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The Impact of Free Education Policy on the Infrastructure and Learning Materials at Primary School Level: A Case of Four Selected Schools of Mambwe District, Eastern Province, Zambia

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Abstract. The study sought to establish the impact of free education policy on infrastructure and learning materials at primary school level in selected schools of Mambwe District. The objectives of the study were: to establish the state of the infrastructure and learning materials in the context of the free-education policy in selected primary schools of Mambwe District; to investigate the impact of the current state of the infrastructure and learning materials on the teaching and learning process in selected primary schools of Mambwe District; to establish the role of school managers in enhancing proper infrastructure and learning materials in selected primary schools of Mambwe District; and to recommend possible measures to improve the infrastructure and leaning materials in selected primary schools of Mambwe District. Descriptive survey design namely cross-sectional was used and employed mixed methods but with a greater focus on qualitative research. The target group was drawn from the selected schools of Mambwe District and District Education standards officers giving a total number of 69. 3 Standards officers and the 8 head teachers were sampled using the non-probability procedure engaging purposive sampling technique while the 16 teachers and the 40 pupils were sampled using simple random sampling method. The instruments for collecting data were: interviews schedules for standards officers and head teachers, questionnaires for teachers, Focus Group Discussions (FGD) for pupils and observations. Data collected from questionnaires was analyzed using the Statistical Package for Social Sciences (SPSS) while data collected from interviews and FGD was analyzed using qualitative thematic analysis. After the FPE policy, the physical infrastructure and learning materials increased thus fairly adequate but could not cater for the high enrolments numbers of pupils causing overcrowding and poor teaching and learning. The significance of the study was to benefit the stakeholders in knowing the constraints of inadequate physical infrastructures and learning materials that needed their contribution. Policy makers would identify strategies and re-define the policy framework on the provision to curb the congestion, add

knowledge in the area and identify the gaps that needed further research. The findings indicated inadequate and poor condition of infrastructure and learning materials hindering pupils' space and access hence poor quality education. Based on the findings, the study made recommendations directed to the infrastructure and learning materials which were grounded on the improvements in the free education policy

keywords: Impact, education policy, learning, infrastructure, learning materials, primary schools.

I. Introduction

1. Overview

This chapter presents the background of the study, statement of the problem, purpose of the study, objectives and questions that direct the study. This is followed by the significance of the study, delimitations and limitations, theoretical and conceptual frameworks of the study and the definition of terms. The chapter closes with a summary.

2. Background of the study

Education, as a sector, plays an important role in the social and economic development of a country. In essence, the development of knowledge and skills important for national and economic development should be accessible to as many citizens as possible. To this effect, it is the responsibility of the education sector to provide it to those who may need it. A better education was focused on providing access to education as a value leading to higher lifetime awareness in skills and knowledge for a more robust national economic growth (EFA Global Monitoring Report, 2005).

The right to education had long been high on the agenda of the international community. This recognition was in the international goals, strategies and targets on Education for All established at Jomtien (Thailand) in 1990 and reaffirmed at the 2000 World Education Forum Education for All in Dakar (Senegal) and the Millennium Development Goals. Established in 2000, the world's governments committed to achieving universal access. Emphasis on free education was to assure increased universal access and quality in order to achieve the benefits of education and improve the literacy and numeracy contribution to social and economic development of countries. The realization among other facts, motivated different governments at different points in less than half a century to make and declare primary education universal and free. Since then, governments recognized it as, pivotal in the pursuit of development and social transformation by encompassing educational provision to all children to benefit from an education that would meet their basic learning needs in the best and fullest sense.

The inclusion of free primary education emphasized the importance of primary education in the development process of every nation and focused on an education that included learning to know, to do, to live together and to be (UNESCO, 2005).

The vision of Jomtien remained pertinent and powerful as it provided a broad and comprehensive view of education and it was a critical role in empowering individuals and transforming societies. Its key points and principles included universal access to learning through which many educated persons would be capable of making a more stable, peaceful, and prosperous country possible. There was no doubt that primary education was a panacea for solving problems such as ignorance, illiteracy, religious violence, insecurity and political servitude.

Free education refers to education that is funded through taxation, or charitable organizations rather than tuition fees (Wikipedia, 2012). By implementing Free Primary Education (FPE), government was fulfilling the commitment made in several international forums to provide free primary education to all children of school-going age irrespective of the socioeconomic status of their parents. In particular, nations ratified the World Declaration on Education for All in 1990, where they pledged to ensure that, there was "universal access to, and completion of, primary education by the year 2000" (UNESCO 1994), the Dakar Framework for Action in 2000, which urged member states to ensure that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, had access to and complete, free education of good quality" (UNESCO 2000[1]), and the Millennium Development Goals (MDGs), goal number 2 to 'achieve universal primary education' and currently the sustainable development goals.

Free Primary Education was introduced because of the unremitting international pressure on governments of developing countries. Primary education became free arguably because the government had realized that many school-age children were denied their right to education for various reasons, including ultra-poverty, anti-education cultural practices and child labour. Free education at primary school level was to be given accurate precaution and provided with the attention it deserved to bring about its effectiveness in the quality of education at this level. It provided young learners with the fundamentals of reading, writing, skill acquisition, information and attitudes necessary for proper adjustment into the society.

Government had for long known the importance of free primary education to national development with its ultimate guiding principle intended to serve individuals' social and economic well-being and to enhance the quality of life for all. The Zambian education system embraced the right to education and imposed an obligation upon the state to ensure that all citizens had opportunities to meet their basic learning needs by introducing the policy at the primary education level in 2000.

Free primary education as expected consistently has had the highest level of enrolment over a period of years. The strength of primary education lied essentially on the sole objectives of equipping young people with the tools needed to investigate and inquire, to think, conclude and understand events around them.

Funding issues in primary education played a crucial role in determining the level of success, development and change. Primary education as a social service required adequate financial provision from all tiers of government for proper execution of educational programs, schemes and policies. Strategically, governments' financial contribution to primary education had been extensively considered as adequate funding, which implied a timely supply of funds, infrastructure facilities and learning materials to ensure success in any organization and that, financial resources to act as a lubricant for the primary education, without which it would be difficult to plan, implement policies and achieve the quality of the programs. Government also helped to direct attention towards the achievement of set goals at all levels of education. Therefore, understanding some basic issues in the provision of free education in primary schools was essential and of great importance to stakeholders.

A measure of progress was however achieved as enrolment increased tremendously showing that the population of entrants into primary schools had been on a steady rise demanding for the creation of more infrastructure and provision of more learning materials. Under the free education policy, the goal of the Ministry of Education (MoE) was that, every child should have access to 7 years of free primary education as the first step in attaining universal basic education (Educating Our Future, 1996). Therefore, the government was compelled to paying tuition fees, improving infrastructure by building more schools and providing teaching and learning materials and core textbooks to all children (Education Statistical Bulletin, 2010).

Although primary school education was free in many countries, studies show that significant challenges remained in respect to access to education by children. The analysis revealed that structural weaknesses had contributed to the gap between the human rights to education promise of free education and the actual realization of free education specifically with the urgent need to expand infrastructure and provide learning materials. The scenario in the implementation of FPE was hugely constrained by inadequate infrastructure and inadequate provision of learning materials and the need for infrastructural investments was still unquestionably rational at the primary school level. While the intentions of free education were appropriate at the time, there was very little focus on the type of infrastructure and the provision of learning materials at this level

Therefore the study seeking to examine the impact of free education policy on infrastructure and learning materials at primary school level in selected schools of Mambwe District.

2. Statement of the Problem

With the adoption of the Universal Declaration of Human Rights in 1948, efforts to advance education around the world became almost equal by ensuring that every child was in school. Primary education became a human right with Education for All (EFA) and Millennium Development Goals (MDG) target of universal access to primary education applicable to the poorest countries.

Since the Jomtien Conference in 1990, the intention to extend free education added greater impetus for the education of children. The Zambian national education system was mandated with a critical role of recognizing and encompassing access to educational provision as a solution for solving problems such as ignorance, illiteracy, religious violence, insecurity and political order and for empowering individuals and transforming societies.

Since 2000, the desire to provide young learners with the foundation of free formal education at primary level received potential attention indicating rapid enrolment levels. The high levels of access indicated increased demand for more learning space and the adequate provision of learning materials. Ochenje (2008) revealed that, most schools did not have adequate classrooms to accommodate large number of pupils enrolled under FPE. In support M.O.E.S.T (2005)'s observed a major backlog of infrastructure provision was the shortage of permanent classrooms and those available were in poor condition due to lack of investment capital, poor construction standards and inadequate maintenance. However, the broad vision of free education showed very little information on what was being done to infrastructure and learning materials. Therefore, the study aimed at establishing the impact of free education policy on infrastructure and learning materials at primary school level.

3. Purpose of the study

policy The purpose of the study was to establish the impact of free education on infrastructure and learning materials in selected primary schools of Mambwe District.

4. Research Objectives

General Objective:

- The general objective of the study was: to examine the impact of the free-education policy on the infrastructure and learning materials in selected primary schools of Mambwe District.

Specific Objectives

The following were the specific research objectives of the study:

- To establish the state of the infrastructure and learning materials in the context of the free-education policy in selected primary schools of Mambwe District.

- To investigate the impact of the current state of the infrastructure and learning materials on the teaching and learning process in selected primary schools of Mambwe District.
- To establish the role of head teachers in enhancing proper infrastructure and learning materials in selected primary schools of Mambwe District.
- To recommend possible measures to improve the infrastructure and leaning materials in selected primary schools of Mambwe District.

5. Research Questions

General Research Question

- The general research question of the study was:

What was the impact of free education policy on infrastructure and learning materials at primary school level in selected primary schools of Mambwe District?

Specific Research Questions

The study was guided by the following research questions.

- What was the state of infrastructure and learning materials at primary school level in selected primary school of Mambwe District?
- How was the impact of the current state of infrastructure and learning materials on the teaching and learning process in selected primary schools of Mambwe District?
- What was the role of the school manager in enhancing proper infrastructure and learning materials in selected primary schools of Mambwe District?
- What possible measures would improve the infrastructure and leaning materials in selected primary schools of Mambwe District?

6. Delimitations of the study

The study was located in North Western Province covering only one District which was Mambwe. The research work was conducted in four primary schools in the southern part of the district and at the District Education Board office.

7. Limitations of the study

The study on the impact of the free- education policy on the infrastructure and learning materials focused on eight selected primary schools of Mambwe District. As a result, the findings of the study may not bring about the exact impact of such factors on the free education policy. Generalization may not represent the actual findings of the study but it may assist the District Education Board to devise systems appropriate for increasing and maintenance of infrastructure and the accurate provision of learning materials in primary schools of Mambwe District.

8. Significance of the study

The study will add to the existing knowledge on impact of the free education policy on national education provision in terms of infrastructure facilities and learning materials at primary school level. It is further going to contribute to a better understanding of how the infrastructure facilities and learning materials should be considered and provided at primary school level.

The study will be useful to the stakeholders of primary education provision in the Ministry of Education and policy makers in improving infrastructure facilities and learning material delivery to enhance the learning process.

The study will also assist in providing strategies necessary to improve infrastructural facilities and learning materials to enhance the effectiveness of free education on national education provision in selected primary schools of Mambwe District?

The recommendations of the study will most importantly, provide new knowledge or tools to help develop appropriate capacity and strengthen free education through national policy and practice.

9. Theoretical framework

Brymand (2004) states that, the theoretical framework, are a collection of interrelated ideas based on theories. The study was based on the social capital theory in which resources inherent in social relations facilitates collective action as propounded by Pierre Bourdieu. Social capital is defined by the OECD as “networks together with shared norms, values and understandings that facilitate co-operation within or among groups”. It describes a person's participation or position within a particular social group, which contributes to their lives in certain ways. The term generally refers to; resources, and the value of these resources, both tangible public spaces, private property and intangible actors, human capital, people, the relationships among those resources and the impact those relationships had on the resources involved in each relationship and on larger groups. It was generally seen as a form of capital that produces public goods for a common good.

The concept behind the theory of social capital was that a person's position within a particular group provided certain benefits that worked to their advantage. Social capital could only be generated collectively to the presence of communities and social networks, but individuals and groups could use it at the same time. Individuals could exploit social capital of their networks to achieve private objectives and groups could use it to enforce a certain set of norms or behaviors (Baker, 1990: 619).

To this end, it is the social exchange and interaction between two or more social actors which help an individual to better his place in society through social networks, adhering to the norms of that group that later allows him to access the resources e.g.

social relationships gained over time. In the case of education, the resources are used to better educational outcomes, thereby enabling socially mobility and reproduce the stratification of society.

In the context of the impact of free education policy on infrastructure and learning materials at primary school level, the social capital themes and associated indicators hinges on control; how effectively, school gave pupils' sense of control over their own lives and included development of self-esteem, /emotional wellbeing and how they might influence decision- making in communities and organizations. It also engendered a belief that their actions and opinions made a difference and self-efficacy and perception of community-level structures or characteristics; how effectively school audited the characteristics of the local, national and global community then built that awareness into the learning opportunities for pupils.

That was evident in the way that the school community engaged with and sought to improve both itself and the wider community.

10. Conceptual Framework

Conceptual framework refers to the tool in research that aims at enabling the researcher develop awareness and understanding of the situation under scrutiny and to communicate it to the reader (Kombo and Tromp, 2006). A well-formed conceptual framework enables the researcher show how the basic concepts and constructs interact with each other in the actual setting and experiences within which the research study is conducted.

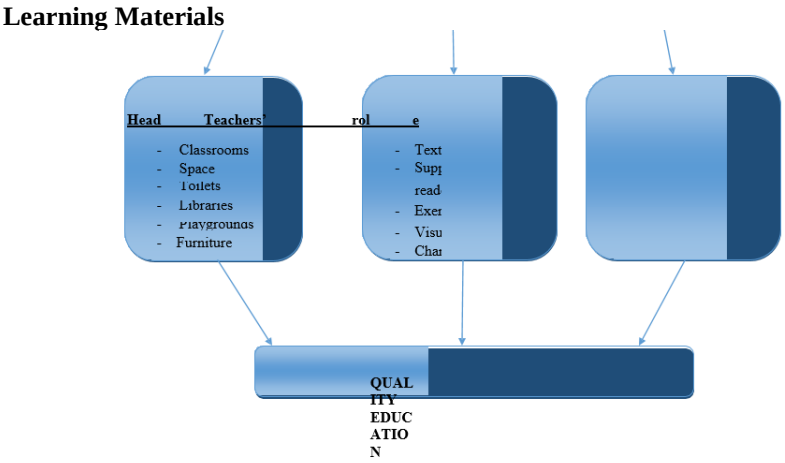

Figure 1: Representation of interaction between variables of the study

11. Definitions of Significant Terms

- Free Primary Education (FPE): Education that is provided through taxation, or charitable organizations rather than tuition fees to primary school children
- Education for All (EFA): The provision of basic education for all children, youth and adults.
- Primary Education: The provision of first level instruction to children usually in the6-11 age groups.

Summary

This chapter presented the background of the study, statement of the problem, purpose of the study objectives and questions that directed the study. This was followed by the significance of the study, delimitations and limitations, theoretical and conceptual frameworks of the study and the definition of terms. The chapter closed with a summary. The following chapter looks at the review of literature of the study.

II. Literature Review

1. Overview

This chapter reviews related literature to the topic under study. Creswell (2003) contends that the review of literature involves putting together, integrating and summarizing what is known in an area being investigated while Cohen et al (2009) indicate that, the main purpose of the literature review is to determine what has been done already related to the research problem being studied. Thus, the chapter reviewed research and other related secondary sources on the impact of the free education policy on infrastructure and learning materials in primary schools. Themes were used in the review of literature. Finally the summary of the chapter was highlighted.

2. What is education infrastructure?

Education infrastructure is one of the most basic elements necessary to ensure access to education and include suitable spaces to learn, the school buildings, classroom accommodation, playgrounds, libraries, toilets, furniture, and size of classroom, sitting position and arrangement, availability of tables, chairs, chalkboards, shelves on which instruments for practical demonstrations were arranged (Farrant, 1991 and Farombi, 1998). School classrooms are the most common place in which structured learning takes place with groups of children. Tsavga (2011) maintains that the learning environment plays a vital role teaching and learning process. While learning also takes place in a variety of different types of spaces but people expect formal education to take place in classrooms that have been designed for safety and comfort. The availability, relevance and adequacy of infrastructure contribute to academic achievement of students as UNESCO (2005) supports that, school infrastructure is the key to the delivery of quality services to the students. Nevertheless, the mere existence of infrastructure does not ensure excellent or effective education; that depends on how well the infrastructure is designed and used. The design of infrastructure also influences use, both through the

extent to which the instruments are made intelligible and accessible to practitioners and procedures that monitor and improve use (Cohen and Bhatt, 2012). However unattractive school buildings and overcrowded classrooms among others contribute to poor academic achievement of the students in primary and other levels of education (Hallak, 1990).

3. What do 'learning materials' imply?

The importance to teaching and learning of the provision of adequate instructional facilities for education cannot be over-emphasized. The statement that "teaching is inseparable from learning but learning is not separable from teaching" is that teachers do the teaching to make the students learn, but students can learn without the teachers. According to Akande (1995), learning can occur through one's interaction with one's environment. Environment here refers to facilities that are available to facilitate students learning outcome. Learning materials includes books, recreational equipment, apparatus, audio-visual, software and hardware of educational technology and other instructional materials. Learning materials include the availability of textbooks, supplementary readers, story books, chalk, visual aids and other learning materials.

4. Literature Review

Review of related literature on the inception of free education under the international commitment of human rights. Where human rights legislation dealt with education, its ambition reflected a belief that all children could develop basic cognitive skills, given the right learning environment with appropriate infrastructure and the adequate provision of learning materials (UNESCO,2003).The World Conference on Education for All (EFA), held in Jomtien, Thailand in 1990, sparked off a new impetus towards free primary education especially with its so-called vision and renewed commitment.

The Dakar Conference of 2000 reviewed developments in achieving Universal Primary Education (UPE) in the African continent. It noted that to serve the basic needs for all, required more than a recommitment to primary education and was further endorsed by the so-called Millennium Development Goals (MDG)Therefore, in achieving the UPE, the free education policy was seen within developments in the wider international context as Alexander (2007) supported that, universalizing primary education benefitted the nation and the individual as well. This came in the light of the Universal Declaration of Human Rights adopted in 1948 that, "everyone has a right to education."(Siaciwena and Lubinda, 2008).Under the Declaration was the General Comment number 13 which provide some guidelines on the right to education with a specification on the availability that:

"Functional educational institutions and programs have to be available in sufficient quantity. These include buildings, sufficiently protected from the elements, sanitation

Facilities for the different sexes, safe drinking water, teaching and learning materials and security among other things".

The concept was used to mean the capacity within a network of primary schools to provide spaces for all school-age children. Primary education was any education system and was rightfully prioritized in international and domestic laws. Most important of the set targets was "to ensure that, children everywhere, boys and girls alike, would be able to complete a full course of primary schooling and what was needed was, an expanded vision that emphasized improvement in institutional structures and learning materials while building on the best in the practices. Since the introduction of the Free Primary Education (FPE) in 2003, policy making had focused on increasing enrolment rates in primary schools and improving the quality of education. More specifically, policy makers recommended the expansion and the streamlining of the infrastructure in primary education. Studies revealed that, while FPE was a commendable initiative, however, the reach and quality of education was complicated by the availability of physical facilities, school furniture, equipment, insufficient learning materials and overcrowding in classrooms. The guidelines of FPE encouraged communities to improve, refurbish and use existing facilities and use locally available materials (Olungah,2011).

4. The state of the infrastructure and learning materials in the context of the free education policy

Review of related literature on the state of infrastructure and learning material at primary school globally.Education development goals stated that education in the world was a single most important means of sustainable development (World Bank, 2004). Globally, education played an important role in reducing poverty (Sifuna, 2003). Free Primary Education (FPE) in the world was to ensure that children from the poor families complete a full course of primary schooling. However, most developed countries of Europe, Central Asia, Latin and Middle East had seen very little improvements in net enrolment rates from 2001 to 2006. East Asia, Latin America and Caribbean had not reached the target hence no region had more than 86% in 2006. Education indicators in the world showed that poor children were disadvantaged in terms of education opportunities and achievements because the effects of poverty led to poor enrolment in school. Journal of Resources Development and Management www.iiste.org Vol.20, 2016.

Universal primary education remained a national goal, but the Papua New Guinea PNG National Department of Education has encountered several challenges trying to achieve it. Papua New Guinea's increase in school enrolments had been experienced in most schools around PNG as a result of the implementation of tuition fee free education policy and more children were able to come to school because of free education.

There was an urgent need to reform the educational system to achieve universal primary education. Studies conducted in Papua New Guinea revealed that the increase in school enrolment forced the school administration to increase the number of students

in each class because it had not built additional school infrastructure. However, achieving quality education had also been hampered by inappropriate infrastructure in all educational institutions as the study done by Ravinder Rena (2011) on infrastructure revealed that many schools did not have classrooms. The survey further revealed the schools in PNG were facing problems of overcrowding, limited or obsolete libraries and insufficient equipment.

Studies done by Kukari, (2013) on the type of instructional materials available, accessible, and frequency of their use showed that the most available and accessible materials included maps and globes, poster, textbooks and other objects like drawing and paintings, bulletin broads, wall charts, and still pictures were widely used by the teachers. Of these, the most frequently used included textbooks real objects and posters. Additional teaching and learning materials had not been purchased to support the increased number of students in each grade. Basic facilities had a problem with resource distribution specifically delivering the textbooks and other learning materials to remote and isolated rural areas of PNG. This created a shortage in teaching and learning resources.

Review of related studies on the state of infrastructure and learning materials at primary school level in sub-Saharan Africa.Governments in sub-Saharan Africa introduced free primary education (FPE) with the aim of fulfilling the Millennium Development Goals (MDGs). Free education refers to education that is funded through taxation, or charitable organizations rather than tuition fees. Studies done in many countries in Sub-Saharan Africa (SSA), revealed the accelerated effort of increased access demonstrated in Malawi (1994), Uganda (1997), Tanzania and Lesotho (2000), and Burundi, Rwanda, Ghana, Cameroon, and Kenya (2003) (Grogan, 2008; Kadzamira & Rose, 2003; Watkins et al., 2008).

A related UNICEF/UNESCO survey conducted in 1995 in 14 least developed countries found that class sizes ranged from fewer than 30 students in rural and urban Bhutan, Madagascar, and the Maldives, to 73 in rural

Nepal and 118 in Equatorial Guinea (Postlewaithe, 1998).

Although primary schools were free in many countries significantly expanding access during the 1990s, the building of new schools had often not kept pace with the increase in the population of pupils. In these cases, schools had to expand class sizes, to accommodate large numbers of new pupils and also excluded improvement or increasing on the provision of learning materials like textbooks.

It was noted, Ghana's demanded for more and better school facilities were obvious due to the increase in school population as a result of UPE policy. Studies revealed funding from the World Bank was used for school infrastructure development and rehabilitation, instructional materials including the production of teacher materials and textbooks in primary schools. There were investments in physical infrastructure: (i)

construction of classrooms, (ii) construction of head teachers' housing, (iii) provision of roofing sheets. However, it realized that the major problem facing UPE in their schools was the construction and rehabilitation of their schools (MOE, 1999: 4).

Studies done by Sifuna and Karungu, (1998) on education show that: most educational planning was done at the national level and only the implementation was devolved to the district level. Issues such as construction and rehabilitation of schools as well as provision of textbooks and other scholastic materials were not under the mandate of the District Directors of Education (DDEs). Head teachers could only make the request for more and improved facilities from the DDE who however, were slow and had no control over funds for construction and rehabilitation of schools.

Sifuna and Karungu, (1998) revealed that schools would lose days of instruction due to leaking roofs, a scenario which indicated clearly the state of physical infrastructures and needs to be put into much consideration. They also noted that to allow facilities to deteriorate or use sub-standard buildings and classrooms held back learning achievements. These challenges had no immediate solutions from the DDEs hence leading to overcrowded classrooms.

Under the introduction of FPE, the provision of teaching and learning materials in the districts came from the government. Studies revealed that money allocated for teaching and learning materials was adversely affected by delays in releasing to purchase adequate teaching and learning materials which adversely affected the performance of pupils.

In Sierra Leone, studies by Mikako Nishimuko (2007) on the introduction of the free primary education policy revealed that, it did not come with adequate school buildings and teaching and learning materials. Plan Sierra Leone had greatly contributed to education renewal in Sierra Leone. Their work included; construction and rehabilitation of primary schools including toilets and wells. Constructing and rehabilitating more schools helped decrease the shortage of school buildings and reduced the double-shift system. However many teachers revealed that overcrowded classrooms were one of their difficulties. Plan Sierra Leone's work not only included their dynamic school construction and rehabilitation but extended to areas such as provision of school materials and providing school furniture. Moreover, providing sufficient basic furniture enabled the physical environment to facilitate teaching and learning, and provided teaching and learning materials a 'minimum condition for enhancing the quality of the teaching and learning process (The MLA Project, 2000). They distributed school materials including pens, pencils, teaching and learning materials, record books, registers and chalk, to helped schools operate properly; provided recreational kits to the war-traumatized children, such as footballs, volleyballs, handballs, skipping ropes, and games among the many. However some schools were exceptions as many children in those areas did not have a set of textbooks, teachers did not have their own teaching materials, and school

textbooks were usually kept in a locked drawer to prevent them from being lost or stolen (Mikako Nishimuko, 2007).

Free Primary Education enrolments in Malawi increased by 1999/2000. Such rapid enrolment increases challenged an already weak system that even before expansion had an average of 100 pupils crowding existing classrooms. Studies done Riddell, (2003) on overcrowding revealed the biggest challenges were, pressure on classroom facilities and an inadequate supply of instructional materials, all areas to which the development community responded by attempting to cater for shortfalls of the new classrooms. Some of the measures introduced to cater for such shortfalls included the building of associated teachers' resource centers, engaging communities in school and teachers' housing construction, and providing instructional materials. The number of pupils per classroom went up but back to a level similar to 1992/3 by 1996: pupils per textbook were 2.9 prior to FPE, declining to 7.1 in 1994/5 but then bouncing back to 3 by 1997 (Riddell, 2003).

The Government of the United Republic of Tanzania recognized the central role of education in achieving the overall development goal of improving the quality of life for its citizens. Primary education was made universal and schools were built in every village to impart literacy to the many unfortunate citizens.

To support the Education Sector Development Programme (ESDP) the Government launched the Primary Education Development Programme (PEDP) in 2002, strategically designed to achieve the MDGs and EFA operational targets, as well as to address the critical challenges facing primary education. One of which was to introduce capitation grants to support the purchase of textbooks and other teaching and learning materials, as well as fund facility repairs, administration materials and school-based examinations. In addition, the Government introduced development grants for the construction of school buildings and the purchase of furniture. Teaching and learning environments had improved through the construction of classrooms and good quality houses for teachers. The implementation of PEDP had led to a number of successes which were a good indicator that universal primary education was likely to be achieved. Increased supply of textbooks and other teaching and learning materials had led to an improvement of the book to student ratio, from 1:20 in 2000 to 1:3 in 2007.

The Government of Kenya, like many in sub-Saharan Africa, introduced free primary education (FPE) in 2003 with the aim of providing universal access to education to all children. Studies done by Alubisia, (2005) on the FPE showed increased enrolment rates and provided opportunities to many children who had previously been excluded from school however there were deficiencies and lack of basic inputs. The implementation of FPE had gotten it all wrong on the infrastructure. Although many

schools had an overwhelming increase in enrolment they did not have the infrastructure to support it. The facilities remained the same and little or nothing had been done to ensure that the influx of pupils was handled at a bigger capacity (Deininger, 2003) and (Oketch and Somerset, 2010).The number of classrooms has not increased correspondingly to the increase in pupils. Classrooms that were built for 30 students to sit comfortably were then packed with three times the number of pupils. In support Chuck (2009) noticed that, over enrolment of the students in schools where the structures meant to offer the comfort of the class sitting were the nature of the classrooms after introduction of the free primary education. In some cases, the numbers of classrooms were not enough, so classes were held outside on the field while teachers conducted them with megaphones. Offices and other schoolrooms had been converted to classrooms for the children. A number of studies had shown that many school systems, particularly those in urban and high-poverty areas, were plagued by decaying buildings that threaten the health, safety, and learning opportunities of students.

Good facilities appear to be an important precondition for student learning, provided that other conditions were present to support a strong academic program in the school. Studies done by Ohba, (2009) revealed that facilities had been much more difficult to maintain and had led to deterioration. Lack of physical facilities in public schools remained a major impeding factor to the achievement of overall effectiveness in public schools. The learning environment had become uncomfortable with the shortage of desks forcing to five three students to squeeze onto a small bench' and encouraging students to become distracted. Sanitary facilities in schools equally played an important role in learning environment. The Ministry of Education had set the minimum standards for the provision of toilets as part of the school sanitation facilities: the minimum number of toilets in a school is 4 for the first 30 pupils, thereafter a ratio of 25:1 and 30:1 applied for girls and boys, respectively (Zambia Review, 2010).

Studies obtained from School Mapping Data MOE, (2011) on National Pupil Toilet Ratio (PToR) for boys in public and private primary schools in 2007 revealed 38 pupils per 1 toilet and 22 pupils per 1 toilet respectively while that for girls was 32 pupils per 1 toilet and 19 pupils per one toilet. The PToR for boys ranged from a maximum of 68 pupils per single toilet in former Coast Province to a minimum of 23 pupils per single toilet in former Central Province. Former Coast province also recorded the highest PToR for girls at 57 pupils per a single toilet while Central Province recorded lowest of 19 pupils per single toilet. It is important to note that Mombasa County which was part of the former Coast Province was affected by those challenges. Going by the Ministry of Education standards, the average pupil-toilet ratios in government schools, was above the benchmark. As it was, adequate and clean sanitary units contributed to physiological well-being of the learners.

Studies done by Sifuna (2003) on the provision of instructional materials revealed that it was not commensurate with the rapid increase in pupil enrolment. It was noted

that, free primary education in public schools had stretched teaching and learning facilities as a result of high influx of new pupils. Studies by Boy (2006) on learning materials explained that while the government had waived tuition fees and provided textbooks, other classroom materials such as exercise books, writing materials and other stationery were still the parent's responsibility. That was because the government was faced with budgetary constraints as it tried to strike a balance between funding the education sector without compromising on other sectors which also needed investment. Though every pupil was entitled to free writing materials e.g. pencils, pens and exercise books under the FPE programme, that had not been realized.

(Okwach and George, 1997) studies on textbooks revealed that they were being shared in the ratio of one textbook to five pupils. Sharing of textbooks affected their accessibility to the books while at home and many have to do their homework early in the morning the next day when in school Textbooks were an important resource in teaching and learning. With the introduction of FPE in 2003, the Ministry of Education provided a list of approved textbooks in all subjects. Government policy on pupil-textbook ratio stipulated that lower primary (grades 1-4) should have a ratio of at most 3:1 while upper primary should have a ratio of at most 2:1 in all main subjects. The pupil-textbook ratios in Science, Mathematics and English in both lower and upper primary grades were examined in all schools (Ngware, Oketch and Ezeh, 2008). It was expected that if FPE would be effective and sustainable in many countries, it should be accessible to all beneficiaries and provide adequate and appropriate infrastructure and readily available learning materials to all school-age children to gain access to quality education for a full cycle of primary education.

Lesotho's most primary schools operated in dilapidated, poorly constructed buildings or in the open space due to lack of funds. However, from the mid-1980s, with the assistance of development partners, the government embarked on school recapitalization programme by constructing decent classrooms and other basic facilities and supplying furniture to some primary schools. From 2000, when FPE was launched with the assistance of development partners such as the World Bank, the African Development Bank (ADB), Irish Aid and the Government of Japan, the government intensified the improvement of physical infrastructure, that time focusing more on the establishment of new government/community schools. Studies done by Chiombe (2006) on constructed buildings revealed that schools were then decongested and that cut down on the long distances that young pupils had to walk to and from school daily. Despite the gains mentioned above, many schools in the remote mountain still lacked basic facilities and educational resources, and that was positively linked to poor education quality (UNESCO 2000[2]).

After Zambia realized the importance of the free education at primary school, it worked hard to achieve universal primary education. The drive to increase participation preoccupied education delivery and the pursuit of expanding access had, however, a lot

of illogicality. Of those: the failure to expand school infrastructure to match the needs of the rapidly growing child population and the learning materials (MoE,1996:15).The need for infrastructural investments was unquestionably rational at the primary school levels.

To ensure that all learners of school age level receive basic education with ease, in a conducive learning environment as a human right despite large enrolments, there was need to investigate the number of physical infrastructures available in and thereafter, given the new policy of Free Primary Education. Therefore in an effort to meet the demand generated, the government planned to construct and rehabilitate classrooms under the BESSIP and MoESP to create more school places. Studies done by Education for all 2015 on infrastructure, revealed that; nationally, all highly populated schools practiced multiple shifts in heavily enrolled schools due to lack of space and reduced teacher pupil contact time while at the same time creating a school environment that was buzzing with rough activity but very little learning. That negative experience significantly contributed to lack of classroom space and remained a challenge because the limited classroom space also impacted on teaching and learning processes and constrained core learning activities (Zambia: Education for all 2015 National Review). As a result government was able to put up additional classrooms and facilities like sanitary units, thus aligning increase in enrolment rates unlikely to be catered for with existing physical infrastructure. However, the construction and rehabilitation was slow because of poor funding from government and the supply of learning materials was not adequate to cater for all learners in schools (Zambia, Education Review, 2015).

Studies done by Zambia's National Assessment Survey Report (2012) on furniture showed that, the problem of availability and quality of classroom furniture had been worsening, not only becoming less attainable but also under severe stress leading to its speedy deterioration. The study done by MoE (1996), on leaning materials indicated that, quality education provision required the supply of books, writing materials and educational items in sufficient quantities to meet the needs of all pupils. It however revealed that, the supplies of educational materials were generally inadequate for needs implying that the shortfalls remained. The Zambia's National Assessment Survey Report (2012) showed that despite the supply of teaching and learning materials, they were not enough so as to reduce on pupil-text book ratio. Implementation of the FPE accelerated enrolments after 2002 and with that, efforts were being made to overcome the critical shortage of educational materials particularly that of textbooks as most of the government funding was contributing to educational materials.

Generally, the overall objective and central role of Free Primary Education (FPE) in the world was accessibility of universal education with adequate physical infrastructures and learning materials but the same was not replicated in most African countries. Most schools did not have adequate classrooms to accommodate the large numbers of

pupils enrolled under FPE. The classrooms were generally congested and there was hardly space for movement.

The classrooms were in poor condition. Furniture for staff and pupils was not adequate forcing four to five pupils to squeeze on one desk. Learning materials were important in education. Important items like textbooks books, supplementary readers, story books, games and sport equipment, chalk, pens, pencils and visual aids like charts were inadequate in number and those available were not able to cater for all the learners in schools. It was obvious that schools without textbooks or learning materials would not be able to do an effective job.

5. The impact of the current state of the infrastructure and learning materials on the teaching and learning process

Review of related studies on the impact of the current state of infrastructure and learning materials on the teaching and learning process at primary school level in sub Saharan Africa.

Studies conducted by Avenstrup et al. (2004), in Lesotho, Malawi, and Uganda, elicited public response on the policy pronouncement far greater than was anticipated. The availability of infrastructure and FPE emphasized the right to citizens and non-citizen to acquire the free education that led to expansion of enrolment in schools. This greatly strained physical facility provided by the Government, (M.O.E & Vocational Training, 2010). The effects of the free education policy had shown that inadequate resources had compounded teachers' problems in the era of FPE, with only a few classrooms with chalkboards in the classes that were visible from all parts of the classroom (UNESCO, 2005). This, together with inadequacy of resources like learning supplies, furnishings, and appropriate infrastructure, led to teachers' incapability to fulfil their mandate in various classrooms across the countries.

In Kenya, Lesotho, Malawi, and Uganda, a major intervention in the implementation of Universal Primary Education (UPE) was the introduction of Free Primary Education (FPE) in 2003.Infrastructure: In Kenya, like most African countries, the significant increase in primary school enrolment put pressure on the existing school resources and led to poor performance (MOE, 2006). In support studies done by Tordley (2005) and (Ogola, 2010) illustrated that the mass influx of pupils overstretched the facilities like classrooms and toilets to the limit from the beginning of the FPE, a shock which resulted into classrooms that were overcrowded and congested leading to large class sizes and children learning in double and triple shifts (Avenstrup, Liang, and Nellemann, 2004).UNESCO (2005) revealed that limited resources led to inadequate infrastructure, overcrowded classrooms and dilapidated buildings, forcing pupils especially in rural areas to take their lessons under trees in some cases.

UNESCO (2005) revealed that limited resources led to inadequate infrastructure, overcrowded classrooms and dilapidated buildings, forcing pupils especially in rural areas to take their lessons under trees in some cases.In a study conducted by Morojele (2010) on classroom space, one teacher lamented, there was no space to move from one child to another, thus it was difficult to give them enough attention. He further stated that in summer, some children collapsed and fainted because of heat and poor ventilation in the small classrooms. Studies done by Cheruto (2010) also identified a number of difficulties like lack of adequate physical facilities, school furniture like desks and equipment as some of the challenges affecting FPE implementation. He noted, lack of desks, no additional classrooms built, pupils sitting on the floor as challenges compromising the quality FPE. Lack of physical facilities in public schools remained a major impeding factor to the achievement of overall effectiveness in public schools. A number of studies had shown that many school systems, particularly those in urban and high-poverty areas, were plagued by decaying buildings that threaten pupil's health, safety, and learning opportunities of students.

Libraries: Oxford advanced learners dictionary described a library as a building or room in which collection of books, tapes, newspapers etc. were kept for people to read, study or borrow. Library was an essential factor in teaching-learning process. It forms one of the most important educational services. The educational process functions in a world of books. The chief purpose of a school library was to make available to the pupil, at his easy convenience, all books, periodicals and other reproduced materials which are of interest and value to him but which are not provided or assigned to him as basic or supplementary textbooks. The importance of library had been demonstrated by the government when she expressed in the National Policy on Education (NPE) that, every state Ministry needs to provide funds for the establishment of libraries in all her educational institutions and to train librarians and library assistants. As a resource, it occupied a central and primary place in any school system. It supported all functions of school-teaching and provided service and guidance to its readers.

Many schools operate without libraries. Studies done by Shodimu, (1998) and Ogunseye (1986) on libraries had earlier noted that the total absence of an organized school library would continue to spell dooms for thousands of pupils in school. This statement clearly implied that many schools operate without libraries and had affected the academic performance of their pupils. Moreover, Fuller in his study (1986) identified a school library as an instructional resource which may significantly influence pupils' achievement after Controlling for pupils' family background.

He found that the effect of library size and its activity had been positive. A study on the relationship between instructional facilities and academic performance done by Popoola (1989) discovered that the library correlated with academic achievement and

those schools with well-equipped library normally maintained high academic performance. On raising school quality in developing countries, Fuller (1985) noted that collection of books kept for reading in the library was related to academic performance.

Learning materials: With high enrolment and the increased number of pupils in public school, the FPE also posed a big challenge of resources availability. There were acute shortages of teaching and learning materials like textbooks, learning materials like chalkboards and visual aids, supplementary readers, chats, learning equipment, games and sport equipment The provisions were not adequate and when they ran out, there were no replacements as they also noted delays in disbursement of the funds and consequently delay in procurement of the teaching and learning materials. It was obvious that schools teachers without textbooks or learning materials were not be able to do an effective job in the teaching and learning processes. This in turn affected the range and the type of inputs used and how effectively they were employed. Lack of textbooks hindered many children from attending school regularly; in the end, these children gave up with learning. Thus, in reality, the amount available for teaching and learning resources and running schools was low. Studies done by Mukudi, (2004) on the rapid expansion in enrolment revealed that, it worsened problems of teaching and learning facilities, overflowing classrooms, shortage of text books and other learning materials and affects inflow of pupils. UN (2010) underscores that, providing enough learning materials was vital in order to meet demand, most notably in sub-Saharan Africa.

Learning materials were enabling in that they underpinned and were intrinsically interrelated to context, educational knowledge, teaching and learning, school vision which led to achievement. Made available, learning materials have direct ways of supporting pupils acquire knowledge and skills with ease.

6. The roles of school managers in enhancing proper infrastructure and learning materials at primary school

Review of related studies on the roles of school managers in enhancing proper infrastructure and learning material at primary school in sub-Sahara Africa.

Role is a prescribed or expected behavior associated with a particular position or status in a group or a school. A school head is the expected to show patterns of behaviors and responsibilities associated with a headship position within a school. A school head that is in charge of a school has a lot of responsibilities to accomplish. For example, developing strategic vision and direction of the school development, management of staff, students and finances, supervision of the implementation of school curriculum and developing the relationship with the wider community (Business Dictionary, 2013).

The Education Act, 1968 defines a school manager as any person or body of person's responsibilities for the management and conduct of a school, and includes a Parents Teachers Association (PTA). On top of that, recent research findings such as Meador

(2013) showed that a good school head is one who always have managerial skills and leads by example, is positive, enthusiastic, has high energy, initiative, tolerance for ambiguity, sense of humor, analytical ability, common sense and have a hand in the day to day activities of the school, and listen to what their constituents are saying.

For the purpose of the study, only some roles related to infrastructure and learning materials were discussed in detail. These were; the strategic vision of the school development, school administration, supervision of the teaching and learning process in relation to enhancing infrastructure and learning materials in primary schools. The following subsections describe in details:

Strategic Vision of School Development

According to Reh (2013) a vision is an over-riding idea of what the organization should be. Vision was defined as, a realistic, credible, attractive future for an organization. A vision must be sufficiently clear and concise that everyone in the organization understands it and can fulfil it with passion. It often reflects the dream of the leader who is the head teacher.

The head teacher described or shared a set of ideals and priorities on infrastructure and learning materials in the school, a picture of the future, a sense of how to make the school special and unique, a core set of principles that the school stands for, and a broad set of compelling criteria in improving infrastructure and provision of learning materials that would help define organizational success. With a vision was strategy, the school head used one or more plans to achieve the vision. To support this, Wikipedia (2012) pointed that, the strategic vision sets the parameters for the development of planning, specific steps to go about making that vision come true, since it establishes the general direction the school will pursue.

He made decisions on allocating its resources to pursue a strategy, by understanding its current position and the possible avenues through which it can pursue a particular course of action. In addition, he combined goals and policies to set a roadmap - which was the path chosen to go towards the end vision.

For better implementation of free education, the head teacher summarized strategic vision into a vision statement. Vision statement is a descriptive picture of a desired future state; and the mission statement, the means of successfully achieving the vision (Wikipedia, 2012). Further, Tatum (2013) revealed that, the head teacher communicated the well-articulated vision to all educational stakeholders, particularly those inside the school, so that it could be easily understood.

The school head had to "walk his/her talk." Tatum (2013) added that, after communicating the vision, implementation took place if the vision was to have any effect on the

school. The head teacher strategic planned by linking the present to the future and show intension to move toward the vision.

In the same manner, Mpondo (2004) stated that a school head provided the direction on how to implement the strategic plan based on the finance allocated which was identified by stating the priorities that ensured infrastructure development and adequate provision of learning materials. He/she further made sure that all records were kept well which included students attendance registers, log books, inventory and the stock records register, teacher on duty's record book, cash books, receipt books, cheque books and others. He or she organized staff to carry out different tasks, managed the school curriculum and finances/resources in the way that teaching and learning process improved.

School Administration

Preserve articles (2012) defined school administration as the process of integrating the efforts of the school personnel, thus, the members of staff and students in utilizing appropriate materials to promote effectively the development of students' academic performance. UNESCO (2011) argued that, the rapid expansion of student enrolments in most African countries since the attainment of political independence, coupled with inadequate resources to cope with the ever-increasing demand for educational provision, has made school management a much more complex and difficult enterprise now than a few decades ago.

To ensure effective and successful management, the head teacher was innovative, resourceful and dynamic and interacted well with people both within and outside the school; staff and pupils, parents and many other members of the community.

Handy as cited in UNESCO (2011) insisted that, the head teacher was the main change agent in the school by promoting the increase of capability of the teaching through administering all school activities like infrastructure development and provision of learning materials to secure best outcomes. He added, they were expected to improve students' academic performance in a period of lessen resources.

In enumerate Mpondo (2004) claimed, the key function of head teacher of schools was to secure and operate effective allocation, monitor and control the use of resources. The prepared the school budget that covered different responsible areas for the fulfilment of educational objectives, specifically teaching and learning process.

In a more focused outlook, Bennars, et al (1994) defined the school finances as all the money the school got for the development and recurrent expenditures. Therefore, the head teacher was an accounting officer of the school responsible to know how money was obtained and expended. In a school, funds were required to facilitate the extension of the school opportunities and facilities as well as to meet the cost of running

the school. He/she ensured income generating activities were implemented by enabling the school generate extra income for school development (MOEC, 1997).

Bennars (opt) continued that, the head teacher identified the type of infrastructure and learning resources needed to support the implementation of school policies. Schools needed to have enough and adequate learning space and classrooms, proper chalkboards, apparatus, library, textbooks, teaching aids, chalk, note books and teacher's reference books. Also, the permanent construction and improvement of school buildings, painting, repairing of walls, windows, doors and school furniture, fencing, clearing and landscaping were the other duties of the school head. He/she made sure that all buildings met the required standards. He/she controlled the equipment and materials by overseeing their acquisition, storage and use. Therefore, in order to supervise well the resources he/she made sure that school equipment and materials were updated annually and inspected periodically for the achievements of the school objectives.

Supervision of Teaching Process

Mpondo (2005) defined supervision as evaluating the educational practices in a school to find out if the school objectives were attained or not. The head teacher gathered information systematically, which could be used to create possibilities for a further improvement in a schools' academic performance. Jekanyifa (n.d) outlined that, the role of the head teacher made sure that educational inputs which were of vital importance to the teaching of any subject in the school curriculum were available. One of them was teaching materials that enabled the teaching and learning process to go smoothly. Examples of teaching materials include; chalkboards, textbooks, apparatus, and handbooks. Most of the recent studies insisted the use of teaching materials made discovered facts glued firmly to the memory of students. Savoury (1958) added that, a well-planned and imaginative use of visual aids in lessons aroused students' interest in the subject by giving them something practical to see and do, and at the same time helping to train them to think things out themselves. He also suggested a catalogue of useful visual aids that were good for teaching like pictures, post cards, diagrams, maps, filmstrips and models.

Furthermore, schools needed to have suitable textbooks, qualified teachers and libraries. According to Coombs (1970), scarcity of these inputs constrained educational system from responding more fully to new demands. In order to raise the students' academic performance, its efficiency and productivity better, learning materials were needed.

Moreover, UNESCO (2011) insisted that, the head teacher needed to ensure that delegated tasks were actually carried out on time, and in a proper manner. Therefore, he/she supervised, and oversaw the work of others in the school. By being active within the school, by visiting classes, talking to teachers, pupils and parents, he/she was informed about the state of infrastructure and the learning materials available in the

school and events. At the same time problems were often prevented, simply because the head teacher kept, as they say, his or her 'ear to the ground' so as to set a good example to others on self-discipline.

In a more focused outlook, MOEC (1997) viewed that the availability of the authorized subjects' syllabus and timetable for all classes were essential in teaching and learning. For efficiency and effectiveness the head teacher ensured the required teaching materials were provided in time and sufficiently. Also, the preparation of schemes of work, lesson plans, filling of the subject logbook and mark book were inspected regularly. He/she made sure the school had enough classrooms, play grounds, furniture, libraries, water and sanitary equipment to facilitate the teaching and learning process.

7. Measures that would improve infrastructure and learning materials at primary school

Review of related studies on measures to improve infrastructure and learning materials at primary school

The FPE was aimed at easing the burden from the parents by abolishing school levies and ensuring equity and accessibility to schools. Through FPE, government had strategically placed itself as an important stakeholder in the education sector and hoped that, it created a better relation between government representatives.

Therefore government was to ensure adequate resources were allocated in the budget if officers were to be effective in their oversight roles. This was to be attained by ensuring that relevant education officers contributing to the sector budget.

There was need for synergy among different players towards ensuring success of FPE specifically in regard to the development of infrastructure in public primary schools. The government through devolved resources, the Members of Parliament through the Constituency Development Fund (CDF) could jointly contributed to the building of classrooms, provision of water, purchase, repair of desks and chairs and the provision of electricity to schools.

Efforts were made towards improving sanitation and toilet facilities by increasing the number of facilities and ensuring that the facilities.

The study recommends appropriate pupil classroom ratio of 1:40 to avoid overcrowding and congestion in classrooms. The standard of the classroom size was to be as per approval by the Ministry of education.

The classrooms were to be made up of permanent structures with appropriate ventilations to create a favorable learning environment for pupils.

Government was to allocate sufficient financial resources to purchase adequate and recommended instructional materials such as text books and other teaching aids. The funds were to be released on timely basis to facilitate appropriate planning by school managements. pupils enrolled in schools. Such school facilities were to be according to set standards and benchmarks.

The government was to put up additional modern physical infrastructures such as classrooms, toilet facilities, and libraries to meet the needs of more.

Summary

The chapter reviewed related literature to the topic under study. The review of literature helped the researcher to develop a significant problem which provided further knowledge in the field of study. Thus, the chapter reviewed research and other related secondary sources on the impact of the free education policy on infrastructure and learning materials in primary schools. Themes were used when reviewing literature. Finally the summary of the chapter was highlighted. The next chapter presents the methodology of the study. It highlights how the research was carried out by describing the whole process which included the collection and analysis of data for the study.

III. Research Methodology

1. Overview

Methodology refers to the systematic theoretical analysis of the methods applied to a field of study or the theoretical analysis of the body of methods and principles associated with a branch of knowledge. It typically encompasses concepts such as paradigms, theoretical model, phases, and quantitative and qualitative techniques (Msambila and Nalaila, 2013). It is said to include: research approach used, research design employed, study area, unit of analysis, population and sample as well as sampling techniques, data collection methods, data analysis techniques used, data presentation approaches selected and mode of disseminating research findings. It is also important to explain how the research ethics will be taken into account when executing the proposed study. The chapter closes with a summary.

2. Research Methods

Research methods were all those techniques, plan, and strategy or structure that were used to carry out a research by showing how data would be collected effectively and efficiently (Prakashan, 2003). In other words, research method referred to the plan or procedure for gathering information, portraying when, from whom and in what situation the information would be obtained (Kothari, 2006).

The study had a mixed research approach, namely: qualitative and quantitative approach. The approach was used in the study in order to obtain data of high quality which were relevant and in-depth information that fulfilled the stated objectives. However it

was vital to point out that the study had a greater bias towards qualitative research method.

Kombo and Tromp (2006) clarified that qualitative research is a form of research that involves description to the data obtained. It sought to describe and analyze the behavior of groups from the point of view of those being studied. Also, the approach enabled a researcher to relate particular aspects of behavior to the wider context. In the study, qualitative approach was used to enable the researcher to get direct explanations and views of respondents. Therefore, interview and focused group discussion (FGD) were used by the researcher. In that way, the study was social in nature and descriptive because it was concerned with describing the characteristics of particular groups.

Quantitative research approach relied on the principle of verifiability that meant confirmation, proof, corroboration or substantiations. It focused on measurement, which is an assignment of numerical events according to rules. Quantitative approach involved the generation of data in quantitative form, which can be subjected to rigorous quantitative analysis in formal and rigid fashion (Kothari, 2006). In the study, the quantitative data was obtained through questionnaires as well as from different documents. The questionnaires were administered to teachers to obtain data from sampled schools. The quantitative research techniques were used to enable the quantification of some information in ratios and percentages.

The aim of the research focused on the impact of free education policy on infrastructure and learning materials at primary school level in selected schools of Mambwe District. The researcher assumed that, by using a mixed approach, she would examine the impact of free education policy on infrastructure and learning materials at primary school level in selected schools in Mambwe District and gain a better understanding of the situation and consequently achieve the outcomes of the research.

3. Research design

Research design was a plan on how a study would be conducted or a detailed outline of how an investigation would take place. Ogula (2005) defined research design as procedures used to select a sample, administration of instruments and data analysis by a researcher. It provided a series of sign posts to keep one in the right direction and specified conditions and optimum research procedures to be followed in conducting a research study.

The study used descriptive survey design. According to Creswell (2003) a survey design provided a quantitative or numeric description of trends, attitudes or opinions of a population by studying a sample of that population. The design had an advantage because it was easy to apply research instruments such as questionnaires and it allowed

for data collection from large numbers of respondents. A descriptive design was selected because of its high degree of representativeness and the ease with which a researcher obtained the participants' opinions. (Schervish, 1996: 218).The researcher used the method so as to focus on different variables from which the sample was drawn and to generalize to the large population from which the sample was drawn. The design was the most appropriate since it allowed the researcher to study a relatively large population for accuracy of findings and was concerned with describing, recording, analyzing and reporting conditions that exist (Creswell, 2003).

The design was mainly cross-sectional to investigate the impact of free education policy on infrastructure and learning materials at primary school level in selected schools of Mambwe District. Cross-sectional survey was used in the study because it ensured the use of different categories at the same time, (Kasomo, 2007). The data collected after the study was analyzed using both qualitative and quantitative techniques.

4. Study area or site

The study was carried out in selected primary schools of Mambwe District. The primary schools of Mambwe District in Eastern Province were selected because of it being, agricultural area with a high population density implying that, people who had migrated to the area, engaged in socio-economic activities and were in need of school places for their children. That situation resulted in the rapid increase in enrolment indicating that free education had an impact on infrastructure and learning materials in primary schools. The researcher picked on this location as Berg (2004: 11) advised that, the ideal setting for any study, was one where the researcher had interest in, easily accessible and one that allowed the researcher immediate support with the respondents.

5. Target population

Msambila and Nalaila, (2013) refer population to a well- defined collection of individuals or objects known to have similar characteristics. It was the population for whom the findings would be generalized or for which information was desired. The study population consisted of district education board officers, school administrators, teachers and pupils in all the selected primary schools of Mambwe District.

6. Sample size

The sample comprised of 3 district education board officers, 4 school head teachers, 16 teachers and 40 pupils from selected primary schools in Mambwe District.

7. Sampling procedure

To select the 3 district education board officers and the 4 school head teachers the non- probability procedure engaging purposive sampling technique was applied. The method was based on the judgment of the researcher regarding the characteristics of the representative sample (Creswell, 2003). The reason for using purposive sampling for the school administrators was meant to provide targeted information pertaining to the

impact of free education policy on infrastructure and learning materials at primary school level in selected schools in Mambwe District.

The probability procedure engaging simple random sampling was used in which each member of the population had an equal chance of being selected as subject to the 16 teachers and 40 pupils from each selected primary school category. The simple random sampling procedure involved writing names of all teachers on small pieces of paper, folding and putting them in a small box. The box was then stuffed to ensure that the papers were well mixed. The head teacher or the deputy head teacher picked pieces of papers with names of teachers who would be used in the study. Use of simple random sampling technique aimed at each class teacher having an equal chance of being selected to take part in the study.

Pupils were also picked using simple random sampling from the grade 7 classes from each school category for focus group discussion. This was done to eliminate any form of bias. To do that, 5 even numbers were written on small pieces of paper and the rest of the papers were blank. The papers were equal to the number of pupils in each grade 7 classes. They were folded and put in a small box. The box was stuffed to ensure that the papers were mixed. Pupils who picked pieces of paper with an even number were selected for the study.

8. Research Instruments

Research instruments used to collect data were; interview guides, questionnaires and focus group discussions and observations. Interview guides were used to collect data from District Education Board officers and school administrators. Interview as a method of collecting data involved presentation of oral or verbal stimuli and reply in terms of oral-verbal responses (Prakashan, 2003). An interview involved the oral or vocal questioning technique or discussion. The researcher became the interviewer and respondents from the selected sample were the interviewees. Through the different interactions the required data were taken for the aim of fulfilling the study objectives.

Both structured and unstructured interview were employed by the researcher. Unstructured interview was chosen to enable the researcher to be flexible due to different situation and people individuality. Structured interview was also preferred to gather information with higher reliability due to the similarity of questions given to all respondents. Semi-structured questionnaires were used to collect information from teachers. Open ended questionnaires were advantageous as they permitted greater depth of responses as stated by Orodho, (2003).

Focused group discussions were used to get information from pupils. Focused discussion group is a special type of group which was concerned with discussion that was carefully planned and designed to obtain information on the participants' beliefs and perception on a defined area of interest. It consisted of homogenous members who

would produce a lot of information quickly through the posed questions by the researcher (Kombo& Tromp, 2006). Unlike interview, in which the researcher interviewed a single interviewee individually, in focused group discussion the researcher interacted with a group of individuals (respondents) at the same time to discuss a specific subject of interest regarding the research objectives (Denscombe, 1998). The researcher employed focused group discussion to collect data from forty (40) pupils who were randomly selected from the respective schools of the study.

The discussion planned to gather information from the pupils on the impact of free education policy on infrastructure and learning materials in primary schools of Mambwe District. During the discussion the researcher had already prepared the open ended questions for discussion. Each participant had equal chance and right of participation to the questions posed.

However, the researcher could sometimes intervene where necessary to make sure that the intended and useful information were gathered. The group discussion was conducted in cinyanja and cichewa languages since those were familiar languages to many participants but English remained a reporting language.

The focused group discussion method was selected to enable the researcher to get a lot of information quickly and high quality data in a social context. In addition, focused group discussion enabled the researcher to control the data she wanted to collect as she could clarify or ask more in depth question to elicit more information.

Validation of research instruments

A research instrument is said to be valid if it measures what it is supposed to measure (Kombo & Tromp, 2006). In order to pre-test validity of the instruments and to perfect the questionnaire items, concept and wordings, content validity of the instruments was used to measure the degree to which the items represented specific areas covered by the study.

To validate the instruments, the researcher checked whether there were any ambiguous and poorly prepared items. The instruments were tested to ascertain their validity and suitability in collecting the required data. The draft questionnaires were given to the supervisor, other lecturers and friends to appraise the items sustainability in obtaining data according to the research objectives. Feedback from the supervisor, lecturers and friends was used to make necessary corrections to the instruments to be used for final data collection.

Reliability of Research Instruments

Mugenda and Mugenda (1999) explained that reliability is a measure of degree to which a research instrument yields consistent results or data after an accepted number of repeat trials. The inter rater of measuring reliability of the research instruments were

used to determine the extent to which individuals agreed in terms of providing similar or same score on observations made regarding the events or phenomenon by using scorings or ratings of the instruments. The consistencies between ratings were calculated by correlating the scores or ratings from the different raters. Results were given in terms of normal numbers that is normal scores or using percentages.

The interview schedules were administered to the standards officers and head teachers, questionnaires to teachers and focused group discussions to pupils. The responses were calculated by correlating the scores or ratings from the different groups of respondents. Results were given in terms of normal numbers or using percentages.

9. Data collection procedures

The researcher got permission to conduct research from the DMI ST EUGENE University and presented it to the District Education Board Secretary (DEBS) Mambwe District. That was followed by the researcher notifying the head teachers of her intention to conduct the study in their schools before visiting each of the schools to administer the research tools. The researcher clearly explained the purpose of the study and the procedures to be followed in each category. That helped to assure the respondents of confidentiality and anonymity of the data collected to maximize objectivity in giving responses. The questionnaires were independently filled by the respondents in the selected schools as the researcher carried out focus group discussions and interview guides were used to interview officers from DEBS office. The respondents were given enough time to fill in questionnaires. At the same time, the researcher also used the observation schedule to get the in depth of the infrastructure and learning materials in schools.

10. Data Analysis Procedure

Data analysis refers to the process of evaluating data analytically and logically so as to examine each component of the data that is collected using the research instruments. In the study, data was analyzed both qualitatively and quantitatively. The qualitative data obtained through focused group discussions and interview guides was converted manually and summarized in order to obtain concise measures of the data using thematic analysis. Quantitative data collected through questionnaires were then be arranged, coded and entered into the computer using Statistical Package for Social Science (SPSS) for micro-soft excel version 17.00 for graphs and charts where it was analyzed and putting into categories for effective analysis of data. Descriptive statistics was used to analyze quantitative data by filling frequencies and percentages presented in table, charts, and graphs. Open ended questions and observations were analyzed qualitatively in narrative form and also presented in form of tables.

11. Ethical Considerations

The researcher presented an introductory letter from the DMI ST EUGENE University which acted as a proof to the respondents that the researcher was genuine and that

the research was meant for education purpose only. This was because some of the respondents might fear that the information given could be used against them. The respondents were not coerced or forced in any way to participate in the study. The researcher explained the significance of the study on the impact of free education policy on infrastructure and learning materials at primary school level in selected primary schools of Mambwe District in Eastern Province.

Respondents were promised that the data collected would be kept confidentially at all times. Besides, their names and schools would not be known and whatever information they would give would only be used for the research purpose. On the day of administering the questionnaires, the researcher begun by explaining to the respondents that is the teachers about the purpose and importance of the research and why they had been selected for the study. As the teachers were attending to the questionnaires, the researcher was conducting focused group discussions to get some in depth opinions from the selected pupils. The researcher administered interviews to education standards officers and head teachers in different days according to the agreed dates and times. Finally, the researcher ensured that the findings were reported as obtained without changing, altering or falsifying them.

Summary

In this chapter, the methodology of the study was discussed. This was to enlighten the consumers of the research on the process of carrying out the research. It included: research approach used, research design employed, study area, unit of analysis, population and sample as well as sampling techniques, data collection methods, data analysis techniques used, data presentation approaches selected and mode of disseminating research findings. It is also important to explain how the research ethics will be taken into account when executing the proposed study. The chapter closed with a summary. The preceding chapter presented findings of the study.

IV. Presentation of Findings

1. Overview

This chapter presents the findings of the study. Quantitative data was presented from the questionnaires while qualitative data was presented from interviews and focus group discussions and observations. The chapter was devoted to the direct statistical and verbatim presentations of collected data from data collection instruments. Chapter ended with a summary of the study.The findings were based on the following study's research objectives and questions.

2. General Objective

The general objective of the study was: to examine the impact of the free-education policy on the infrastructure and learning materials in selected primary schools of Mambwe District.

Specific Objectives

The following were the specific research objectives of the study:

- To establish the state of the infrastructure and learning materials in the context of the free-education policy in selected primary schools of Mambwe District.
- To investigate the impact of the current state of the infrastructure and learning materials on the teaching and learning process in selected primary schools of Mambwe District.
- To establish the role of head teachers in enhancing proper infrastructure and learning materials in selected primary schools of Mambwe District.
- To recommend possible measures to improve the infrastructure and leaning materials in selected primary schools of Mambwe District.

3. Presentation of findings (questionnaires)

From the quantitative data, the section presents the findings collected using semi structured questionnaires the from the sixteen (16) teachers from the selected primary schools under the guidance of the general objective of the study which was to examine the impact of the free- education policy on the infrastructure and learning materials in selected primary schools of Mambwe District.

Questionnaires administered to 16 teachers to get information on the impact of the free-education policy on infrastructure and learning materials in selected primary schools of Mambwe District.

Infrastructure

On the structure classrooms: 16 (100%) teachers said: the classrooms were permanent. On the status of the classroom (capacity): 10 (62%) teachers said, classrooms were very congested. 6 (38%) teachers said, classroom were not congested. On whether classrooms were big and spacious enough to accommodate the number of pupils: 2 (13%) teachers said, ‘yes’. 14 (87%) teachers said, ‘no’. On the current range of toilet facilities for both boys and girls in your school: 12 (75%) teachers said, between 7- 8 toilets. 4 (25%) teachers said, between 4 – 6 toilets.

On how many pupils sat on one desk in class: 12 (75%) teachers said, 4 -5 pupils. 4 (25%) teachers said 2 -3 pupils.

The finding below revealed teachers’ responses on the adequacy of infrastructure in schools:

Library facilities; 2 (12%) adequate. 14 (87%) inadequate Learning space; 3 (19%) adequate. 13 (81%) inadequate

Classrooms; 4 (25%) adequate. 12 (75%) inadequate Playgrounds; 2 (12%) adequate. 14 (87%) inadequate Toilets; 5 (31%) adequate. 11 (69%) inadequate

Furniture; 2 (12%) adequate. 14 (87%) inadequate

On whether the non-availability and poor conditions of infrastructure affected the teaching and learning process: 14 (87%) teachers indicated, 'Yes'. 2 (13%) teachers indicated, 'No'. To their 'yes', answers that followed were statements to support their responses: Findings revealed that there was a lot of discomfort in both the teacher and the learners. Learners gave up easily as that led to frustration. Pupils felt they were not benefitting therefore they preferred to abscond most of the lessons hence absenteeism. For those who did not have where to sit out of frustration, they ended up bullying others. These can be attested by the verbatim expressions below.

Teacher 1, 2, 4, 6, 7, 10: pupils easily became uncomfortable. Their minds were distracted and it was difficult for them to concentrate and participate effectively because of the uncomfortable sitting position.

Teacher 9,12 ,13: poor infrastructure brought about frustration in pupils. They became indiscipline and could do anything to damage more of the existing infrastructure just to distract the attention of the teacher and other pupils.

Teacher 5, 11, 14: when they were fatigued by standing, they leave class and would not attend the next lessons in the teaching and learning process. Such pupils lose morale and easily give up on tasks.

Teacher 3 and 16: there was a lot of bullying especially by those who had sitting space. They failed to work independently, kept on obstructing others which leads to poor performance.

Teachers' responses on the physical infrastructure and their effects on the quality of education at primary schools level. Teachers' responses on: Status of classrooms contributing to the quality of education offered in schools: 9 (56%) Strongly agree. 6 (38%) agree. 1 (6%) moderate. Classroom space affects the teaching and learning process: 12 (75%) strongly agree. 4 (25%) agree.

Pupil toilet ratio affects the teaching and learning process in schools: 56%) strongly agree. 5 (31%) agree. 1 (6%) moderate. 1 (6%) disagree.

Availability of desks and chairs enhances pupil comfort, hence quality of education: 13 (81%) strongly agree. 3 (19%) agree

Usage of playground in co-curricular learning motivates pupils' performance: 10 (62%)

strongly agree. 3 (19%) agree. 1 (6%) moderate. 2 (12%) disagree.

The school environment plays a crucial role in attracting and retaining learners in the school. Findings revealed, 13 (81%) teachers indicating inadequate teaching and learning space classes hindering movements by the teachers and also learners thus affecting learning, 12 (75%) stated poor ventilation, 14 (87%) said, it resulted in inadequate furniture, 11 (67%) said, it brought about absenteeism, 13 (81%) said it brought about frustration, 11((67%)

resulted in indiscipline among learners and 15 (94%) resulted in lack of physical activities.

4.2.1.2 Learning materials

Whether schools provided enough teaching and learning materials: 14 (87%) teachers said, no. 2 (12%) teachers said, yes. On the number of pupils sharing a textbook: 12 (75%) teachers said 1:4 pupils. 4 (25%)

teachers said 1:5 pupils.

The following were teachers' responses on:

Usage of books in the library; 2 (12%) agree. 12 (75%) disagree. 2 (12%) strongly disagree Usage of wall chart and visual aids; 1 (6%) strongly agree. 10 (62%) agree. 5 (31%) moderate Usage of supplementary readers and story books in teaching and learning; 5 (31%) agree. 3 (19%) moderate. 8 (50%) disagree.

Usage of the text books in the teaching and learning: 13 (81%) strongly agree. 3 (19%) agree.

On the provision of learning materials as per free education policy: 16 (100%) teachers showed that the schools were unable to provide the following requisites to pupils adequately textbooks, supplementary readers, teaching materials particularly dusters, chalk, markers and charts, pens, pencils, rulers, physical education equipment, crayons, art materials and others. On the contributing factor to the state above, teachers had this to say; 11 (68%) indicated, inadequate funding, 3 (18%) said, misappropriation and 2 (12%) said, poor management.

3. Presentation of findings (interviews, Focus Group Discussions and observations)

From the qualitative data, the section presents the findings collected using interviews guides from the three (3) standards officers and the eight (8) head teachers from the selected schools and the Focus Group Discussions (FGD) from a group of forty (40) pupils from the selected schools. Information was also presented from observations conducted by the researcher. The responses were under the guidance of the general objective of the study which was to examine the impact of the free-education policy

on the infrastructure and learning materials in selected primary schools of Mambwe District. Some of their responses were presented through their direct narrations.

1Interviews conducted with 3 District Education Officers to get information on the impact of free education on the infrastructure and learning materials at primary school level.

To describe the state of infrastructure and learning materials in schools since the inception of

FPE:

On infrastructure; 2(67%) standards officers said, infrastructure was in a bad state. Classrooms were not adequate, conducive and were uncomfortable. 1(33%) standards officers said, the infrastructure was okay since they can accommodate large numbers of pupils.

3 (100%) standards officers said, there were not enough classrooms to accommodate the number of pupils in most schools.

In order to assist school head teachers to improve the state of infrastructure in schools: 3 (100%) standards officers said, to give schools grants to build new classrooms of rehabilitating the old ones.

On learning materials; 3 (100%) standards officers said learning materials were in-adequate and could not cater for all pupils in the school.

On the classrooms being enough to accommodate the number of pupils:

On whether government had been providing learning materials adequately to schools: 3 (100%) standards officer said, although government was providing learning materials, they were not adequate. On how often learning materials were provided to schools in a year: 3 (100%) standards officer said, once or sometimes twice in a year. On the challenges faced with infrastructure and learning materials to promote Free Primary Education policy: 2 (67%) standards officers said, although the infrastructure was there, it was not adequate support learning. learning materials were not enough. 1(33%) standards officer said nothing much was being done towards improving infrastructure and the availability of learning materials.

On coping strategies put in place to deal with the challenges: 3 (100%) standards officer said, schools built new classrooms and rehabilitated the dilapidated ones. Some learning materials were sourced from the project Luangwa and others like the LOGO 2000.

On measure government put in place to improve infrastructure and learning materials in primary school: 3 (100%) standards officer said, lobbying for funds from government for the construction of new classrooms and rehabilitating old ones and fund raising ventures

On head teacher's roles in enhancing proper infrastructure and learning: findings revealed that, 1 (33%) standards officers said, to improvise for inadequacies in the provision of learning and materials through fundraising and proper management of the infrastructure, 2 (67%) standards officers said, to ensure proper maintenance of infrastructure and supervise the utilization of the infrastructure and teaching and learning resources.

Interviews conducted with 8 head teachers to get information on the impact of free education on the infrastructure and learning materials at primary school level.

Infrastructure (physical facilities)

On the size of your school: 2 (25%) head teachers said, triple shifts and 6 (75%) said four shifts On schools having adequate classrooms for the number of pupils: 7 (87%) head teachers said, they had inadequate classrooms for the number of pupils in their schools. 1 (13%) head teachers said, he had adequate classrooms for the number of learners in his school.

On the state of infrastructure in the school: Of the 8 head teachers, 4 (50%) said the infrastructure was very old, 3 (37%) said the infrastructure was dilapidated and 1 (13%) said the infrastructure was good as in figure 1.

In describing the state to support free education: generally, 7 (87%) head teachers reported that, schools did not have enough infrastructures to support free education. Toilets were not enough in all schools. Only 2 schools had library facilities. Furniture like desks and chairs were damaged and those remaining were not enough in each classroom. 1(13%) head teacher said the school had no problems with infrastructure, there was enough.

On the status for the pupils' toilets and their criterion: 6 (75%) head teachers indicated that, their schools had 8 toilet sets for both girls and boys. 2 (25%) head teachers said, they had 6 sets for both girls and boys..

To describe the physical environment and infrastructure to support the quality of education:

7 (87%) head teachers indicated that the physical environment was not conducive and comfortable for teaching and learning. The following were verbatim responses of the participants to support these findings;

- Head teacher 1: Both inside and outside, the required features were not in place. Infrastructure was old and dilapidated.
- Head teacher 2 and3: The schools had infrastructure but it was not adequate to quench in all the pupils.
- Head teacher 4 and 5: classrooms were overcrowded in all the different sessions and pupils had challenges sitting properly on desks.
- Head teacher 6: the learning environment was very poor such that even the quality of education is affected severely.
- Head teacher 7: from the infrastructure, even a stranger can tell the kind of products. Even if we try hard we can change anything.
- 1 (13%) head teacher said, we can only use the infrastructure as it is. What is important is to see that teaching and learning are taking place.
- Finding on the effects of inadequate infrastructure on teaching and learning process revealed:

7(87%) head teachers said, it had resulted in inadequate teaching and learning space, overcrowding, poor planning, poor management, less teaching and learning time, unequal distribution of furniture These had greater effects on the quality of education. 1 (13%) head teachers said, there was poor performance and concentration because of the inadequate infrastructure

On how they had maintained the existing infrastructure in the school: 5 (62%) head teachers said, they delegated responsibility tasks to teachers and pupils in each block who did some awareness lessons through preventive maintenance. 3 (38%) head teachers said, they were accountable for the existing infrastructure, therefore, they did the monitoring, routine check- ups and supervised the state of infrastructure frequently.

Learning Materials

On the learning materials provided to the pupils in the school: 8 (100%) head teachers mentioned, textbooks, supplementary readers, story books, charts, pens, pencils, rulers, dusters, chalk and markers. On where schools got the learning materials from: 8 (100%) head teachers said, they were given the learning materials from government, organizations like project Luangwa, chipembele education trust, mfuwe lodge and the LOGO 2000.

On how well stocked school were with teaching and learning materials: 6 (75%) head teachers reported that schools were not well stocked with teaching and learning materials. They did not receive adequate funds to buy enough teachers guides, textbooks, dusters and chalk. Schools did not have adequate teachers' guides, textbooks and supplementary readers in all subjects taught said, they had inadequate stocks to cater for all pupils in the school. 2 (25%) head teachers said, they had enough stock for all the pupils in the school.

On the effects on the provision of learning materials on the teaching and learning process: findings revealed 7 (87%) head teachers said that, if they are in good supply, that resulted in high quality performance and when the provision was poor, they further said because of overcrowding there was high pupil book ratio. This led to poor concentration, difficult to grasp concepts, lack of creativity and lack of interest, poor performance and participation. On the part of the teacher, it was stressful and difficult to deliver lessons. They further revealed that wall charts and visual aids which were visible enough enhanced and promoted learning and for those who did not have, it hindered learning. 1 (6%) it was difficult to allocate them equally to all classes especially the textbooks.

Interviews conducted to get information on their roles in enhancing proper infrastructure and learning materials in primary schools.

On their roles in enhancing proper infrastructure and learning materials findings 2(25 %) head teachers said, to plan and prepare budget on infrastructure and learning materials improvement. 1 (12 %) head teachers said, to delegate tasks and responsibility to teachers and pupils. 2 (25%) head teachers said, to manage infrastructure and learning materials properly.

1 (13%) head teacher said, to maintain infrastructure and learning materials well. 2 (25%) head teachers said, to supervise the utilization of infrastructure and learning material. One head teacher said, ‘this could also be done by fund raising, lobbying for building materials to build new ones and rehabilitate the old and dilapidated infrastructure and also to procure more learning materials’.

Another one said, ‘teachers should be encouraged to use local material for teaching aids in the teaching and learning processes.

Interviews conducted to get information on measure to improve the infrastructure and learning materials in primary schools.

On measure to improve the infrastructure and learning materials 4 (50%) head teachers revealed that, schools be left alone to decide conditions on how they spend the grants given to them. They should be encouraged to use local material in the teaching and learning process. 2 (25%) head teachers said government should disburse funds for all school requirements in appropriate times. They further suggested that, the Ministry of Education should be conducting regular monitoring and evaluation of school physical infrastructure to ascertain its adequacy and plan in time for the future. 2 (25%) head teachers said government involve more Non-Governmental Organizations (NGOs) in all school activities and request for learning materials.

4. Focused Group Discussion conducted with 40 pupils to get information on the impact of free education on infrastructure and learning materials.

Infrastructure

On classroom being big and spacious enough in schools: Of the 40 pupils, 17 (42%) indicated that, the classrooms were big and spacious. 23 (58%) pupils said, classrooms were not big and spacious. One pupil reported, 'they are not spacious because we are too many in one class'.

On classrooms being good enough for learning? 30(75%) pupils said that, the classes were not good enough for learning. 10 (25%) pupils said, they are good. The responses for not being good enough were given as follows; 22 (55%), 'we are too many, if the teacher is teaching, she only concentrates who answers questions'.'When you get anything wrong, that's the end, she will not explain and will say go and ask your parents'.

On the toilets were enough for both boys and girls 30 (75%) pupils said they had toilets but they were not enough. 10 (25%) pupils said the school had enough toilets. Verbatim responses from the pupils on how they helped themselves if the toilets were not enough; 'We girls take long in the toilet, so sometimes we make a queue especially at break time. Sometimes, when you more pressed, you even mess up yourself'. 'For us boys, we just go behind the toilet. If you are with a friend, for urinating you can use the toilet at the same time'.

On whether they had enough desks in classrooms: 35 (87%) pupils said, the desks were not enough and they did not sit properly on them. Verbatim responses on why they did not sit properly were; ' the desks are not in good condition'. 'There are many on one desk.'

On the school having a playground: 36 (90%) pupils said, they had. 4 (10%) pupils said did not know. Verbatim responses on how often they used it:'We do not use it because they are used by some football clubs'.'We do not use it because we do not do physical education'.

On whether the school provides equipment for physical activities: 21 (53%) pupils said, the school provided equipment for physical education. 19 (47%) pupils said, the school did not provide equipment for physical education.

On whether there was a library in the school: 30(75%) pupils said they had no libraries. 10 (25%) pupils said, they did not have libraries. For those who had the facility in school, they indicated that the library did not have enough books and it was rarely open for them.

Findings on the current state of infrastructure revealed that 12 (30%) pupils indicating

discomfort when learning because they had to squeeze on one desk for many hours, 8 (20%) reported absenteeism when they did not have where to sit and for girls when having their monthly period, 6 (15%) said there was a lot of bullying especially the big boys when they did not have where to sit, 4 (10%) said, they were frustrated if they did not have where to sit and 10 (25%) if they did not have enough space to sit, they lacked concentration.

Learning Materials

On the enough learning materials: 36 (90%) pupils said, the learning materials in the school were inadequate. 4 (10%) pupils said, they had enough. On what the school can do to have enough learning materials: 32 (80%) pupils said government should buy more. 8 (20%) pupils said tell parents to buy. On whether they had enough learning materials during the teaching and learning process: 30 (75%) pupils said they were not given learning materials. 10 (25%) pupils said, they were given learning materials. To mention what learning materials were given, pupils said, textbooks only.

On whether they had access to a variety of textbooks and supplementary readers in the teaching and learning process: 40 (100%) pupils said, that they did not. One pupil said;

We only use one type of textbook and we are not given any other books in school.

On how many pupils shared text book: 32 (80%) pupils said, 3- 4 pupils. 8 (20%) pupils said, 4-5 pupils.

On how they wrote homework without textbooks: 40 (100%) pupils said, they consulted their parents and siblings. On whether they were given supplementary readers or story book during the teaching and learning process; 30 (75%) pupils said they were not given supplementary readers or story book during the teaching and learning process. 10 (25%) pupils said they were given supplementary readers or story book during the teaching and learning process. One pupil said; we do not get any exercise books, pens, pencils or anything by the school. Another one said, sometimes they were asked to bring our own learning materials for home economics and art lessons like pairs of scissors, papers, crayons and markers.

On challenges experience when writing class activities without textbooks: 20 (50%) pupils revealed that, it was difficult to complete activities. One pupil said, 4 or 5 of us needed to use the book at the same time and when the period was over the teacher would collect the textbooks to be used by other classes.

12 (30%) pupils said it was difficult to do the activity and know how to read. Another pupil said, textbooks were only given out during the lesson and for a short period of time and after the lesson, they were taken away. 8 (20%) pupils said, you lose interest quickly and you can’t write anything.

5. Observation schedule on the state of infrastructure in the context of free education policy

The researcher further used an observation schedule to provide an in depth understanding of the state of the infrastructure and learning materials in the selected primary schools of Mambwe District.

Infrastructure

On condition of Classrooms (structure, status) the researcher observed that the classroom were permanent. Some classrooms were big while others were small. Some classrooms were dilapidated with walls having paint which was too old and windows shattered. In other situations, the classrooms were well maintained. Playgrounds were available in schools except for one school.

Learning materials

Textbooks in the teaching and learning process were available except that they were not enough for the all the learners. Libraries were not available and for those that were available, they were not adequately equipped with required books. There were few instances showing learning materials displayed on walls in almost all schools. This was because classrooms were used by many other learners in different shifts.

Summary

The chapter presented the findings of the study in form of objectivity and subjectivity through narrations. It was presented in a direct and clear manner as obtained from the questionnaire, interview schedules, focused group interview and observations. The chapter closed with a summary of the study. The next chapter will present the discussions on the findings.

V. Discussion of Findings

1. Overview

This chapter discusses the findings presented in the previous chapter. Discussion of quantitative data encompasses objectivity while qualitative data involved subjectivity and were represented thematically and with reference to the objectives of the study. Tables, bar graphs and pie charts, frequencies, percentages and narrations were used to discuss the findings. The chapter closed with a summary.

2. Objective one: to establish the state the infrastructure and learning materials in the context of the free education policy.

This presentation, presents discussions based on the first research objective and question which focused the state of infrastructure and learning materials in the context of the free education policy at primary school level. In regards to the state of infrastructure in the context of the free education policy, the study shows that, primary schools faced high increases in enrolment but did not have the adequate infrastructure to support

it. Schools had permanent structures most of which were old, dilapidated and in poor condition. The majority of the schools under study showed that the condition of the infrastructure was generally poor and lacked proper maintenance or was not there to support free education as Ochenje (2008) had the same view that, most schools did not have adequate classrooms to accommodate the large number of pupils enrolled under FPE. M.O.E.S.T (2005) noted that over time a major backlog of infrastructure provision and shortage of permanent classrooms was particularly due to poor condition, lack of investment capital, poor construction standards and inadequate maintenance.

The observations made on classrooms revealed that of the eight schools, most schools had permanent classrooms and the rooms were without standard measurements. Some floors were cracking and peeling off and the classroom walls were evidence that some classrooms had painted walls and were in good conditions while for others the paint was old and not pleasant. The researcher also observed, most classrooms had broken windows while a few in others were in place as in figure 1.

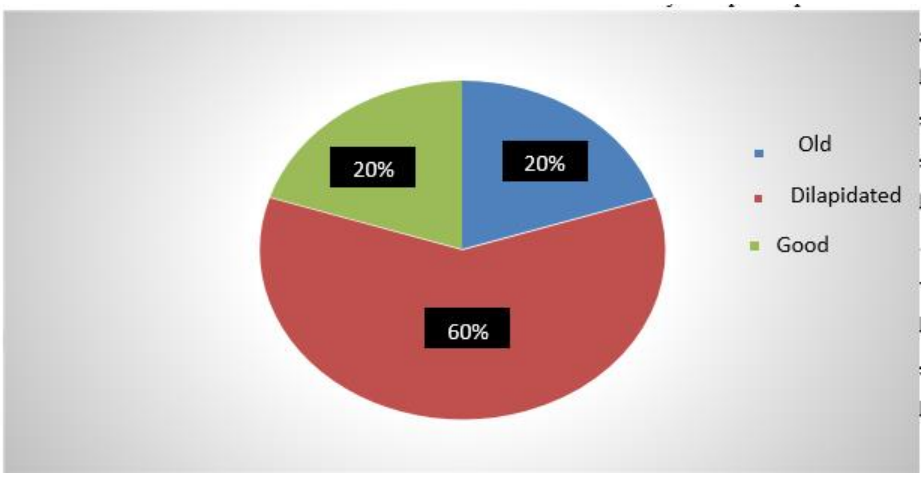

Figure 2: Head teachers' views on the state of infrastructure

The study on physical facilities further revealed, that there were hardly enough classrooms, space, sanitary provision, libraries and playgrounds as cited in the shortages experienced. For those available, most physical facilities were in bad condition, small or inadequate for pupils. However, for both categories, the toilets were gender sensitive. This implied that even though physical facilities like classrooms were present, they were not able to cater for the high enrolments and did not adequately accommodate all the pupils.

Schools showed noticeable variation in learning space. In all schools, the lower classes were congested while the upper classes had fairly adequate space. Some upper

classes had ample spaces for pupils to work while others were overcrowded with very little space movements by the teachers and also learners. Because of the painted walls some of the classes had good visibility while some had a poor visibility. The situation was worse in lower primary where most classes were dark and especially in the morning hours. In the small classrooms, ventilation was poor and while some were stable and pleasant.

It was noted that lack of classrooms implied lack of furniture such as chairs and desks. The study revealed that, desks were inadequate and at the same time the problem was compounded by tear and wear of the same. Despite the few desks in classes, most of them were still congested. The shortage of desks and the available desks forced four or sometimes five pupils to squeeze onto a small bench who did not easily get access to sanitary units and the same children learning in triple and four shifts.

The study shows only 2 of the schools had library facilities. This indicated that most pupils had no access to a variety of books. At the same time, there were no proper storage facilities for books except for some improvised rooms like senior teachers' offices or in classrooms which caused loss and distortion of many books.

Finding on the number of toilets revealed that, toilets were inadequate because they were not tarrying with the number of pupils in schools. The physical counting of latrines in the schools visited indicated that most of the schools did not have enough toilets for both boys and girls and teachers except for one school.

Some schools had playgrounds which were in bad conditions as they were not taken care of. The study also found that one school lacked a playground. Most schools also lacked games and sports equipment such as balls and nets which limited pupils' participation in extra- curricular activities. Majority of the schools playgrounds were noted not to be well maintained.

From the study, it is observed that even if primary schools were free, they excluded improvement or increasing on the provision of learning materials like textbooks. Schools were not well stocked with teaching and learning materials. They did not receive adequate funds to buy teaching and learning materials hence they did not have enough. Schools did not have adequate teachers' guides, textbooks and supplementary readers in all subjects taught said, they had inadequate stocks to cater for all pupils in the school. Ironically, the FPE programme had not been realized that, there were fewer textbooks and other learning materials like chalk, chart and markers in schools.

3. Research objective two: to investigate the impact of the current state of infrastructure and learning materials on the teaching and learning process.

This presentation, presents discussions based on the second research objective and question which focused the impact of the current state of infrastructure and learning on the teaching and learning process

Although government had attempted to play its role in the provision of free education, some schools lacked physical facilities and those which had; they were not enough to sustain the mass influx of pupils into schools. Overcrowding and congestion in classrooms was responsible for the poor performance (Journal of Resources Development and Management www.iiste.org. Vol.20, 2016).That had also affected planning and had remained a major impeding factor to the achievement of overall effectiveness and quality in primary schools.

In some schools, the status of the classrooms was poorly structured with paintings peeling off and buildings too old with some floors peeling off. If the learning environment were uncomfortable and not conducive for learning, pupils complained that they were distracted, could not concentrate during lessons therefore absconded from school and were unable to perform well. Chunks (2009) supported that the poor conditions of the classrooms impacted negatively on the pupils learning outcomes which discouraged school attendance and lowered the quality of learning in the division. Well maintained classrooms were required in order to improve the quality of education offered and boost pupil retention.

The current state of infrastructure revealed that pupils were uncomfortable when learning because they had to squeeze on one desk for hours, they reported absenteeism when they did not have where to sit and for girls when having their monthly period because of the inadequate toilets in schools. There was a lot of bullying especially by the big boys when they did not have where to sit. They became frustrated if they did not have where to sit hence lacked concentration. This is shown in figure 2 below.

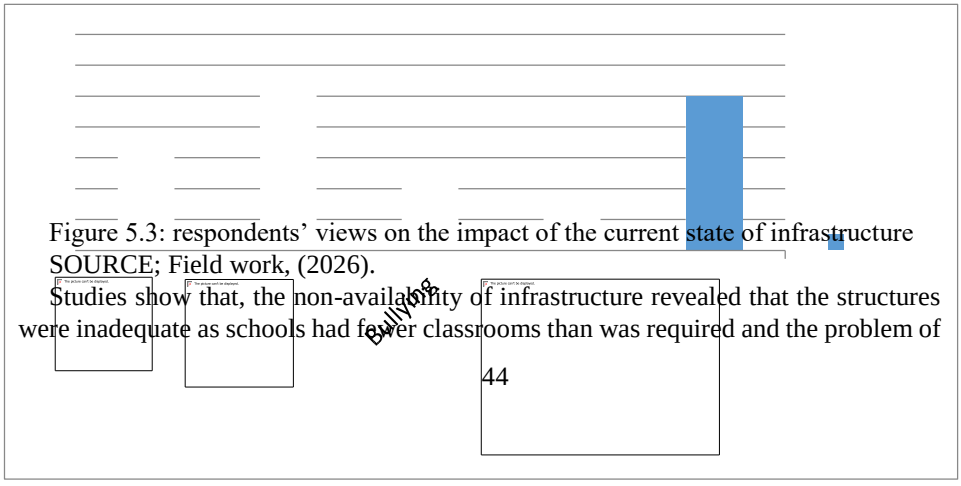

Figure 5.3: respondents' views on the impact of the current state of infrastructure
SOURCE; Field work, (2026).

Studies show that, the non-availability of infrastructure revealed that the structures were inadequate as schools had fewer classrooms than was required and the problem of

space was an elusive situation. Offices and other school rooms were converted into classrooms as classrooms were also overcrowded and congested. The congestion reduced on space and caused a lot of discomfort because pupils had to squeeze on one desk while others had to stand throughout the teaching and learning process. All these led to triple or four shifts which reduced on learning time and affected quality. Such facilities are not conducive causing discomfort. Pupils' minds were distracted and it was difficult for them to concentrate and participate effectively because of the uncomfortable sitting position. This led to poor academic performance.

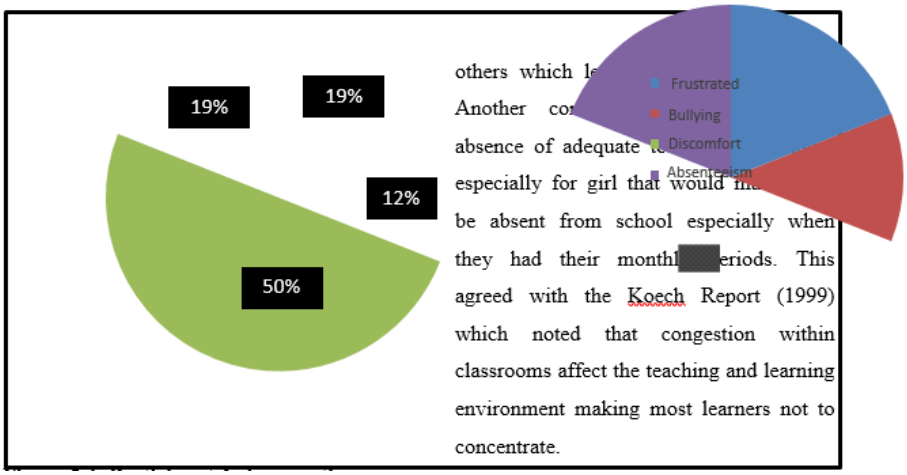

Figure 5.4: Participants' views on the non-availability and poor conditions of infrastructure affected the teaching and learning process

The poor infrastructure brought about frustration in pupils. They were frustrated because they were fatigued caused by the discomfort experienced and led to indiscipline in the learning process. When they were fatigued by standing during the learning process, they left class and would not attend the next lessons in the teaching and learning process. Such pupils lost morale and easily gave up on tasks. That made them do anything to damage more of the existing infrastructure just to distract the attention of the teacher and other pupils.

Because they had few desks to sit on, there was a lot of bullying especially by those who had no sitting space. They failed to work independently, kept on obstructing others which leads to poor performance. Another contributing factor was the absence of adequate toilets in the school especially for girl that would make them be absent from school especially when they had their monthly periods. This agreed with the Koech Report (1999) which noted that congestion within classrooms affect the teaching and learning environment making most learners not to concentrate.

UNESCO (2005) revealed that limited resources led to inadequate infrastructure, overcrowded classrooms and dilapidated buildings, forcing pupils especially in rural areas to take their lessons under trees in some cases. A study conducted by Morojele (2010) on classroom space, revealed there was no space to move from one child to another, thus it was difficult to give them enough attention. He further stated that in summer, some children collapsed and fainted because of heat and poor ventilation in the small classrooms. Studies done by Cheruto (2010) also identified a number of difficulties like lack of adequate physical facilities, school furniture like desks and equipment as some of the challenges affecting FPE implementation. He noted, lack of desks, no additional classrooms built, pupils sitting on the floor as challenges compromising the quality FPE. Lack of physical facilities in public schools remained a major impeding factor to the achievement of overall effectiveness in public schools. The study revealed that schools provided sitting and writing space however crude. The situation remained crucial as little was done to provide the sitting and writing space. Space was highly inadequate in the lower grades and progressively increased in the upper classes. Spacious classes were required for easy movement and interaction during the teaching / learning process.

Lack of sitting space and very poor conditions especially in lower classes may be responsible for children losing interest in school. Evidence showed that, the practice of multiple shifts in heavily enrolled schools commonly with overcrowded pupils which led to very high pupil teacher ratios, was due to lack of space, specifically in grades one to four while at the same time creating a school environment that was busy with very little learning. Lack of classroom space not only constrains core learning activities but also made it difficult for school management teams to carryout remediation and learning support (Zambia Education for All 2015:30-31). It was noted that sitting facilities ensured learners' comfort in the classrooms for smooth learning. Learning was hampered if the facilities were inadequate or inappropriate. Additionally, the arrangement of space had immediate and far reaching consequences for teacher's ability to effectively and efficiently accomplish daily activities, the formation of social and professional relationships, and the sharing of information and knowledge as Aduda (2005) recommended that spacious classes were required for easy movement and interaction between pupils and teachers during teaching and learning. A few of the classes had good furniture while most had insufficient, old and broken furniture in the schools studied with pupils seating uncomfortably. A large variation existed in the distribution of furniture with the condition being worse in lower grades in the majority of the schools. The shortage of desks forced four or sometimes five pupils to squeeze on to a small bench and were uncomfortable. It also revealed that at primary schools, the inadequate desks were broken and leading to tearing of pupils' clothes. If chairs and desks in the classrooms with were inadequate to handle the sudden expansion in pupil numbers, it forced some school administrators to run or manage triple or four streams. This situation did not provide a conducive learning environment. The respondents suggested that

there was need to provide better classes as well as furniture in schools to meet the required standards.

According to UNESCO, the minimum student classroom space should be 1.5 square meters per pupil with one-seater desk, which would translate to 67.5 square meters for a room expected to hold 45 students.The Ministry of Education recommends a 7.5m x 6.0m classroom (Government of Kenya, 2000). This translates to 45 square meters or about 1 square meter per child in a room with 45 children. Inadequacy of physical facilities such as latrines/toilets, offices and size of the playground brought about congestion and space, poor sanitation and negatively affect the entire school environment. Lower quality of physical infrastructure or lack of the same, can greatly hamper the decline or challenges to the quality of education offered to the primary school children in public primary schools. However Lumuli's (2009) findings show that an adequate learning facility is a factor that enhances quality and relevance of skills imparted to learners.

The table below shows participants' responses on the adequacy of infrastructure in schools:

Table 1: Participants' responses on the adequacy of infrastructure in schools

Infrastructure	Responses	Frequency
Library facilities	Yes	2
	No	14
Learning space	Yes	3
	No	13
Classrooms	Yes	4
	No	12
Playgrounds	Yes	2
	No	14
Toilets	yes	5
	No	11
Furniture	Yes	2
	No	14

Inadequacy of physical facilities such as latrines/toilets, offices and size of the playground brought about congestion and space, poor sanitation and negatively affect the entire school environment. Lower quality of physical infrastructure or lack of the same, can greatly hamper the decline or challenges to the quality of education offered to the primary school children in public primary schools. However Lumuli's (2009) findings

show that an adequate learning facility is a factor that enhances quality and relevance of skills imparted to learners.

The table below shows participants' responses on the adequacy of infrastructure in schools:

Table 2: Participants' responses on the adequacy of infrastructure in schools

Infrastructure	Responses	Frequency
Library facilities	Yes	2
	No	14
Learning space	Yes	3
	No	13
Classrooms	Yes	4
	No	12
Playgrounds	Yes	2
	No	14
Toilets	yes	5
	No	11
Furniture	Yes	2
	No	14

Structures such as libraries and latrines/toilets among other facilities play a pivotal role in enhancing efficiency and quality of education in an institution. The study revealed that the only two schools had libraries and that even those; the reading materials in them were inadequate. These included story books, supplementary readers and activity books that would help pupils improve their reading and imagination skills. However the study established no difference in performance between the schools with or without a library. Studies done by Shodimu, (1998) and Ogunseye (1986) on libraries had earlier noted that the total absence of an organized school library would continue to spell dooms for thousands of pupils in school. This statement clearly implied that many schools operate without libraries and had affected the academic performance of their pupils. Moreover, Fuller in his study (1986) identified a school library as an instructional resource which may significantly influence pupils' achievement after controlling for pupils' family background. He found that the effect of library size and its activity had been positive. A study on the relationship between instructional facilities and academic performance done by Popoola (1989) discovered that the library correlated with academic achievement and those schools with well-equipped library normally maintained high academic performance. On raising school quality in developing countries, Fuller (1985) noted that collection of books kept for reading in the library was related to academic performance. It also indicated that for most schools, there were

no proper storage facilities for books except for some improvised areas in some senior teachers' offices which caused loss and distortion of many books. The issue of sanitation and hygiene is obviously still a problem in many schools. Most of the sanitation facilities like toilets were so old, well maintained and still in very poor state.

The study shows toilets were not adequate as indicated by the physical counting of toilets for both the teachers and pupils visited in schools. The available latrines were found to be gender sensitive in construction which motivated teachers and pupils. However, the limited number of toilets and sanitary materials for girls implied lack of privacy and proper support with such facilities in girls during their monthly periods. This put off some teachers and pupils lowering school attendance. This affected their performance and ultimately dropping out of school. It is also indicated that, sanitary units help in the physiological well-being of the learners as pupils narrated. One said; "it is difficult to find the toilets free and some pupils mess up on themselves while waiting for a toilet to be free, especially grade ones". When that is the case, they are booed and end up feeling bad .Another one said; if one mess up, she fails to go back to class for fear urine will smell and others will shun sitting near her.

Attempts to improve the sanitation situation were however seen in one schools trying to provide sanitary facilities for the girl child although the supplies were only for emergencies and not for regular supply.

The school environment plays a crucial role in attracting and retaining learners in the school. Recreational facilities and playfields helps in making the school environment more interesting through physical education and co-curricular activities, helped to prevent the build-up of stress among students as well nurturing talents through co-curricular learning. Unfriendly school conditions discouraged learners from joining and attending schools. Chimombe (2011) confirmed that school environment that was not conducive for learning may lead to underperformance. The study indicated that although schools are putting a lot of emphasis in the playfield activities, little emphasis is being put in on recreational facilities as playgrounds were not available for pupils in most school. They were observed to because they were occupied by non-pupils all the time. Asked where they play from when they are in school, pupils had this to say;

"we play behind the classrooms where we also stopped to say we are disturbing other pupils in different sessions". At the same time, we are told, "you are going break windows in those classes which still had some".

Teachers' responses on the physical infrastructure and their effects on the quality of education at primary schools level.

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Table 3: participants' views on the physical infrastructure and their effects on the quality of education at primary school level

Statement	Strongly Agree 1	Agree 2	Moderate 3	Disagree 4	Strongly Disagree 5	Total
Status of classrooms contribute to the quality of education offered in schools	9	6	1	0	0	16
Classroom space affects the teaching and learning process in schools	12	4	0	0	0	16
Pupil toilet ratio affects the teaching and learning process in schools	9	5	1	1	0	16
Availability of desks and chairs enhances pupil comfort, hence quality of education	13	3	0	0	0	16
Usage of playground in co-curricular learning motivates pupils' performance	10	3	1	2	0	16

Table 2 shows teachers' responses on the physical infrastructure and their effects on the quality of education at primary school level.

Other things being equal, quality education needs to ensure provision of tools for transformation of current societies to more sustainable societies. The success of teaching and learning is likely to be strongly influenced by the learning materials made available to support the process and the direct ways in which those resources were managed (UNESCO,2003).

On the impact of the current state of learning materials teachers revealed that because of overcrowding in classes, learning materials were not sufficient enough for all learners. They said, there were a lot of irregularities in the distribution of learning materials. Most pupils had limited access to textbooks which resulted in high textbook- pupil ratio

lead to poor performance. They further said, they were heavily stressed because of overcrowding. It was difficult to assess the teaching and learning process and also to provide remedial work. That led to poor relationship with pupils because the teachers had very little contact with the learners. Furthermore, it proved difficult to identify which learners had problems with the work because of the poor interaction.

Grant (1978) asserted that teaching and learning cannot be effective without adequate and relevant use of instructional materials. According to Abimbade (1997) instructional resources in teaching and learning make students to learn more and retain better what they have been taught and that it also promotes and sustains students' interest. It also allows the learners to discover themselves and their abilities and consequently provides them with an opportunity to realize their full potential. The impact on learning materials, especially those directly related to reading and writing is consistent across several studies as Buhere (2007) quotes Oshungbohun (1984) affirming that there are three prerequisite that determine good quality education namely physical facilities, competent teachers and adequate and relevant instructional resources.Thus greater availability of textbooks and reading materials rise quality of learning activities and hence increased achievements, (Fuller, 1986).

On the provision of learning materials as per free education policy findings revealed that schools were unable to provide the following requisites to pupils adequately textbooks, supplementary readers, teaching materials particularly dusters, chalk, markers and charts, pens, pencils, rulers, physical education equipment, crayons, art materials and others as shown in the table below.

Table 4: Teachers view on the provision of learning materials.

Learning material	Response	Frequency
Exercise books	Yes	3
	No	13
Textbooks	Yes	6
	No	10
Supplementary Readers	Yes	3
	No	13
Pen	Yes	1
	No	15
Pencils	Yes	1
	No	15
Chalk and markers	Yes	15
	No	1
Rulers	Yes	12

	No	4
Physical education equipment	Yes	2
	No	14

Contributing factors indicated, inadequate funding, misappropriation and poor management.

Without adequate learning materials most schools could not comprehend and implement the curriculum (Tordley, 2005), which clearly pointed to compromised quality. Meghir, (2002) confirms that, the utilization of resources in education brings about fruitful learning outcomes since resources stimulate students learning as well as motivating them.

It was obvious that schools without textbooks and other learning materials would not be able to do an effective job. From the study it emerged that, because of overcrowding learning materials like, textbooks were not enough for the learners although they were purchased. The finding on overcrowded classrooms was supported by Eshiwani's (1988) that one factor that caused poor performance was lack of learning and teaching materials as these led to reduced learners' motivation. As a consequence pupils had challenges experience when writing class activities without textbooks. The following were some of the pupils' verbatim responses on writing activities without textbooks: they revealed that they found it difficult to complete activities. One pupil said, 4 or 5 of us needed to use the book at the same time and when the period was over the teacher would collect the textbooks to be used by other classes.

They revealed that it was difficult to do the activity and know how to read. As another pupil said, textbooks were only given out during the lesson and for a short period of time and after the lesson, they were taken away. The third child revealed that, when the textbook was taken away he lost interest quickly and could not write anything.

This is presented in table below.

Table 5: Pupils' views on challenges experience when writing class activities without

Response	Frequency	Percentage
Difficult to complete activities	20	50%
Difficult to do the activity and know how to read	12	30%
Lose interest quickly	8	20%
Total	40	100%

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The table below shows teachers' responses on the utilization of learning resources in the teaching and learning process.

Table 6: Teachers' responses on the utilization of learning resources in the teaching and Learning process

Statement	Strongly Agree 1	Agree 2	Moderate 3	Disagree 4	Strongly Disagree 5	Total
Usage of books in the library	0	2	0	12	2	16
Usage of wall chart and visual aids	1	10	5	0	0	16
Usage of supplementary readers and story books in teaching and learning	0	5	3	8	0	16
Usage of the text books in the teaching and learning	13	3	0	0	0	16

It is noted that, there was a strain on the available textbooks and supplementary books as they were being shared. The textbook- pupil ratio was found to range between ratio of 1:4 for upper classes and 1:5- for lower classes implying that most pupils had limited access to textbooks. Sharing of textbooks affected their free accessibility to the books especially at home when they have to do their homework for next day in school. It was also apparent that sharing of text books in schools resulting to very poor performance in the subject. The revision materials were limited in schools since the schools prioritized purchase of stipulated textbooks. The amount of resources spent on education influences its quality and the amount of learning achieved. Textbooks were an important resource in teaching and learning and the textbook availability in a school enhances achievement of learners as they are exposed to better revision. Additionally, teachers shared teaching material particularly dusters, chalks, registers and charts. This costed so much on the teaching time. For practical subjects, it was revealed that for some they had to bring from home. For those who could not manage to bring their morale was reduced and it affected their self-worthiness.

Wall charts and visual aids were not available in most of the classes in the schools visited except for a few. It was observed, of the charts available only a few were of good quality while the rest were of poor quality. This stressed both the teacher and learners in the teaching and learning process. The teacher needed to spend more time putting across information, and the pupils took long to get the concept and to use their imagination which affected performance. Only a handful of the classes had chalkboards visible from all segments of the classroom. The study revealed that most of the schools had very old and rough chalkboards with poor visibility from some segments of the classroom which hindered learning.

The effects on the provision of learning materials on the teaching and learning process revealed that, if they are in good supply, that resulted in high quality performance and when the provision was poor and there was overcrowding there was high pupil book ratio. This led to poor concentration, difficult to grasp concepts, lack of creativity and lack of interest, poor performance and participation. On the part of the teacher, it was stressful and difficult to deliver lessons. They further revealed that wall charts and visual aids which were visible enough enhanced and promoted learning and for those who did not have, it hindered learning. Table 2 shows tabulate the frequencies on head teachers' responses.

Table 7: Head teachers' responses on the effects of inadequate infrastructure on the teaching and learning process

Response	Frequency
Inadequate teaching and learning space	7
Overcrowding	7
Poor planning	7
Poor management	7
Less teaching and learning time	7
unequal distribution of furniture	7
Poor performance	1
Poor concentration	1

On the effects Further finding in table 2 revealed of inadequate infrastructure on teaching and learning process show that, it had resulted in inadequate teaching and learning space, overcrowding, poor planning, poor management, less teaching and learning time, unequal distribution of furniture. There was poor performance and concentration because of the inadequate infrastructure. These had greater effects on the quality of education.

Teachers in all studied schools sat in crowded and poorly conditioned rooms referred to as staff rooms which interfered with their preparation for lessons thus leading to frustration, lack of motivation hindering quality in performance. Decent facilities make additional contributions to teachers work. The study revealed that teachers needed better staffrooms to boost their morale and thus productivity. Lack of motivated teaching force, large and congested classes, indiscipline cases and low contact hours were noted to contribute greatly to this.

Research objective three: the role of the school manager in enhancing proper infrastructure and learning materials.

This presentation, presents findings based on the third research objective and question which focused on the role of head teachers in enhancing proper infrastructure and learning materials in primary schools.

An effective and efficient manager must possess the technical, human and conceptual skills in order to be a good organizer, (Ngaroga, 2001). Technical knowledge and skill include understanding and being proficient in using specific activity such as a process, technique, or procedure. The study revealed that school managers should be equipped with relevant know- ledge and skill to perform administrative duties which include planning daily routine, among other duties. This implies that school managers need to be trained to equip them with the relevant skills and techniques to prepare them to be effective in implementation of educational policies (Ngaroga, 2001).

Jekanyifa (n.d) outlined the key functions for the head teacher as; to prepare the school budget that covered different responsible areas for the fulfilment of educational objectives, specifically teaching and learning process. In enhancing proper infrastructure and learning materials, the school head planned for the purchase of learning material and to ensured proper management of the available resources in public primary schools. Findings revealed that head teachers planned and prepared budget on infrastructure and learning materials improvement. They delegated tasks and responsibility to teachers and pupils to manage infrastructure and learning materials properly which helped to maintain infrastructure and learning materials well and they supervised the utilization of infrastructure and learning material. This is presented in table 8 below

Table 8: Head teachers' views on their roles in enhancing proper infrastructure and learning materials

Responses	Frequency	Percentages
Plan and prepare budget on infrastructure and learning materials improvement	2	25%
Delegate tasks to teachers and pupils	1	12%
Manage infrastructure and learning materials properly	2	25%

Maintain classrooms, furniture and learning materials well	1	13%
Supervise the utilization of infrastructure and learning material	2	25%
Total	8	100%

One school head indicated his role was;

"to plan effectively and ensure that all the necessary requirements are available and administer school resources adequately so as to benefit the intended beneficiaries".

However poor management and internal inefficiency in schools had been cited as impacting negatively on quality in schools as Kimenyi et al, (2007) observed.The head school understood the school's current position and the possible avenues through which it could pursue a particular course of action which helped him to make decisions on allocating its resources to pursue a strategy. To secure and operate effective allocation, monitor and control the use of resources the study shows that school heads had appointed some teachers as school accountants to deal with financial issues, something that sometimes had been reported to have led into loss of school income and unclearly stated expenditures. The study revealed lack of proper management of funds also delayed the purchasing of academic facilities like instructional materials, and sometimes obstructed the availability of these facilities as Kimenyi et al, (2007) also noted poor prioritization of funds and projects in terms of budget allocations and misappropriation of funds in many public schools. Head teachers revealed that government was to blame blamed for the inadequate funds for entrusting people with no accounting skills in any kind of management skills which contributed to the poor state of learning resources and inefficient use of funds. Nevertheless, on one hand, a school head lamented, "the government was also blamed for this situation as the inadequate funds are given with condition on how it should be utilised".

Head teachers supervised the resources school equipment and materials well and updated annually and inspected periodically for the achievements of the school objectives. The study revealed that, to ensure its quality in primary schools, the head teacher was involved in ensuring proper utilization of limited resources to achieve the set goals. One of them was teaching materials that enabled the teaching and learning process to go smoothly. Example of teaching materials include; chalkboards, textbooks, apparatus, and handbooks. Most of the recent studies insist the use of teaching materials as it would make discovered facts glued firmly to the memory of students. However, the study show inadequacies in the provision of learning and materials allocated to children. It revealed that, most of the school head in schools were in a difficult position;

since they were expected to improve students' academic performance in a period of lessen resources.

A school head is an accounting officer of the school hence was responsible to know how money is obtained and expended. He or she was expected to be an agent of change through creativity and innovativeness to get funds from various sources such as fees, the government budget fund-raising; school based economic activities and external donors. In the same vein, a school head identified the type of infrastructure and learning resources needed to support the implementation of school policies and control the equipment and materials by overseeing their acquisition, storage and use. However, it was difficult for the school heads to make sure that all buildings met the required standards. The study revealed that the school heads were finding it difficult to provide educational inputs which are of vital importance to the teaching of subject in the school curriculum were available. They were struggling to raise funds to buy teaching materials that enable the teaching and learning process to go smoothly. Example of teaching materials include; chalkboards, textbooks, apparatus, charts and handbooks. Head teachers reported; government had not been able to provide enough learning materials required to sustaining pupils for a budgeted period of one year. There they had to engage in fundraising ventures and other school based economic activities.

Mpondo (2005) supported that school head had to gather information systematically, which can be used to create possibilities for a further improvement in a schools' academic performance. The head teacher had to provide professional leadership for the continuous improvement of the school through proper coordination of all the required resources to get the desired outcomes which included learning materials. One school head said that; "to strengthen leadership, management and supervision in academic, co-curricular and infrastructure programmes in order to facilitate the delivery of quality education". "to strengthen leadership, management and supervision in academic, co-curricular and infrastructure programmes in order to facilitate the delivery of quality education".

The school head should made sure that all records were kept well. In addition, they were to take stock of the type of infrastructure in school for example classrooms, play grounds, furniture, libraries equipment to facilitate teaching and learning and also the quality and quantity of learning materials available. These records included students attendance registers, log books, inventory and the stock records register, asset registers and others. The school head had the vision and direction that motivated people to be responsible and take care of the school property and manage finances/resources in the way that teaching and learning process is improved.

On head teacher's roles in enhancing proper infrastructure and learning: findings revealed that, standards officers said, to improvise for inadequacies in the provision of

learning and materials through fundraising and proper management of the infrastructure, to ensure proper maintenance of infrastructure and supervise the utilization of the infrastructure and teaching and learning resources. This information is tabulated in table 8 below.

Table 9: Standards officer's views on head teachers' roles in enhancing proper Infrastructure and learning materials

Responses	Frequency	Percentages
Improvise for inadequacies through fundraising and proper management of infrastructure	1	33%
Ensure proper maintenance and supervision of the utilization of infrastructure and learning material	2	67%
Total	3	100%

Research objective four: measures to improve infrastructure and learning materials.

- It was expected that if FPE would be effective and sustainable, it should be accessible to all beneficiaries and provides adequate and appropriate infrastructure instead of spending most of the time dealing with congestion issues.
- • Learning materials should be readily available to all school-age children to gain access to quality education for a full cycle of primary education (Ngware, Oketch and Ezeh, 2008).
- If education system is to promote effective learning and prevent learning breakdown, it was imperative that mechanisms or infrastructures were structured into the system to break down existing barriers.
- Develop the capacity of the system to overcome barriers which may arise, prevent barriers from occurring, and promote the development of an effective learning and teaching environment.
- Devise appropriate measures to maintain infrastructure and learning materials to avoid deterioration.
- Come up with strategies to help increase the number of sanitary units that would tarry with the enrolment levels in schools.

Summary

This chapter discussed research findings in form of themes. Discussion of quantitative data encompasses objectivity while qualitative data involved subjectivity and were represented with reference to the objectives of the study. Tables, bar graphs and pie charts, frequencies, percentages and narrations were used to discuss the findings. The chapter closed with a summary. The next chapter was the last and carries the conclusion and recommendations of the study.

VI. Conclusion and Recommendations

Overview

This last chapter presents a conclusion and provides recommendations of the study based on the findings and discussions in the previous chapters for future research.

Conclusion of the study

The aim of the study was to examine the impact of the free education policy on the infrastructure and learning materials in selected primary schools of Mambwe District.

- To establish the state the infrastructure and learning materials in the context of the free- education policy in selected primary schools of Mambwe District.
- To investigate the impact of the current state of the infrastructure and learning materials on the teaching and learning process in selected primary schools of Mambwe District.
- To establish the role of school managers in enhancing proper infrastructure and learning materials in selected primary schools of Mambwe District.
- To recommend possible measures to improve the infrastructure and leaning materials in selected primary schools of Mambwe District.

In view of the of the findings of the study and what has been discussed so far, it is clear that, free education policy had an impact on infrastructure and learning materials at primary school level in Mambwe District .While the importance of the implementation of free education policy at primary school level cannot be overemphasized, it is clear from the literature review and the findings that the programme may not be implemented well for the benefit of pupils if the provision of adequate infrastructure and learning materials is left unchecked.

In regard to objective one: the study had shown the state of the state the infrastructure and learning materials in the context of the free-education policy in selected primary schools of Mambwe District. The introduction of free primary education came with the high increases in enrolment at primary school level. The high influx of pupils in schools brought about overcrowding which impeded on infrastructure. This meant that, infrastructure in terms of; classrooms, toilets, libraries and playgrounds were not adequate to handle sudden expansion in pupil numbers. Lack of classrooms implies lack of furniture such as chairs and desks. Free primary education (FPE) also excluded improvement or increasing on the provision of learning materials like textbooks. There were inadequate learning material in primary schools resulting in pupils not have free access to books and other materials necessary for learning. Ironically, the introduction of FPE came with some changes of inadequacies in infrastructures and learning materials and could not fully cater for the high influx of pupil.

In regard to objective two: the study had shown the impact of the current state of the infrastructure and learning materials on the teaching and learning process in selected primary schools of Mambwe District.

The FPE would have be effective and sustainable if was accessible to all beneficiaries and provided adequate and appropriate infrastructure and readily available learning materials to all pupils. However the influx of pupils overstretched facilities to the limit, affected planning and remained a major impeding factor to the achievement of overall effectiveness of primary schools. Overcrowding and congestion in classrooms led to triple or four shift and reduced on learning time. Additionally the poor conditions of the classrooms, space, toilets impacted negatively on the pupils' school attendance.

The shortage and strain of the available teaching and learning materials impeded on free accessibility of knowledge and skills. This affected pupils' performance, concentration, the amount of learning achieved and self-concept and led to low achievements and poor quality of education.

In regard to objective three: the study established the role of school managers in enhancing proper infrastructure and learning materials in selected primary schools of Mambwe District. Head teachers' roles included; school improvement, management and supervision were important aspect in enhancing infrastructure and learning materials to ensure its quality. The head teachers' roles included: a vision for school and use a variety of strategies, having management skills and to supervise infrastructure and the teaching and learning materials in the school.

In regard to objective four: suggested possible measures to improve the infrastructure and leaning materials in selected primary schools of Mambwe District.

- It was expected that if FPE would be effective and sustainable, it should be accessible to all beneficiaries and provides adequate and appropriate infrastructure instead of spending most of the time dealing with congestion issues.
- Learning materials should be readily available to all school-age children to gain access to quality education for a full cycle of primary education (Ngware, Oketch and Ezeh, 2008).
- If education system is to promote effective learning and prevent learning breakdown, it was imperative that mechanisms or infrastructures were structured into the system to break down existing barriers.
- Develop the capacity of the system to overcome barriers which may arise, prevent barriers from occurring, and promote the development of an effective learning and teaching environment.
- Devise appropriate measures to maintain infrastructure and learning materials to avoid deterioration.
- Come up with strategies to help increase the number of sanitary units that would tarry with the enrolment levels in schools.

The physical infrastructure and facilities and learning materials were important as they underpinned and were intrinsically interrelated to context, teaching and learning, human resources, school governance, class size, educational knowledge, supportive infrastructure, public resources available for education.

2. Recommendations of the study

Based on the findings, the following are the recommendations:

- The distribution of instructional materials must be made based on student enrolment and the current school population.
- The government should ensure that there are clear accountability mechanisms for the providers of Free Primary School education services and the consumers of these services.
- The Government should ensure timely release of funds meant for the provision of FPE services as delay forced parents to cushion the school as it waits for money from government.
- Funds meant for the construction of infrastructure should be calculated and implemented based on the growing populations of pupils that are admitted every year.
- More funding was required to support the current facilities that are available in public schools to achieve better results from the FPE system.
- Supply of textbooks to schools to be done by the government instead of sending money to schools since the amount received was not enough to enable schools acquire good quality books.
- Increasing budgetary allocations to the schools to improve the quality and quantity of inputs such as instructional materials and physical infrastructure as a long way of creating an attractive school environments thus ensuring retention.
- Schools to initiate income-generating projects to supplement government funding on FPE to reduce congestion and pupil/book ratio hence improve performance.
- Government to re-examine its position on FPE on the distribution instructional material and other physical facilities to attain its set targets within the required mileage.
- The government should put up additional modern physical infrastructures such as classrooms, toilet facilities, and libraries to meet the set standards and benchmarks

References

1. ACTIONAID-Kenya (2004). The pastoralist communities and free primary education in Kenya: a preliminary survey. Govt. of Kenya, Arid Lands Resource Management Project.
2. Aduda, D. (2005). New Report Spells out the Future of Education. The Daily Nation Monday April, 2005 Nation Media Group Nairobi.

3. Akande, O.M. (1995). Hints on teaching practice and general principles of education. Lagos, OSKO Associates.
4. Alexander R. (2007). Education for All, the Quality Imperative and the Problem of Pedagogy. New Delhi: Department for International Development.
5. Alubisia, A. (2005). UPE myth or reality: A review of experiences, challenges and lessons from East Africa London: Oxfam.
6. Arenstrop, R. (2004). Kenya, Lesotho, Malawi and Uganda: Impact of Universal Primary Education. Washington, D.C: World Bank.
7. Avenstrup R, Liang X, Nellemann S. (2004) Kenya, Lesotho, Malawi and Uganda: Universal Primary Education and Poverty Reduction. Scaling up Poverty Reduction: A Global Learning Process and Conference, Shanghai, May 25 to 27, 2004.
8. Bennaars G.A, Otiende J.E and Boisvert R. (1994). Theory and Practice of Education, Nairobi Kenya, East African Educational Publishers,
9. Berg B. L. (2004). Qualitative research methods for the social sciences. Boston: Allyn & Baconand Pearson Education Inc.
10. Boy J. (2006). Free Primary Education and its Effects on Student Performance in Bungoma. District. An unpublished research thesis, Moi University
11. Boy, 2006) The Impact of Free Primary Education on Performance of Teaching Stakeholders in Public Schools in Kenya: A Case of Public Schools in Bungoma East District. International Journal of Current Research. Vol.2, Issue, 1, pp.151-162, January, 2011.
12. Bryman, A. (2004). Social Research Methods. New York. Oxford University press. Inc.
13. Business Dictionary.com (2013). Role. Retrieved from http://www.businessdictionary.com/definition/American-Bureauof-Shipping- ABS.htm. Accessed on 6thMarch, 2013.
14. Cheruto, K. & Kyalo, W. (2010). Management Challenges Facing Implementation of Free Primary Education in Kenya: A case of Keiyo District. Journal of Education Administration and Policy Studies 2(5), 71-76.[4].
15. Chimombo, J. (2005). Quantity Versus Quality in Education: Case Studies from Malawi. Journal for international Review of Education 51(2), 155-172.
16. Chiombe E (2006). Challenges 2006-2007: Lesotho Edging Towards Education MDG. From<http://www.ipsnews.net/news.asp?idnews=35864> (Retrieved on Jun15, 2012).
17. Chuck, A. (2009). Disparities in the System: The effects of Free Primary Education on Quality of Education in Nairobi Public Schools. SIT Kenya: Development, Health and Society, 20, 102-104.
18. Cohen, D. K. and Bhatt, M. P. (2012). The importance of Infrastructure Development to High Quality Literacy Instruction. University of Michgan.
19. Coombs, P.H. (1970). The World Educational Crisis: A system Analysis. New York. Oxford University Press.
20. Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches. (2nd ed.).Los Angeles: Sage.

21. Deininger K. (2003). Does cost of schooling affect enrolment by the poor? Universal primary education in Uganda. Economics of Education Review, 22, 291-305.
22. Deininger K. (2003). Does cost of schooling affect enrolment by the poor? Universal primary education in Uganda. Economics of Education Review, 22, 291-305.
23. Denscombe, M. (1998). The Good Research Guide for Small Scale Projects Buckingham: Open University press.
24. Eshiwani. G.S. (1993) Education in Kenya since Independence. Nairobi: East Africa Education.
25. Farombi, J.G. (1998). Resource concentration, utilization and management as correlates of students' learning outcomes: a study in School Quality in Oyo State. Unpublished Ph.D. Thesis, university of Ibadan.
26. Farrant, J. S. (1991). Principles and practice of education (Tenth Impression Singapore: Longman.
27. Ferragina, E. (2012) Social Capital in Europe: A Comparative Regional Analysis. Cheltenham: Edward Elgar. Books.google.com. Retrieved 2014-04-20.
28. Grogan L. (2008). Universal primary education and school entry in Uganda. Journal of African Economies, 18, 183-211.
29. Hallak, J. (1990). Investing in the Future: Setting educational priorities in the developing world. Paris 1TEP and Pergonion Press.
30. Jekanyifa, A.A (n.d) Effects of Instructional Resources on the academic Performance of Students in history in Nigeria. Retrieved fromhttp://www.unilorin.edu.ng/publications/jekayinoluwa/2.%20EFFECTS %20OF%INSTRUCTIONAL%20RESOURCES.htm. Accessed on 6th March 2013.
31. Kadzamira E., Rose P. (2003). Can free primary education meet the needs of the poor?: Evidence from Malawi. International Journal of Educational Development, 23,501-516.
32. Kasomo, D. (2007). Research methods in humanities and education (Research statistics, measurement, evaluation and testing). Eldoret: Zapf chance Research Consultants and Publishers.
33. Koech, D., (1999). "Total Integrated quality education and Training (TIQET)." Report of the Commission of inquiry into the education system of Kenya. Nairobi: Government Printer.
34. Kombo, D.K & Tromp, D.L.A (2006) Proposal and thesis writing. An introduction. Nairobi; Paulines Publications Africa.
35. Kothari, C. P. (2006). Research Methodology New Delhi: Wiley Eastern limited
36. Majanga E., Nasongo J., & Sylvia. V., (2010). The effects of class size on classroom interaction during mathematics discourse in wake of free primary education: A study of public primary schools in Nakuru district. Journal of social sciences 3(1): 44-49, 2011 mass Failure Conference paper Presented at Ibadan
37. Meador, D. (2013) The Role of The principal; keys to being an effective Principle Retrieved from http://teaching.about.com/od/admin/tp/Role-Of-The teachersPrincipal.htm. Accessed on 6th March 2013.

38. Mikako Mishimuko (2007) Problems behind education for all (EFA): A case of Sierra Leone
39. Ministry Of Education (2003), Free Primary Every Child in School, Nairobi.
40. Ministry of education. (2010).Education Statistical Bulletin. Lusaka.
41. Ministry of Education. (2015)Zambia Education for All Review. Lusaka.
42. Morojele P 2012. Implementing free primary education in Lesotho: Issues and challenges. Journal of Social Sciences, 32(1): 37-45.
43. Mpondo, L. (2005) Leadership and Management Training Programme for Heads of Schools, Bagamoyo, ADEM.
44. Mugenda, A. & Mugenda, O. (2003). Research methods: Quantitative and qualitative approaches. Nairobi: African Centre for Technology Studies Press.
45. Ngaroga, M. (2001). PTE Revision Education. Nairobi: East African Publishers
46. Ngware, M. W., Oketch, M., &Ezeh, A. C. (2011). Quality of primary education inputs in urban schools: Evidence from Nairobi. Education and Urban Society, 43, 91- 116.
47. Ngware, Oketch and Ezeh, (2008). What quality of education are children in urban schools receiving? Evidence from Nairobi: APHRC working paper No. 39: Nairobi: APHRC
48. Ochenje, C. A. (2008). 'A comparative study of factors influencing academic performance between private and public primary schools in Kitale municipality in Kenya.' Unpublished M. Phil thesis: Moi University, Eldoret. Kenya Vision, 2030.Nairobi:Kenya.Government Printers.
49. Ogola, F. O. (2010). Free Education in Kenya's Public Primary Schools. Addressing the Challenges. Addis Ababa, Ethiopia: Organization for Social Science Research in Eastern and Southern Africa (OSSREA).
50. Ogula, P. A. (2005). Research Methods. Nairobi: CUEA Publications.
51. Ogunseye, F. (1986). The Learning Resources: Factor in Education and its implication of
52. Ohba, A. (2009) Does free secondary education enable the poor to gain access? A study from rural Kenya. CREATE Pathways to Access Monograph No. 21. Brighton: University of Sussex.
53. Oketch, M. & Somerset, A. (2010). Free Primary Education and After in Kenya: Enrolment impact, quality effects, and the transition to secondary school. Research Monograph No. 37, University of Sussex: CREATE Pathways to Access
54. Okwach, A. and George, O. (1997). Efficiency of primary education in Kenya: situational analysis and implications for educational reform. Nairobi: Institute of Policy Analysis and Research
55. Olungah A. (2011), Constraints Facing Implementation of Free Primary Education in Sabatia Sub-County, Vihiga County. Thesis UoN
56. Orodho (2003) Training and turnover in the evolution of organizations. Organization Science,

57. 8(1): 84-96. Performance. Unpublished M.ED Project, University of Ilorin. Popoola, T. A. (1989). An Investigation between Instructional Resources and Academic
58. Postlewaithe, N. (1998). The conditions of primary schools in least-developed countries.
59. International Review of Education, 44(4): 289-317.
60. Preserve Articles (2012). What is the difference between schools Administration and publications Africa
61. Ravinder Rena Education Research International Volume 2011 (2011)
62. Reh, J.F. Vision, Strategic and Tactics. Retrieved from(http://management.about.com/cs/adminaccounting/a/vst.htm) Accessed on 6th March 2013.
63. Riddell, A. (2003). The introduction of free primary education in sub-Saharan Africa. Schervish, M (1996) Theory of Statistics, p. 218. Springer ISBN 0-387-94546-6
64. Siaciwena, R. and Lubinda, F. (2008). The Role of Open and Distance Learning in the Implementation of the Right to Education in Zambia. Volume 9(1).
65. Sifuna, D.N. & A.M. Karungu. (1998). Contemporary issues in education in East Africa London: University of London, Institute of Education.
66. Tatum, M. (2013). What is Strategic vision? Retrieved from (http://www.wisegeek.com/what- is-strategic-vision.htm). Accessed on 6th March 2013.
67. The MLA Project (2000) With Africa for Africa: towards Quality Education for All. Pretoria: The Human Sciences Research Council.
68. Tsavga, J. (2011). The effect of environment on the academic performance of students in Tarka Local Government Area of Benue State. Unpublished PGDE Thesis, Makurdi: Benue State University.
69. UNESCO (1994). World Declaration on Education for All and Framework for Action to Meet Basic Learning Needs. New York: UNESCO.
70. UNESCO (2000). The Dakar Framework for Action. Paris.
71. UNESCO (2000[1]). The Dakar Framework for Action Education for All: Meeting our Collective Commitment. World Education Forum, Dakar, Senegal, April 26 to 28, 2000.
72. UNESCO (2000[2]). Review of Education Sector Analysis in Lesotho: 1978-1979. Paris: UNESCO.
73. UNESCO (2002), EFA Global Monitoring Report. Retrieved on January 24th 2011, fromefaraport.unesco.org.
74. UNESCO (2003). Education for All Global Monitoring Report 2003/2004 Gender and Education for All-The Leap to Equality
75. UNESCO, (2005). Challenges of Implementing Free Primary Education in Kenya: Assessment Report.
76. UNESCO, (2015). Education for All (2015) National Review. Lusaka
77. UNESCO, EFA Global Monitoring Unit (2002), The 2002 Education for All Global Monitoring Unit Report: EFA - Is the World on Track? UNESCO, Paris.

78. UNESCO, EFA Global Monitoring Unit, The 2002 Education for All Global Monitoring Unit Report: EFA - Is the World on Track? UNESCO, Paris.
79. UNESCO. (2005). EFA global monitoring report 2005: Education for All, the quality imperative. Paris: UNESCO.
80. Watkins K., Al-Samarrai S., Bella N., Benavot A., BouaLiebnitz P. M. B., Buonomo M., Varin S. (2008). EFA global monitoring report: Education for all, 2009. UNESCO.
81. Wikipedia, the free Encyclopaedia (2012) Strategic Planning. Retrieved from https://en.wikipedia.org/wiki/Strategic_planning. Accessed on 6th March 2013.
82. World Bank (1988), Education in Sub Sahara Africa Policies for Adjustment Revitalization and Expansion, Washington DC World Bank.
83. World Bank (1990), A World Bank Policy Paper: Primary Education. Washington DC World Bank.
84. World Bank (2004): "Strengthening the Foundation of Education and Training in Kenya: Opportunities and Challenges in Primary and General Secondary Education" ReportNo.28094-KE
85. World Bank, (1999). World Bank of education forum education for all: Meeting Behavior
86. Collective Commitments. The framework for action, Paris.
87. World Bank. (2004). "Books, Buildings and Learning Outcomes: An Impact Evaluation of
88. World Bank Support to Basic Education in Ghana," World Bank Report No. 28779.Washington, DC
89. Zambia: Education for all 2015 National Review. Lusaka