar Bergen. Norway September, 2004.
- [20] Sallis, C. J. (1996). *Total quality management*. (2nd Ed.). London: Kogan Page.
- [21] UNESCO (2000). *The Dakar Framework of Action*. Paris: UNESCO.
- [22] UNESCO (2004). *Education for All: The Quality Imperative (Executive Summary)*, p 11. Published by UNESCO Publishing as a part of the EFA Global Monitoring Reports series, 2004.
- [23] UNESCO (2004). *Education for All: The Quality Imperative (Full Report)*, pg. 3. Published by UNESCO Publishing as a part of the EFA Global Monitoring Reports series. 2004.
- [24] USAID (2010). *School Fee Abolition: Parents' Perspectives*. EQUIP2: Educational Policy, Systems Development, and Management.
- [25] World Bank, (2004). *Kenya, Lesotho, Malawi and Uganda: Universal Primary Education and Poverty Reduction*. Shanghai: World Bank.