AN EVALUATION OF DYNAMICS OF QUALITY OF
EDUCATION PROVIDED BY NON-FORMAL PRIMARY
SCHOOLS IN NAIROBI, KENYA

KAUGI, EPHANTUS MICHENI
E83/10929/06

A RESEARCH THESIS SUBMITTED FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY IN THE SCHOOL OF EDUCATION,
DEPARTMENT OF EDUCATIONAL MANAGEMENT, POLICY
AND CURRICULUM STUDIES
KENYATTA UNIVERSITY

JUNE 2015
DECLARATION

I confirm that this research thesis is my original work and has not been presented in any other university/institution for certification. The thesis has been complemented by referenced works duly acknowledged. Where text, data, graphics, pictures or tables have been borrowed from other works-including the internet, the sources are specifically accredited through referencing in accordance with anti-plagiarism regulations.

......................................................... Date........................................

KAUGI, EPHANTUS MICHENI
E83/10929/06
Department of Educational Management,
Policy and Curriculum Studies,
Kenyatta University

Supervisors’ declaration: We confirm that the work reported in this thesis was carried out by the candidate under our supervision as University supervisor(s)

......................................................... Date........................................

PROF. GRACE W. BUNYI,
Department of Educational Management,
Policy and Curriculum Studies,
Kenyatta University/

......................................................... Date........................................

DR. SAMUEL N. WAWERU
Department of Educational Management,
Policy and Curriculum Studies,
Kenyatta University
DEDICATION

To my late father Stanley M’Ilkingi M’irambu (Kaugi) and my dear mum Judith Cianthuni (Faith),

You planted in me a seed that has grown to produce this piece of work.

To my wife Jane for being there for me all the time,

Our sons Murimi, Mwaki and Muthomi,

Always remember you can never achieve what you never dreamt.

To all my teachers
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### ABBREVIATIONS AND ACRONYMS

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<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
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<tr>
<td>DAE</td>
<td>Department of Adult Education</td>
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<td>DCE</td>
<td>Director of City Education</td>
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<tr>
<td>DQAS</td>
<td>Directorate of Quality Assurance and Standards</td>
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<tr>
<td>EFA</td>
<td>Education for All</td>
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<td>FPE</td>
<td>Free Primary Education</td>
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<tr>
<td>GoK</td>
<td>Government of Kenya</td>
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<tr>
<td>HIV</td>
<td>Human Immune Virus</td>
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<td>KANU</td>
<td>Kenya African National Union</td>
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<tr>
<td>KCPE</td>
<td>Kenya Certificate of Primary Education</td>
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<tr>
<td>KIE</td>
<td>Kenya Institute of Education</td>
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<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>MoE</td>
<td>Ministry of Education</td>
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<td>NFECs</td>
<td>Non-Formal Education Centres</td>
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<tr>
<td>NFSs</td>
<td>Non-Formal Schools</td>
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<tr>
<td>NGOs</td>
<td>Non-Governmental Organisations</td>
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<td>SFP</td>
<td>School Feeding Programme</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organisation</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children Education Fund</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
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<tr>
<td>WCEFA</td>
<td>World Conference on Education for All</td>
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<td>WFP</td>
<td>World Food Programme</td>
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Basic education in Kenya is provided through Formal and Non-Formal Education Institutions. The Non-Formal Institutions, that provide basic education are the Non-formal primary schools (NFSs), which offer the regular school curriculum and Non-Formal Education Centres (NFECs), which follow a non-formal basic education curriculum. The formal school system is not able to provide access to all learners, especially those from urban informal settlements resulting to enormous growth of NFSs. Despite the great role, the NFSs continue to play in providing an alternative channel basic education there is paucity of literature on the quality of education that these schools provide. This study was an attempt to fill this gap. The specific objectives of this study were, first, to establish the quality of learners who attend Non-Formal Schools. Second, to investigate the quality of the learning environments provided in the Non-Formal Schools. Thirdly, to evaluate the quality of the curriculum used in the Non-Formal Schools. Fourthly, to investigate the quality of the educational processes employed in the Non-Formal Schools; and finally, to evaluate the quality of educational outcomes obtained from the Non-Formal Schools. The study was informed by the general systems theory and adopted the UNICEF framework of education quality that defines education in terms of five quality dimensions, namely; learner, environment, content, processes and outcomes. Descriptive survey design was used to investigate the quality of education provided in these schools. The target population comprised 411 NFSs that had presented candidates for KCPE. Stratified random sampling was used to get study respondents who comprised the pupils, teachers, headteachers of the NFS. Data collection was done through use of questionnaires, interview guide, review of curriculum documents and observation. Quantitative data were analysed using descriptive statistics by use of the SPSS software while qualitative data were analysed thematically. The study findings were children who enrolled in the NFS were very needy as they came from poor households; some children had difficulties getting medical care, food, and shelter and were prone to insecurity. Other findings were the NFSs lack suitable and adequate physical facilities and instructional materials for use by the learners; most of the teachers who teach in the NFSs were untrained; school managers lacked training in school management. Further the study found out that there was regular use of continuous assessment and NFSs performed quite well in the Kenya Certificate of Primary Education (KCPE) and rated better than the public schools in Nairobi county. From the above findings, it was concluded that despite the many challenges Non-formal primary schools provide quality education. The researcher recommends first, for intervention programmes that help families meet basic needs, second, for support from the government and other actors to improve the quality of the physical facilities, and finally for in-servicing/recruitment of trained teachers.
CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.0 Introduction

This chapter begins by providing the background to the study, the statement of the problem, the purpose of the study, objectives of the study and research questions that guided the study. The significance of the study, limitations and delimitations, assumptions of the study and the theoretical and conceptual framework for the study are too presented in this chapter. Finally, the operational definition of terms and the organization of the thesis are explained in the chapter.

1.1 Background to the Study

The role of education in improving the quality of life is well documented by various studies (Bruns, Mingat, & Rakotomala, 2003), (Lloyd, Kaufman, & Hewett, 2000) and (Psacharopoulos & Patrinos, 2004). The importance of provision of basic education to all children has further been underscored by various international conventions, notably; The World Declaration for Education for All (EFA), (Jomtien Thailand, 1990), The Millennium Declaration and the Dakar Framework for Action in 2000 and the Millennium Development Goals (MDGs) (UNESCO, 2005). The Jomtien conference and the Dakar framework particularly stressed the need to provide quality education (UNESCO, 2008) and (UNESCO, 2005).
In Kenya basic education is usually provided through the formal school system and non-formal means with the former being the main mode of education provision to school-going age children. On the other hand, non-formal education has for a long time been associated with out-of-school youth and adults. However, in Kenya, the term non-formal education is used to refer to education provided to out-of-school youth and adults that follows a non-formal school curriculum and the education that is provided to school-going age children who attend Non-formal primary schools that follow the 8-4-4 curriculum (Republic of Kenya, 2009) and (Republic of Kenya, 2005c). This study focused on the quality of education provided by the non-formal primary schools in Nairobi, Kenya.

1.1.1 Conceptualization of Quality Education

The concern over quality education was first raised during a United Nations conference held in Jomtien, Thailand in 1990 that resulted in the “Declaration on Education for All and a Framework for Action to meet basic learning needs” (UNESCO, 2005). The conference noted that provision of education at the time was deficient in terms of quantity, quality and relevance (Mundy, 2006) and (UNESCO, 2004). The post-Jomtien conference period saw many countries implement policies that focused on expansion of education through improving access. Since what constituted quality education was not agreed on at the Jomtien conference, education expansion was not necessarily focusing on quality as seen with the United Nations Millennium Declaration that set out the commitment to
achieve Universal Primary Education by 2015 without specific reference to its quality (UNESCO, 2004).

A shift of focus from the quantitative aspects of education provision was seen at the World Education Forum (Jomtien Follow-up) Dakar, Senegal in 2000 (Mundy, 2006). The Dakar framework for Action (2000) goal 2 committed nations to provision of good quality primary education and goal 6 nations were asked to improve all aspects of education quality (UNESCO, 2004). The importance of good quality education was reaffirmed as a priority at a Ministerial Round Table on Quality Education, held in Paris, 2003 (UNESCO, 2004). Though the need for quality education continued to be emphasized the definition of what constitutes quality education remained unresolved. Since definition of quality tends to be contextual and evolving an universally accepted definition is implausible due to national, regional and local expectations (Adams, 1993).

Educators seem to agree on at least six common views of quality, namely; quality as reputation, quality as resources and inputs, quality as process, quality as content, quality as output and outcome and quality as “value added” (Adams, 1993). Conceptualization of quality implied in the Global Monitoring Report 2005: ‘the Quality Imperative’ (UNESCO, 2004), take a broad approach to understanding quality that emphasizes learning for social development through promotion of life skill and identifies four variables that influence educational quality, namely; learner characteristics, context,
inputs and outcomes (Angeline Barret, Chawla-Duggan, Lowe, Nikel, & Eugenia Ukpo, 2006) and (UNESCO, 2004). On the other hand (UNICEF, 2000) has an education quality framework that views education as a multifaceted system that is entrenched in a political, cultural and economic context. This UNICEF framework has five ingredients, namely: the pupils, content, processes, environments and outcomes. Since an evaluation of education quality is dependent on the conceptualization of the term quality, the current study of the quality of education in Non-formal primary schools in Kenya used the UNICEF framework of quality education (UNICEF, 2000).

1.1.2 Development of Non-Formal Education

Non-formal education became part of the international discourse on education policy in the late 1960s following an international conference in Williamsburg USA in 1967, where concerns that many countries were finding difficult (politically or economically) to pay for the expansion of formal education to meet the demands of basic education (Coombs, 1968). Additionally, there were complaints that the formal school system was extremely faulty with there being inadequate places for children in formal schools, a lot of wastage and its lack of relevance (Hoppers, 2000).

(Hoppers, 2006) identifies the core characteristics of the formal education as use of a standard curriculum; use of formal institutions of learning; use of national systems of examination, qualification and certification thus
making formal education hierarchical in structure with a chronological grading system. The above characteristics tend to make formal schools quite rigid and relatively costly to build which result in inadequate places for pupils, and also being less friendly to children from underprivileged and vulnerable groups in the society (Republic of Kenya, 2006) and (UNICEF, 1999a). The lack of adequate places for pupils in formal schools and their rigid programmes created gaps in the provision of basic education that favoured the introduction of non-formal education. Additionally, there was the feeling that formal systems were failing in some aspects like unsuitable and irrelevant curriculum, disparity in educational growth and economic growth, unemployment and other socio-economic problems (Coombs, 1973), (Rogers, 2004) and (Bishop, 1985). Non-formal education for that reason came in to fill the gap left by the formal school system.

The concept of non-formal education became more prominent following a major research study done by Coombs for UNICEF in the United States of America in 1971, to how non-formal education could help meet the minimum essential learning needs of millions of educationally deprived children and adolescents and to help accelerate social and economic development in rural areas (Coombs, 1973). Following the study, Coombs argues that formal educational systems had adapted too slowly to the socio-economic changes and there was need for planners to make a distinction between formal education, informal education and non-formal education (Coombs, 1973), (Smith, 1976) and (Torres, 1993) . However, the concept
of non-formal education was used in a very broad and loosely manner to refer to education that takes place outside of the formally organized school (Coombs & Ahmed, 1974). Coombs and Ahmed (1974) define non-formal education as:

Is any organised, systematic, educational activity carried on outside the framework of the formal system to provide selected types of learning to particular subgroups in the population, adults as well as children.

Non-Formal education was, therefore, taken to refer to the learning and training which takes place outside recognized educational institutions or those “deliberate” educational activities not conducted in the formal system of schooling (Grandstaff, 1974) and (Tight, 1976). Generally, non-formal education programmes are normally flexible, versatile, adaptable and have capacity to carry out educational tasks, which the formal schools cannot (Coombs, 1976) (Evans, 1981) and (Thompson, 1995).

Currently, non-formal education may be categorized into four main types, namely, Para-normal education, popular education, education for personal development and professional training (Carron & Carr-Hill, 1991) and (Rogers, 2004). Characteristically, each of these four forms of education by and large responds to different education needs, serves different clientele, is organized by education agencies and has different relationships with the formal education system. The focus of this study was the para-normal education.
Normally, the para-normal education consists of educational programmes that offer a substitute to regular full-time schooling with the main objective of providing a second chance to those who have not had a chance to attend formal school system. An example of para-normal education is found in Hungary where we have “Workers’ schools” which are the substitutes for the eight-year formal primary education that is provided in that country (Rogers, 2004). Other examples include the BRAC non-formal primary education in Bangladesh which offers education to poor rural Bangladesh children and follows a formal curriculum (Bunyi & Munyui, 2005) and (Mednick, 2004).

In Africa, examples of non-formal education programmes include first the Complementary Opportunities for Primary Education (COPE) initiative in Uganda, which compresses five years of formal primary curriculum content into three years thus making it possible for the COPE learners to enter formal schools at primary six. Second, we have the Complementary Basic Education (COBET) Programme in Tanzania that targets rural vulnerable children condense five years formal primary education content into three years (Hoppers, 2006). Third, we have Primary Alternative Education (PAE) Programme in Somalia that targets vulnerable groups of children and uses a condensed version of the primary formal curriculum (Bunyi & Munyui, 2005). Other examples of NFE programmes in Africa include the National Foundation for Community Skills Development Centres in
Namibia, Schools as Centres for orphans and vulnerable children in South Africa, the village schools of SCF/USA in Mali (Hoppers, 2006).

In Kenya, the commitment towards provision of basic education by the government since independence is demonstrated in the various sessional papers, Education Commission reports and National Development Plans. Notably, in its election Manifesto in 1963, the Kenya African National Union (KANU) indicated that it was its intention that every child in Kenya should have a minimum of seven years’ free education (Republic of Kenya, 1964). However, provision of basic education was mainly limited to the formal school system until 1979 when the government established the Department of Adult Education (DAE) to co-ordinate Non-formal Education Programmes (NFE). These NFE programmes mainly focused on provision of functional literacy skills to adults and out-of-school youth.

The adoption and implementation of the cost-sharing policy through Sessional Paper No 6 of 1988 (Republic of Kenya, 1988) had adverse effects on enrolments, as many children were unable to meet the relatively high cost of education in the formal schools. This saw the entry of non-formal education that had lower user charges targeting the many school-going age children and youth who had otherwise been excluded by the formal education system (Republic of Kenya, 1999). The provision of NFE to school-going age children continued to expand and by 1998, there were over 116 non-formal primary schools and non-formal centres in Nairobi,
alone (Thompson, 2001). However, provision of basic education through NFE programmes remained largely unregulated and non-recognised by the government.

The Kenya government, being a signatory to various international conventions on provision of basic education, notably the Education for All (EFA) and Millennium Development Goals (MDGs) introduced Free Primary Education (FPE) in January 2003 to increase access to basic education to all children. The implementation of FPE policy saw enrolment in formal primary schools rise from 5.9 million in 2002 to 7.2 million in 2004, an increase of 1.1 million children and 300,000 children were enrolled in Non-formal primary schools (Republic of Kenya, 2005c). Yet, despite the big success of FPE, over 1.5 million children, because of their difficult circumstances, could not be able to gain access to any form of schooling (Republic of Kenya, 2009b) and (Republic of Kenya, 2003). These children were mainly from urban informal settlements, commonly referred to as slums (Republic of Kenya, 2007). Therefore, the country required other innovative ways for providing basic education. A taskforce appointed by the Minister for Education in 2003 noted that the non-formal schools, though not officially recognised by the Ministry of Education at the time, provided access to education to many children in the urban informal settlements. Therefore, the taskforce among other things, recommended the use of non-formal education as an alternative channel to provision of basic education to meet the educational needs of out-of-
schoolchildren (Republic of Kenya, 2009b). The findings and recommendations by the taskforce meant that the government could no longer ignore provision of education through non-formal means.

Consequently in 2005 through the Sessional paper No 1 of 2005, non-formal primary education was officially recognized as an alternative means of providing education to children unable to access education through the formal primary schools (Republic of Kenya, 2005d). Following this recognition of non-formal education as an alternative means of providing basic education, the government initiated the process of developing policy document for alternative provision of basic education. This policy document on alternative education was formerly launched in 2009 (Republic of Kenya, 2009).

Non-formal education programmes mainly targets out-of-school and hard-to-reach children (Republic of Kenya, 2009). Non-formal education in Kenya is offered in two types of institutions, namely; the Non-formal primary schools (NFSs) and the Non-formal Education Centres (NFECs). The NFSs enrol primary school-going age children who are unable to access formal schools and use formal primary school curriculum (8-4-4 curriculum). Consequently, pupils who attend NFSs sit the Kenya Certificate of Primary Education on completion of the primary school cycle and compete for admission to secondary schools with pupils from the formal school system.
On the other hand, NFECs use non-formal basic education curriculum, which combines literacy, numeracy and skill training, prepared by the Kenya Institute of Curriculum Development (KICD) (Republic of Kenya, 2006). Just like the NFSs, the NFECs normally enrol those young out-of-school children and youth, aged 6-17 years old but who have missed a chance to get basic education from either formal schools or Non-formal primary schools (Republic of Kenya, 2006) and (Republic of Kenya, 2009).

The current study focused on the quality of education provided in the Non-formal primary schools (NFS) as defined by the UNICEF framework of education quality. The UNICEF framework identifies five ingredients of quality educations, namely; learners’ characteristics, learning environments, processes, curriculum content and outcomes (UNICEF, 2000).

1.2 Statement of the Problem

The introduction of FPE in 2003 and the recognition of the Non-formal primary schools as an alternative channel to the provision of formal basic education in 2004 saw great proliferation of Non-formal primary schools particularly in the informal settlements in Nairobi. A census conducted in Nairobi by the Ministry of Education and UNICEF in 2005 established that there were 411 Non-formal primary schools offering the formal school curriculum at the time and more schools continued to be established (Ministry of Education & UNICEF, 2005a). However, there is paucity of documented information on the quality of basic education provided in the
Non-Formal Schools. This study aimed at evaluating and documenting the quality of education provided by the Non-formal primary schools in Nairobi, Kenya. The study used the UNICEF framework of education quality that defines quality in terms of five learner’s characteristics, quality of learning environments, the curriculum content, quality processes and outcomes. These education quality dimensions guided this study.

1.2.1 Purpose of the Study

The purpose of this study was to investigate the quality of education provided in Non-formal primary schools in Nairobi, Kenya. The study evaluated the quality of education by use of UNICEF framework (defining quality in education ) that focuses on five widely accepted dimensions of quality education, namely; the learner, content, processes, environment and outcomes (UNICEF, 2000).

1.2.1 Objectives of the Study

The objectives of the study were:

i. To establish the quality of learners who attend Non-formal primary schools (NFS).

ii. To investigate the quality of the learning environments provided in the Non-Formal Schools.

iii. To evaluate the quality of the curriculum used in the Non-Formal Schools.

iv. To investigate the quality of the educational processes employed in the Non-Formal Schools.

v. To evaluate the quality of educational outcomes obtained from education provided by the Non-Formal Schools.
1.2.3 Research Questions

The study sought answers to the following research questions.

i. What is the quality of learners who attend Non-formal primary schools (NFSs)?

ii. What is the quality of the learning environment in the Non-Formal Schools?

iii. What is the quality of the curriculum used by the Non-Formal Schools?

iv. What is the quality of the educational processes employed in the Non-Formal Schools?

v. What is the quality of educational outcomes from the Non-Formal Schools?

1.3 Significance of the Study

The study findings will be used to make informed recommendations and policy options with regard to the provision of quality education through Non-formal primary schools in Nairobi in particular and Kenya in general. Additionally, the study findings would be important in the design of appropriate intervention measures for improving and enhancing the quality of education provided by NFS in Nairobi, Kenya.

1.4 Limitation and Delimitations of the Study

In this section, limitations and delimitations of the study are discussed.

1.4.1 Limitations

The study had a number of limitations. First, the office of the Director of City Education did not have up-to-date records of registered Non-formal
primary schools since the rate of closure of the schools was high and the same rarely communicated to the education authorities. Some Non-formal primary schools did not operate on permanent physical locations, which made it difficult to locate such schools. These factors made sampling rather challenging. To address these issues, the researcher sought the assistance of the chairperson of the Nairobi Non-formal primary schools Association whose office had more up-to-date records of the registered schools and whose staff knew the physical location of the schools. Only those schools that were registered, had permanent physical locations and had presented pupils for Kenya Certificate of Primary Education were included in the study.

Second, the respondents particularly the headteachers of Non-formal primary schools complained about being visited by too many researchers and some of them refused to cooperate. The researcher had to take time to explain how this particular study was different from others and its importance to the individual headteachers. Although time consuming and expensive, the approach worked well for nearly all the sampled schools, however, some respondents would fail to respond to all questionnaire items. Such incomplete responses were excluded during data analysis and consequently in the final report which affected the sample size for that particular response. Finally, the research findings from this study are limited to Non-formal primary schools in Nairobi and may not be
generalized elsewhere unless to Non-formal primary schools operating under similar conditions.

1.4.2 Delimitations of the Study

This study investigated the quality of basic education provided by Non-formal primary schools in the eight districts of Nairobi. The study employed the UNICEF (2000) framework of quality education and assessed quality of the learners, content, processes, school environments and outcomes. Only registered Non-formal primary schools that offered the formal (8-4-4) curriculum and had presented candidates for the Kenya Certificate of Primary Education (KCPE) at least once were included in the study.

1.5 Assumptions of the Study

In this study, it was assumed that all respondents would answer all questions truthfully. To achieve this, the researcher tried to create conditions that encouraged respondents to answer truthfully. First during data collection, it was clearly explained to the respondents that participation in the research was voluntary and one was free to withdraw from the study without any ramifications. Second, the respondents were assured that anonymity and confidentiality would be preserved. It was further assumed that the data collection instruments would provide data that would enable the researcher to answer the research questions. A pilot study was conducted to make data collection instruments reliable.
1.6 Theoretical and Conceptual Framework

In this section, the theoretical and conceptual frameworks of the study are discussed.

1.6.1 Theoretical Framework

The present study was guided by the General Systems Theory (GST) advanced by Ludwig Von Bertalanffy (Bertalanffy, 1956) who defined a system as “elements standing in a relationship”. According to (Ackoff, 1981) a system is a set of two or more interrelated elements with three properties, first, each element has an effect on the functioning of the whole, second, each element is affected by at least one other element in the system and finally all possible subgroups of elements also have the first two properties.

Quality education was thus conceptualized as a system that has several components. Consequently, the present study adopted the UNICEF framework of education quality that defines quality education as consisting of five dimensions, namely quality learners, environments, curriculum content, processes and outcomes.

Although there is consensus on the need to access quality basic education, the debate on the question of what constitutes quality education remains unresolved. In the context of education, the term quality is complex and multifaceted in nature. However, there exist common views regarding what
constitutes quality education. As earlier mentioned in section 1.1.1 on conceptualization of quality education (Adams, 1993) identified six common views of quality by educators. In the first view, quality is seen as a reputation and is mostly associated with assessment of higher educational institutions. In the second view, quality is seen as a resource and or inputs. Quality is also viewed as a process where inputs and results continuously interact. The fourth view of quality is that of outputs and outcomes where quality is defined in terms of achievement in cognitive skills. The fifth view of quality is that of content or body of knowledge and skills. Finally, quality is viewed as “value added”. These conceptualizations of quality appear to have informed the definition of quality education by UNESCO (2000) and UNICEF (2000).

In 1990, the World Declaration on Education for All (EFA) noted that there was need to improve the quality and relevance of basic education (UNICEF, 1999a). In 2000, the Dakar Framework for Action declared that access to quality education was the right of every child and the definition of quality was expanded to include: desirable characteristics of pupils, processes, content and systems (UNESCO, 2000). On the other hand, UNICEF framework of education quality strongly emphasizes desirable dimensions of quality as identified in the Dakar Framework that include quality learners, environments, content, processes and outcomes (UNICEF, 2000). The current study adopted the UNICEF theoretical framework on quality education.
According to the UNICEF framework (UNICEF, 2000), quality learners characteristically would require to have good health and nutrition, early childhood psychosocial experiences, regular attendance for learning, and family support for learning. On the other hand, quality-learning environments are made of physical, psychosocial and support services. Quality content includes curriculum that emphasizes deep coverage of important areas of knowledge, knowledge and skill acquisition based on clearly defined learning outcomes. Quality processes refer to how teachers and educational managers build meaningful learning experiences for the pupils. Finally, the framework outlines learning outcomes as diverse results of the learner’s interaction with the environments, contents and processes, which include; knowledge, skills, attitudes and expectations for themselves and the society. This study used the above-described UNICEF framework of education quality to investigate the quality of education provided by the Non-formal primary schools in Nairobi, Kenya.
1.6.2 Conceptual Framework

Figure 1.1 is a diagrammatic representation of the conceptual framework. The diagram shows how in a non-formal school the learner interacts with the learning environment, the content, the processes, and the resultant outcomes.

Figure 1.1: Diagrammatic Representation of the Conceptual Framework of Quality Education
In the conceptual framework, quality education is conceived as an interaction of five key variables, namely; the learner, environment, content, processes and outcomes. To begin with the learner, he/she must receive good nutrition; gets adequate social support from home including access to early childhood education. The learner who is now ready to learn joins a school that has suitable and adequate physical facilities and instructional materials. The school and home environment should ensure the learner enjoys both physical and emotional security. The learner is then exposed to curriculum content that is suitable and unique to his/her circumstances to enable him/her develop the desired knowledge, skill and attitudes. Teachers who are trained on pedagogy do curriculum delivery. The schools are managed by headteachers who also ensure quality is assured. The learning outcomes are evaluated through continuous assessment and final examination.
1.7 Operational Definition of Terms

Basic education-Comprises pre-primary, primary and secondary tiers of education. Basic Non-formal curriculum-Is the academic and technical programme of instruction, prepared by Kenya Institute of Curriculum Development, that targets out-of-school children and youth aged 6-17 years in Kenya.

Formal education-Is the hierarchically structured, chronologically graded 'education system', running from pre-school through the university.

Full vaccination-Refers to a status where a child has received all the basic childhood vaccinations as recommended by World Health Organisation (WHO) by the end of 24 months after birth.

Learning environments- Refers to the physical and psychosocial elements found within a school setting whose quality affect learning.

Non-formal education-Refers to basic education that is offered in Non-Formal Schools.

Non-Formal Schools-refers to learning institutions that are informal in nature and therefore, not recognized by the Ministry of Education as formal schools but offer the formal education curriculum.

Primary education-Refers to basic education offered to primary school-age going children using an approved curriculum.

Psychosocial elements-Refers to the psychological and the social aspects of school environment and the interaction between them that influence the quality of education.
**Quality curriculum**- Refers to the planned and taught curriculum in schools.

**Quality outcomes**-Refers to the measurable outcomes (usually through continuous assessment and final examinations) of an education system.

**Quality processes**-Refers to the quality of teachers development, pedagogical approaches, management processes and quality assurance activities in Non-Formal Schools.

### 1.8 Organization of the Thesis

This research study is organized into five chapters. The first chapter is an introductory one dealing with the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, and assumptions of the study, rationale of the study, delimitation and limitations of the study, theoretical and conceptual frameworks and finally, definition of the key terms. In chapter two the literature related to the present study is reviewed. Chapter three presents the methodology used to conduct the study. In chapter four, data are presented, analysed and discussed. A summary of research findings, the conclusion, the recommendations of the study and suggestions for further research is presented in chapter five.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

In this chapter, literature related to the chosen area of study is presented. Literature related to the problem was reviewed in order to establish the research gaps the study would fill. The literature was reviewed under the following sub-sections; first on characteristics of quality learners, second on quality learning environments, third on quality curriculum content, fourth on quality processes and finally on quality outcomes. A summary of the identified research gaps is given at the end of the chapter.

2.1 Quality Learners

The quality of learners that join a school system is important as schools normally work with children who join them. Scholars have theorized that the variations in learning and the level of learning of the learners are determined by the children’s learning histories and the quality of instruction they receive (Bloom, 1976). Suitable changes on these factors can greatly reduce the variation of learners and greatly increase their level of learning and their effectiveness in learning in terms of time and effort spent.

In discussing the quality of learners the UNICEF framework (UNICEF, 2000) identifies learners, health status and nutrition as an important
characteristic of a quality learner. With regard to learners, health prevention of common childhood diseases through immunization is important so that pupils are protected from contracting such diseases. (Mutua, Kimani-Murage, & Ettarh, 2011) in their study entitled “childhood vaccination in informal urban settlements in Nairobi, Kenya: who gets vaccinated” found that children resident in the Nairobi informal settlements are underserved with vaccination. A study by African Population and Health Research Centre, Nairobi, on the vaccination levels in the informal settlements, places full vaccination at 57.5% and concludes that children from urban informal settlements are underserved with vaccination (Mutua et al., 2011). The current study sought first to confirm the above findings and second to establish if all the pupils in all the NFS in Nairobi had been underserved with vaccination.

Learners’ nutritional status is likely to affect class attendance and general school participation. Provision of school meals has been shown to also improve school attendance and academic achievement (Powel, Walker, Chang, & Grantham-McGregor, 1998) and (Vermeersch & Kremer, 2005). Additionally, (Lloyd, 2005) asserts that School Feeding Programme is a popular approach not only to improve nutrition but also school attendance. The current study sought to find out whether NFS had hot lunch programme as a way of enhancing the nutritional status of the children.
At school, pupils require water for drinking and washing their hands after visiting sanitation facilities. Therefore, provision of safe water for drinking is important to prevent water borne diseases. A study by (O’Reilly et al., 2008) on the impact of school-based safe water and hygiene programme and practices of students and their parents in the former Nyanza Province, Kenya in 2006, found that 78% of the primary schools provided clean water to their students. In addition, the above study found that provision of safe water for drinking and good hygiene practices reduced students’ absenteeism by 35%. In their conclusion, they indicated that safe drinking water and hygiene were essential to reducing the waterborne disease burden in Kenya. The present study sought to find out whether NFS provided safe water for drinking to the pupils as a way of keeping pupils away from contracting waterborne diseases and thus boost their education participation.

Early childhood psychosocial development experiences affect the nature of the learner. Positive early experiences are vital in preparing a quality learner. In a study in 13 Latin American countries (Willms & Somer, 2001) used samples of approximately 100 schools in each country, and 40 grades 3 and 4 pupils sampled in each school in their study. Their study aimed at examining the relationships between three schooling outcomes, namely; language and mathematics achievement, and time to complete primary schooling, and family background, as well as various school policies and practices. They found that across all countries, the most effective schools
tend to be those with classrooms of a high-level parental involvement; and classrooms that have a positive classroom climate, especially with respect to classroom discipline. The study further found that the relationship between schooling outcomes and family background vary among countries as attendance at day care coupled with higher levels of parental involvement that included parents reading to young children was associated with higher test scores and lower rates of grade repetition in primary school.

(Epstein, 1996) argues that out-of-school children who may not have parental support or have no place to call a home, notably children-on-the-street have less preference for formal schools because the latter require these children to blend into the existing school system without structurally adapting the system to their specific needs. He further asserts that though such children may experience great challenges such as poor school records, lack of parental care and need for behavioural change, with tolerance and appreciation, afflicted pupils can overcome their environmental challenges and compete successfully with the rest of the learners in a given school. The present study sought to find out why the pupils attended Non-Formal Schools.

On the other hand (Glasser, 1975) reported in (Zastrow, 2013) asserts that if a child undergoes negative early experiences, he or she is apt to become angry, depressed, alienated, lonely and hostile and may express the failure
identity through delinquency, withdrawal or development of emotional disturbances. Such negative experiences are likely to destruct a child from benefitting from the instructional process. This is particularly so as students who attend schools regularly have been found to obtain higher marks on standardized achievement tests as compared to those who have incidences of irregular attendance (Zastrow, 2013).

(Mudege, Zulu, & Izugbara, 2008) in their study on how insecurity impacts on school attendance and school dropout among slum children in Korogocho and Viwadani slums in Nairobi found that insecurity was quite prevalent in those areas with at least three cases of rape reported amongst the age 12-14 every week. They further found that some schoolchildren cited insecurity as a major reason for non-school attendance. Their study further found that boys feared assaults whereas girls were mostly fearful of rape, sexual assault and harassment. Consequently, some parents from the two slums sometimes withdraw their children from school, particularly girls; for fear that, the children might be raped on their way to school. Such a high prevalence of insecurity is bound to affect school enrolments, retention and school performance and consequently, the overall quality of education. Both boys and girls expressed fear of insecurity. The current study sought to find out whether these findings were also true for the rest of the schools in the non-formal settlements in Nairobi.
School attendance is important for good academic achievement. However, regular attendance is likely to be affected by various school and home factors including ability to pay school fees by the parents. Studies on learning achievement have shown that child labour and inability to maintain children in school affects pupils academic achievement (Heady, 2003) and (Patrinos & Psacharopoulos, 1995). The present study sought to find out what reasons kept the pupils from Non-formal primary schools away from school.

Education is mostly an entry condition to the labour market. This suggests that poor quality of education would be itself a depressant on the demand for education even where access exists (UNICEF, 1999b). Analysis of the cost of educating children in Kenya in relation to family incomes shows that on average, the proportion spent on educating one child is 6-7 per cent of family income; for two children 11-17 per cent; and for three children it rises to 17-22 per cent (UNICEF, 1999b). The poorer a household, the more its decisions will be governed by short-term considerations (ibid). Indirect but mostly direct costs have a greater influence on the volume of demand. Opportunity costs play an important role as Bergmann (1996:590) notes:

...Even if the parents have a positive image of the school, which would encourage them to enroll their children, they may refrain from doing so if they need their labour in the family.
Another example is provided by (Torres, 1995: 7) who recorded an interview response by Assane, a 10-year old shoeshine boy interviewed in Senegalese City of Ziguirchor, who said:

…I do not need to go to school. What can I learn there? I know children who went to school….are educated…. But you see them sitting around….are useless to their families…I know I need to learn to read and write ….I cannot leave work to go to school…

Another important factor in the improvement of academic achievement is parental involvement. A study by (Jeynes, 2003) on the effects of parental involvement on minority children’s academic achievement in Paraguay found that parental involvement in the supervision of their children’s homework resulted in improved academic achievement. Further, a study by (Baker & Stevenson, 1986) found that parental participation in the management of their children’s school careers had direct consequences for their children’s educational achievement. The current study sought to find out whether NFS involved the parents in the learning of their children.

2.2 Quality Learning Environments

Researchers have identified several factors that influence education quality. Some of these factors are school environments related and include the amount of time set aside for learning, the infrastructure, the teaching personnel, the teaching/learning resources, relevance of curriculum, teachers’ knowledge of subject matter and their competence in various pedagogical approaches (Lloyd, 2005), (Lockheed, 1993), (Verspoor, 1991)
and (Verwimp, 1999). The physical and material resources usually include class size, the supply of teachers and learning materials, such as textbooks.

A study by (Willms & Somer, 2001) on the relationship between various schooling outcomes (referred to earlier in section 2.1) found that most effective schools tend to be those with sufficient of school resources, and classrooms that have a positive classroom conditions, especially with regard to classroom discipline. Additionally, physical facilities has been shown to affect the critical factor of time on task (Miske & Dowd, 1988) which further affects learning achievement (Stallings, 1980). The present study sought to find out whether NFS has had sufficient physical facilities.

Instructional materials, mainly textbooks, writing materials and teachers guides among other materials are important elements in learning, as they are known to enhance student achievement (Heyneman & Loxley, 1983), (Heyneman, Farrell, & Sepulveda-Stuardo, 1981) and (Heyneman, Farrell, & Sepulveda-Stuardo, 1978). Further sufficient availability of textbooks can make sure that instructional time is not wasted as teachers and pupils copy text materials on and off the chalkboards (ibid). Additionally teachers guides that are suitably integrated with the textbooks can have a positive impact on student achievement (ibid).

In Brazil, a package of writing materials (chalk, notebooks, pencils, erasers, and crayons) was found to be effective in boosting fourth grade
mathematics achievement (Harbison & Hanushek, 1992). This could be attributed to children’s increased opportunity to practise mathematics learning time (Lockheed, 1993).

Research from a variety of countries has indicated that the amount of time available for instruction is consistently related to how much pupils learn in school (Heyneman & Loxley, 1983). In general, the more time dedicated for instruction the more the pupils are likely to learn. The present study sought to find out whether learners in the NFS have access to the basic instructional materials.

2.3 Quality Curriculum Content

The curriculum content and the language of instruction form an important component of school quality. It is not enough simply to ensure that children attend school. How knowledge, skills and values are transmitted is as important as what is learned. Much research suggests that early learning is most effectively accomplished in a child’s native tongue (UNICEF, 1999a). The present study sought to find out what language of instruction was used in the lower primary in the Non-Formal Schools.

In view of the fact that the aim of education is to improve the quality of human life by imparting knowledge, enables individuals to be self-reliant, education is one of the most important investments by both governments and individuals (Republic of Kenya, 1995) and (Psacharopoulos, 1994).
The school curriculum in Kenya is based on the Kenya’s philosophy of “Education and Training for Social Cohesion as well as Human and Economic Development” (Republic of Kenya, 2005d). Based on this philosophy, education in Kenya aims at equipping the youth with Knowledge, skills and attitudes to enable them to realize and practise the norms and values of the society while at the same time removing inequality between sexes, regions, social and economic groups. In spite of the heavy expenditure on education by Kenya, access to basic education by all members of the society, particularly the poor and the marginalized remains a big challenge (Qravenir, Mse, Njihia, & Ouma, 2006). Given that basic education provides the basis for further life-long learning and provides the best long-term approach for eradicating illiteracy, basic education should be accessed to all.

Since provision of basic education has over the years been limited to formal schools, children who are unable to join formal schools have not been able to get basic education particularly in urban slums and ASALs (Republic of Kenya, 2005a), (Republic of Kenya, 2005b) and (Republic of Kenya, 2009). Studies have showed that non-formal institutions that offer basic education in non-formal settings play a crucial role in broadening access to basic education to the citizens of a given country (Council of Europe, 1999), (European Youth Forum, 2008) and (Rogers, 2004).
The development and enactment of the policy for alternative provision of basic education and training in 2009 (Republic of Kenya, 2009) was a great milestone for non-formal education in Kenya. These policy guidelines on non-formal education for children and out-of-school youth gave direction on the functioning and running of NFE in Kenya. This policy recognises that all children and adults are entitled to basic quality education as a right and as (Kemmerer, 1992) argues, such education must be of quality if it was to be meaningful. Most of the educational programmes involving out-of-school children within the developing world were originally associated with NGOs or volunteer organisations that are church related (Epstein, 1996). Two programmes that have received an enormous amount of international publicity by various authors are the Bosconia/La Florida program in Columbia and the Undugu Basic Education Programme in Kenya (Gichuru, 1987) and (UNICEF, 1993). Innovative educational programmes that address the needs of out-of-school children respect those needs rather than ignore them. The present study sought to find out how the curriculum addresses the needs of the children who are unable to join formal schools for various reasons.

The NFE providers from voluntary and church-related institutions make it their business to be mindful of the out-of-school learners’ way of life and ensure the environment of the out-of-school children is respected with respect to institutional placement as well as curricular and instructional policies. Their flexibility is in part due to their informal mandate and lack
of overt governmental interference. Out-of-school curricular initiatives tend to supplement rather than substitute regular formal instruction (Epstein, 1996). Issues have been raised as to the exclusive nature of such schools, what they do to the social and cultural identity of pupils and to what extent it capacitates individuals and communities for engaging in “lifelong learning” and in their own form of development (Hoppers, 2000). The message is that the notion of schooling needs fundamental changes in its structural features, the construction of its curriculum and its methodologies of learning. Invariably, such changes have to take into consideration the nature of the pupils, the content to be taught, the processes, the learning environment and the outcomes that are critical ingredients of education quality (UNICEF, 2000) and (UNICEF, 2002).

One of the objectives of primary education in Kenya is to impart literacy, numeracy and manipulative skills (Republic of Kenya, 1988). This is in recognition of the fact that basic literacy enables a person to effectively function in the development of a society. Indeed, “civilization” is based on literacy and therefore, the need for quality education. Considering the fact that basic education provision through NFS is a recent phenomenon in Kenya, there is need for a study that focuses on the quality of education provided by the Non-Formal Schools. The present study used the UNICEF framework for quality education (Fagerlind & Saha, 1989) and (UNICEF, 2000) to investigate the quality of education provided in NFS.
2.4 Quality Processes

2.4.1 The In-Service and Pre-Service Teacher Training

Various researchers have documented the importance of teacher training. Notably, (Angrist & Lavy, 2001) carried out a study on the effect of in-service teacher training on children's reading and mathematics achievement in Jerusalem elementary schools. The researchers used a matched-comparison design, which exploits the fact that only a few schools received extra funds for training. The study findings suggested that the training received by teachers in Jerusalem public school system led to an improvement in their pupils' test scores. Similarly, (Goldhaber & Brewer, 2000) found that teachers who had standard certificates in their subject areas had a statistically significant positive impact on student test scores relative to teachers who were not certified. Another study by (Harris & Sass, 2011) found that content-focused teacher professional development was positively associated with productivity in middle and high school maths.

A further study by (Darling-Hammond, 1977) observed that highest quality teachers had deep mastery of both their subject matter and pedagogy. (Lockheed, 1993) asserts that effective teaching is determined by both subject matter knowledge and pedagogical skills. However, a study by (Jacob & Lefgren, 2004) used a regression discontinuity strategy to estimate the effect of teacher training on the reading of math and reading performance of elementary students. The study results indicated that
marginal increases in in-service training have no statistically or academically significant effect of elementary school children in high-poverty schools. Further, a study by (Naoreen, Aslam, Arshad, & Nau Sheen, 2011) on the impact of in-service teacher training on student learning achievement in mathematics found that trained teachers were significantly better than untrained teachers. (Hill, Rowan, & Ball, 2005) also found that teachers’ mathematical knowledge was significantly related to student achievement. The present study sought to find out whether the teachers in the NFS had the necessary academic and professional competencies.

Another important factor is the time teachers spend in class for instruction. In a study on measuring quality of teaching at the individual level based on teaching attitudes and teaching behaviour of teachers (Verwimp, 1999) found that quality of teaching was negatively correlated with increased pupil/teacher ratio and time allocation of teachers affects quality. There are internationally comparable data on time to learn from UNESCO but no data on trends in the length of the school day over time. Reported contact hours vary from 845 in centrally planned economies to 1097 in Eastern Asia (Lloyd, 2005). The current study sought to find out whether the Non-formal primary schools follow teaching schedules comparable to those in the formal schools.
The influence a teacher has on his pupils is well-demonstrated when we look at the labelling theory. (Becker, 1952) in an analysis of interviews with teachers in Chicago, introduced the concept of “ideal pupil”. He concluded that the teachers in his sample were operating with a definition of the “ideal pupil” that included being interested in lessons, working hard in schools and being trained at home in such a way that he or she was bright and quick at schoolwork. The techniques that these teachers used, ‘Becker argues, were able to deal effectively with such pupils, but were inadequate to cope with those deviating from the ideal pupil image. Other features in the image of ideal pupil were moral: being clean, healthy, well-dressed and moderate in behaviour by exhibiting politeness and patience (Meighan & Harber, 2007). The present study sought to find out the virtues teachers in the NFS try to promote amongst the pupils.

Student-teacher ratios are often used as proxy for quality. High teacher-pupil ratio results to low pupil achievement as pupils get little attention from the overworked teacher (UNICEF, 1999b). However, (Fuller & Heyneman, 1989) fault this assertion as they established that reducing class size did not result in higher school achievement. However, factors such as the length of instructional programme, pupil feeding programmes, school library activity, years of teacher training and textbook and instructional materials were found to be highly effective parameters in influencing school achievement (Fuller & Heyneman, 1989) and (Milner, Banda, & Mchikoma, 2001).
(Fuller & Heyneman, 1989) further found that teachers’ salaries were an ineffective parameter in school achievement. Thus, the existence of a teaching force, which is well-qualified in sufficient numbers, is one of the main conditions for quality education provision. In this case, the indicators would be the general level of educational attainment of teaching staff and the percentage of teachers who are certified or trained to teach according to national standards of a given country. The present study sought to find out the academic and professional qualifications of teachers of Non-Formal Schools.

A study on measuring the quality of education at two levels: A case study of primary schools in Rural Ethiopia (Verwimp, 1999) measured the quality of teaching at the individual level based on teaching attitudes and teaching behaviour of teachers. Using Pearson correlation, the findings showed that school quality is positively correlated with increased enrolments but however, the quality of teaching is negatively correlated with increased pupil-teacher ratio. Further evidence suggests that class size and time allocation for teachers are important determinants of academic achievement (Lloyd, 2005) and (Verwimp, 1999). The present study sought to find out the teacher pupil-ratio in the Non-Formal Schools.

On pedagogical approaches used by teachers, according to (UNICEF, 2000) teaching methods that aid active student learning rather than encourage passivity and rote memorization should be used by teachers to
improve the learner outcomes. This is particularly so as a study on effects of learner-centred environment on the academic competence and motivation of students at risk showed that use of learner-centred methods yields significantly higher achievement scores and a somewhat higher internal motivational orientation among students (Alfassi, 2004). Further studies have also shown that good quality teaching and student support for learning improves student achievement and retention (Zepke, Leach, & Prebble, 2006). A study on the re-conceptualization of learner-centred approaches; a Namibian case study (O’ Sullivan, 2004) argues that implementation of use of learner-centred approaches is likely to be a challenge particularly in situations where a majority of the teachers are untrained. He further argues that to bring about learning teachers’ skills have to be developed in whichever approach they are likely to use. He claims the focus should be on learning-centred approaches as opposed to learner-centred approaches. The present study sought to find out whether teachers in the NFS use learning-centred pedagogical approaches and incase they do what are the most commonly used learning-centred approaches.

On the role of headteachers in instructional leadership (Grissom, Loeb, & Master, 2013) in their study on effective instructional time use found that specific instructional leadership behaviours were associated with gains in student achievement. Specifically, time spent on teachers coaching and
developing schools educational programmes predict positive attainment gains amongst the students.

Research literature indicates that some of the children who attend NFS happen to be children living under difficult circumstances (Gathenya, 2003), (Ouma, 2004) and (Republic of Kenya, 2003). Such children may not be able to access education through the formal schools and may include children living on the street (erroneously referred to as street children) who live and work in the streets with few or no ties with their families (ibid). Such children are generally found in major urban centres, slums, shopping centres and small towns.

Another category of children living in difficult circumstances are those involved in providing labour commonly referred to as child labourers (Republic of Kenya, 2003). The nature of the labour children renders them into physical, intellectual and emotional harm, which may affect their potential (ibid). To attract such children and retain them in school to an appropriate age and level of learning, and to reintegrate children who have dropped out, education must be structured to fit their specific needs, that of their families and communities (UNICEF, 1999a). This may need considerable innovation and the use of non-traditional methods including in-service programmes for teachers, flexible and creative educational management styles and learner-centred teaching and learning methods.
The quality of teaching/learning process depends on the quality of the curriculum, its contents, methods and manner of implementation (Bergmann, 1996). The quality of curriculum implementation depends in turn on the teaching/learning materials, the working conditions, and the pedagogical skills of the teachers, the total instructional time, and on the importance assigned to quality by external agents (Bergmann, 1996). These factors mainly depend on the control exercised by the school management and the parents. The current study sought to find out the strategies the NFS management uses to attract and retain children living in difficult circumstances into their schools.

2.5 Quality Outcomes

Education quality is concerned about the quality of the system components, and the overall quality hence depends on the quality of these components. So far, the researcher has discussed four components i.e. the learners, environment, content and processes. The last component is learning outcomes. This output quality of education is evidenced by the quality of student achievement or outcomes. The output quality depends on two main factors, the quality of the pupils and the quality of the processes whereas the process quality depends on input quality (Bergmann, 1996) and (UNICEF, 2000). Outcomes are normally obtained through a process of evaluation.
Generally, evaluation serves an important role of providing information that could be used for making decisions regarding the efficiency of an educational programme and to provide feedback data, which are useful for improving an educational programme (Cronbach, 1970). Sources of curriculum evaluation are teacher-made tests, examinations, student’s records, curriculum records such as textbooks, syllabuses and other related educational resources. These evaluation tools mainly evaluate the cognitive achievement or output is assessed in terms of the amount and the degree of perfection of learning according to the various levels of intellectual achievement, namely; recall, comprehension, application, analysis, synthesis and evaluation (Anderson, Krathwohl, & Bloom, 2001).

(Cronbach, 1970) asserts the varied experiences and situations of the learner; documented official, formal and informal, curricular or co-curricular activities, deliberate or accident, planned or unplanned, in the school environment or outside are the entire basis for curriculum design and evaluation. These experiences constitute the product and process of an educational programme, which is the object of evaluation.

(Shiundu & Omulando, 1992) suggest that written and oral examinations, practical situations or tasks are some of the commonly used procedures of evaluation. This evaluation includes a variety of techniques indispensable to the teaching-learning process. Much of the available literature focuses on
the evaluation of the cognitive dimension of the school curriculum, which is easy to measure through examinations.

A study by (Willms & Somer, 2001) on the relationship between various schooling outcomes found that the most effective schools tend to be those where children are tested frequently. The present study sought to find out the mode of evaluation that NFS uses to obtain the learning outcomes and how these schools perform in the examinations.

2.6 Summary of the Key Research Gaps

i. Findings from previous research indicate that children in urban informal settlements were underserved with vaccination. However, these studies did not target NFS and covered only certain parts of Nairobi.

ii. There is limited documented information on the provision of hot lunch programme by the NFS as a way of enhancing the nutritional status of the children.

iii. There is little documented information on provision of safe water for drinking to the pupils of NFS as a way of keeping them away from contracting waterborne diseases and thus boost their education participation.

iv. There is paucity of documented literature why pupils in the informal settlements attend NFS.
v. Though documents literature shows that parental participation in the learning of their children has had direct consequences for their children’s educational achievement little information existed on the participation of parents of children in the NFS in the learning of their children.

vi. Although insecurity is a common problem in the urban informal settlements, there exists little documented literature as to whether it affects pupils school attendance in Nairobi.

vii. There exists little documented literature on reasons that discourage school attendance in the urban informal settlements.

viii. Although documented literature exists on the importance of sufficient schools facilities to academic achievement little literature exists on the availability and suitability of physical facilities and instructional materials in the NFS in Nairobi.

ix. Although research literature shows, the importance of the language of instruction used in the lower primary in learning achievement little, documented information exists on the language of instruction in the lower primary in NFS in Nairobi.

x. There exists limited documented literature on how the school curriculum addresses the needs of children who NFS.

xi. The suitability of teachers who teach in the NFS is not well documented.

xii. Although the NFS covered by the study follows the formal school curriculum that usually follow a fixed lesson subject teaching
timetable not much is documented with regard to how NFS adheres to the subject time allocation guidelines.

xiii. There is limited documented information on the virtues promoted amongst the learners in the NFS.

xiv. There was paucity of documented literature on the most commonly used methods of instruction used in the NFS.

xv. Not much is documented on the strategies used by the management of NFs to attract and retain pupils in school.

xvi. There exists limited literature on how the performance of NFS in KCPE compares to that of formal schools in Nairobi.
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction
This chapter presents the research methodology utilized in the current study. The chapter describes the research design and locale, the sampling techniques and sample size used. Then the research instruments are described including how validity and reliability were determined. The actual data collection procedures are then presented including logistical and ethical considerations. Finally data analysis procedures used for both quantitative and qualitative data are described.

3.2 Research Design and Locale
The present study sought to analyze the quality of education provided in the Non-formal primary schools in Nairobi. This study is descriptive in nature and the design employed is the survey design. Survey design involves the collection of data in order to answer questions concerning the present status of the subjects of the study (Best, 1977a), (Gay, 1981), (Kothari, 2004) and (Orodho, 2009). The survey approach was used because it allows the use of a sample from a large population thus making data collection faster and less costly, produce greater accuracy of results and have greater scope and adaptability (Singh & Chaudhary, 1986). Survey design also has enough provision for protection against bias and maximizes reliability, as the aim is to obtain complete and accurate information or evidence (Kothari, 2004).
The survey design was, therefore, considered ideal for the present study objectives, namely; to find out the quality of the pupils who attend non-formal schools, investigate the quality of the learning environments, find out the quality of the curriculum, the quality of educational processes and educational outcomes of the education provided in the Non-Formal Schools. The design enabled the researcher to collect and analyze data in a short period of time and at minimum of expense.

The study had four independent variables namely; quality of learners, quality of learning environments, quality of curriculum, and quality of processes. The quality of outcomes was the study dependent variable.

The locale of the study was Nairobi. The study was carried out in the eight districts of the city of Nairobi. The city of Nairobi was selected for the following reasons. First, in Kenya, non-formal primary schools are mainly located within informal settlements (slums) of major urban areas. Nairobi is the capital city and has many such settlements. Majority of the Non-formal primary schools are found in Nairobi with 452 (46%) out of 986 registered Non-formal primary schools (Republic of Kenya, 2009) and (Ministry of Education & UNICEF, 2005). Second, Nairobi has densely populated informal settlements, has cosmopolitan population and also has many NFS thus providing an ideal place to undertake the current study. Third, it was envisaged that data collection would take some considerable amount of time due to challenges in accessing NFS and so the choice of Nairobi was
considered more economical in terms of time and financial resources as the researcher did not have to travel long distances from the University.

### 3.3 Population

The study population was the 452 registered NFS in Nairobi. The target population for the present study was the Director City Education (DCE), headteachers, teachers and pupils in the 411 schools that provide basic education through the 8-4-4 curriculum and had presented candidates for the Kenya Certificate of Primary Examination (KCPE) at least once.

### 3.4 Sampling Techniques and Sample Size

#### 3.4.1 Sampling Techniques

The study respondents were headteachers, teachers and pupils of Non-Formal Schools. The headteachers, teachers and pupils who were included in the study were selected through stratified random sampling (Gay, 1981). Further, stratified random sampling is an appropriate methodology in order to make proportionate but random selection of respondents from subgroups in the population (Gay, 1981). This is further supported by (Bayle, 1988) and (Mugenda & Mugenda, 2003) who also argue that sampling theory supports stratified random sampling as an efficient choice because the means of the stratified samples are likely to be closer to the mean of the population overall.
The bulk of the research data was collected from the non-formal schools. First, the research obtained a list of 411 Non-formal primary schools that had presented KCPE candidates at least once from the Director, City Education office. The schools were then listed according to the districts where they were located, thereby each district forming a stratum. Then through proportional allocation (Singh & Chaudhary, 1986), the number of schools to be selected for each district or strata was obtained. Finally, selection of the specific schools to be included in the study was done through simple random sampling.

The selection of specific schools involved writing of the names of all the schools in a given district on small pieces of paper, folding the pieces of paper and then placing them in a small box. The papers were then shuffled after which the required number of papers was randomly picked (see table 3.1). The names of the schools on the randomly selected papers formed the sample for that district. The procedure was repeated for each of the eight districts to obtain sample schools for inclusion in the study.

The sampling of the respondents was done as follows: first, the sampling of NFS and consequently, the headteachers included in the study is described. Second, the sampling of teachers and finally, the sampling of pupils included in the study is described. The headteachers of the sampled schools were the ones who were included in the study to provide data for their particular school. Teachers and pupils included in the study were sampled
from those in the selected schools. The sampling for each respondent was done as described below.

(a) **Headteachers of Non-Formal Schools**

All the headteachers of the sampled schools from each district were selected for the study (see table 3.1). Headteachers were chosen because they were in charge of the school administration and the curriculum and so would be critical to providing data on pupils, environments, content, processes and outcomes.

(b) **Teachers**

From each of the sampled schools in each of the eight districts, four teachers were selected for inclusion in the study. Teachers who taught class seven the examinable subjects languages (English or Kiswahili), Mathematics, Science and Social Studies were included in the study. These teachers were selected first because the subjects they taught were examined at KCPE and second the teachers were considered well-placed to provide data for answering the research questions with respect to the learning environments, content, processes and outcomes for the respective subject areas.

In the cases where more than one teacher taught a given subject for example English and Kiswahili, simple random sampling was used to select the teacher to be included in the study. In such cases, pieces of paper were
written with only one of them bearing the name of the teaching subject, then the teachers would be asked to randomly pick one of them. The one who picked the paper bearing the name of the subject would be selected for the study. The procedure was repeated for all the selected schools in the eight districts to get the teachers who were included in the study (see table 3.1).

(c) Pupils

From each of the sampled schools in a given district, 10 pupils from class seven were selected for inclusion in the study. Class seven was chosen because the pupils in that class were assumed to have academic competencies to enable them to complete a questionnaire having covered a big part of the primary school curriculum. Additionally, the school authorities were more comfortable to have class seven rather than class eight pupils to take part in the study because the latter were busy preparing for the national examinations.

The class seven boys and girls present on the day of the research constituted the population from which a sample was drawn for that school. To get the individual pupils from each school for inclusion in the study, simple random sampling was used. First, the total number of pupils present was established and categorized by gender. Then the ten chances for those children to be included in the study were proportionately shared amongst boys and girls according to their numbers. For each gender little papers,
equivalent in number to the chances allocated to that particular gender were written **Yes** and the rest were written **NO** and placed in two small cartons one for boys and the other for girls. Pupils from the respective gender were asked to randomly pick a paper from their respective cartons. Those who picked **Yes** were selected for the study. The selected boys and girls formed the pupil sample for that particular school. This same procedure was followed in all the selected schools to get the pupils to be included in the study.

(d) **The Director of City Education (DCE)**

The Director City Education, who is the overall person in terms of policy implementation and quality assurance in the city, was also included in the study. The DCE provided relevant data with regard to management of the Non-formal primary schools and quality assurance with respect to pupils, learning environments, content, processes and outcomes.

### 3.4.2 **The Sample Size**

The study comprised a sample of 111 (27%) of Non-Formal Schools. (Gay, 1981) argues that for a descriptive survey, a sample size of 10 per cent of the accessible population is adequate. The above argument is supported by (Best, 1977) who asserts that a sample size of between 10 and 30 per cent for a descriptive survey is sufficient. (Grimm, 1993) adds that the larger the sample, the better because as a sample size increases, it becomes more
representative of the population. The above arguments informed the determination of 111 (27%) as the sample size. The head teachers of the 111 selected schools were included in the study.

To obtain the sample for each of the eight districts, the 111 selected schools were proportionately divided and the following figures were obtained; Kasarani 17, Makadara 13, Kamukunji 10, Starehe 12, Westlands 15, Dagoreti 14, Langata 15 and Embakasi 15. Teachers of Mathematics, languages (English/Kiswahili), Science and Social Studies totaling to 444 were included in the study. Some 10 class seven pupils from each of the selected schools totaling to 1,110 pupils were included in the study. A summary showing the sample of headteachers, teachers and pupils for the eight districts is shown on table 3.1.

Table 3.1: A Summary of the Sample

<table>
<thead>
<tr>
<th>Division</th>
<th>KCPE Schools</th>
<th>Sampled Schools</th>
<th>Teachers</th>
<th>Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Headteachers)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kasarani</td>
<td>63</td>
<td>17</td>
<td>68</td>
<td>170</td>
</tr>
<tr>
<td>Makadara</td>
<td>48</td>
<td>13</td>
<td>52</td>
<td>130</td>
</tr>
<tr>
<td>Kamukunji</td>
<td>33</td>
<td>10</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td>Starehe</td>
<td>41</td>
<td>12</td>
<td>48</td>
<td>120</td>
</tr>
<tr>
<td>Westlands</td>
<td>59</td>
<td>15</td>
<td>60</td>
<td>150</td>
</tr>
<tr>
<td>Dagoreti</td>
<td>52</td>
<td>14</td>
<td>56</td>
<td>140</td>
</tr>
<tr>
<td>Langata</td>
<td>59</td>
<td>15</td>
<td>60</td>
<td>150</td>
</tr>
<tr>
<td>Embakasi</td>
<td>56</td>
<td>15</td>
<td>60</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>411</strong></td>
<td><strong>111</strong></td>
<td><strong>444</strong></td>
<td><strong>1,110</strong></td>
</tr>
</tbody>
</table>
3.5 Research Instruments

The study used three main data collection instruments, namely; questionnaires, interview schedules and document analysis. Construction of the above instruments is described below.

3.5.1 Questionnaires

Questionnaires were used to gather data on the following research variables; characteristics of learners, quality of content, quality of environments, quality of processes and quality of outcomes in the NFS. The questionnaires were administered to the headteachers, teachers and pupils in the Non-Formal Schools. Questionnaires were used for data collection because the study was descriptive and questionnaires have been found to be suitable data collection instruments for descriptive studies (Kothari, 2004), (McNabb, 2004), (Mugenda & Mugenda, 2003) and (Orodho, 2009). Three questionnaires were developed, one for the headteachers, another for teachers and the last one for pupils.

Construction of the questionnaires was done in a systematic way in order to ensure that information gathered answered all the research questions, respondents were requested to answer each questionnaire item and were assured of confidentiality so that they could provide truthful information and all potential errors were kept to a minimum. The researcher developed a variables matrix showing the research instrument and the relevant study variables it was meant to collect data for as a guide in ensuring that each
data collection instrument obtained the required data. Through this procedure, appropriate questionnaire items were developed for each type of questionnaire and seeking data for the relevant study variable.

3.5.1.1 NFS Headteachers Questionnaire

A 22-item questionnaire was administered to the headteachers of Non-Formal Schools. This questionnaire consisted mostly of closed-ended or structured questions (see Appendix A). Specifically, this instrument collected data on headteachers biographic data and school data. The instrument was also designed to collect data on quality of learners including data on the health services offered, hot lunch programme and attendance of ECD. On environment, the instrument collected data on physical facilities and instructional materials. The instrument also collected data on curriculum, processes and outcomes including performance in the KCPE.

3.5.1.2 NFS Teachers Questionnaire

A 16-item questionnaire was administered to teachers of Non-formal primary schools (see Appendix B). This instrument sought among others teachers bio-data, data on the learner and environment especially physical facilities and instructional materials. The instrument also sought data on curriculum including teaching strategies, processes including teachers professional development and finally, learning outcomes.
3.5.1.3 Questionnaire for the Pupils

The present study also administered a 14-item questionnaire that had both closed and open-ended items to the pupils of the Non-formal primary schools (see Appendix C). This instrument was used to obtain pupils biometric data including data on family background. The instrument collected data mainly on the learner and environment.

3.5.2 Interviews

In the study, an interview guide (see appendix D) was used to gather data from the Director of City Education. An interview was preferred for it allows one to obtain in-depth data, which are not possible with questionnaire (Mugenda & Mugenda, 2003). Additionally the sample size for the identified respondents was small, it was only for the Director of City Education.

3.5.2.1 Interview Schedule for the Director of City Education, Nairobi

This instrument was used to elicit information on the following variables with respect to NFS learner characteristics, environments, curriculum content, environments, processes and quality outcomes. Specifically, data were collected on staffing of NFS by TSC, FPE funding, performance in the KCPE for NFS, private schools and public schools. Further data were collected on school inspections; management practices in the Non-Formal Schools, including the management role NGOs, churches, parents and the community. The instrument also sought data on linkages between the Non-
formal primary schools and the formal ones in terms of students assessment and participation in co-curricular activities such as sports and athletics, drama and music festivals.

### 3.5.3 Review of Documents

Review of documents is way of collecting data mainly from existing documents or internal records (McNabb, 2004). Records were reviewed to obtain data on the content of curriculum offered. The following curriculum documents were reviewed: the syllabuses and course books for the examinable subjects (Mathematics, English, Kiswahili, Religious Education (Christian Religious Education, Hindu Religious Education and Islamic Religious Education) Science, and Social Studies at the KCPE. In addition, the study also focused on the life skills curriculum; because though not an examinable subject, the subject aims at enabling the pupils to acquire life skills, an important ingredient of quality education.

### 3.5.4 Observation

Use of observation is borrowed from observation research where the researcher simply observes and records the social behaviour of subjects (McNabb, 2004) and (Orodho, 2009). In the current study, observation of physical facilities (conditions of classrooms, adequacy of learning materials, sitting arrangements, and quality of lighting in the classrooms) was conducted and recorded in notes.
3.5.5 Pilot Study

A pilot study was conducted with a small sample of respondents drawn from the same population from which the final sample was drawn to pretest the questionnaires that were used in data collection for reliability and validity. The pilot study was carried out in eight NFS that were not included in the main study. (McNabb, 2004) and (Mugenda & Mugenda, 2003) argue that questionnaires should be pretested in a selected sample similar to the actual sample but caution against the use of subjects in the main study in the pretest. The pilot study helped the researcher to revise the questionnaires to improve them in order to capture the required data.

3.5.6 Validity

The researcher gave close attention to the issue of the validity of research instruments used in the collection of the data. The validity of the research instruments was established in two ways. The first method was that of expert judgment as (Gay, 1981) and (Suskie, 1996) suggest that experts can carefully examine all the items on the research instrument and give suggestions that enhance their validity. Expert judgment was sought from the University supervisors who gave suggestions on the improvement of the research instruments for use in the research. Second, the questionnaires used in data collection were piloted and revised so that they could capture the required data. Additionally, stratified random sampling was used in the present study.
3.5.7 Reliability

The researcher, through a pilot study, pre-tested the three questionnaires used for this study, namely: headteachers of Non-formal primary schools questionnaire, teachers and pupils questionnaire. Split-half reliability was used to test the internal reliability of the above data collection instruments.

The researcher used the Alpha (Cronbach) which is a model of internal consistency, based on the average inter-item correlation (Hardy & Bryman, 2009). The SPSS computer software (Version 16 which has Cronbach reliability test) was used to obtain the internal reliability for each of the research instruments. The reliability coefficients for each of the research instruments were as follows; \( \alpha = 0.84 \) for the headteachers questionnaire, \( \alpha = 0.85 \) for the teachers question and \( \alpha = 0.82 \) for the pupils questionnaire. The above reliability levels were taken as acceptable internal reliability for data collection instrument (Hardy & Bryman, 2009); (Gay, 1981) and (Mugenda & Mugenda, 2003).

3.6 Data Collection

The field data collection was done by the researcher with the help of three research assistants due to the relatively large number of respondents. The researcher first trained the research assistants by conducting orientation sessions with them where the purpose and the methodology of the research were outlined and explained. Training of research assistants was done to
reduce inter-rater variability so that data collected by the research assistants would be as close to what the researcher would have collected as possible.

During data collection, from each of the sampled schools, the researcher first reported to the headteacher’s office. The researcher then introduced himself and research assistants to the headteacher and explained the purpose of the study whose data were being sought. The researcher then personally administered the headteachers questionnaire (HTQ). The administration of the questionnaire by the researcher helped familiarize the headteacher with the study and create rapport for ease of work.

The research assistants helped in the administration of the teachers questionnaire (TQ) and pupils questionnaire (PQ) with guidance and close supervision from the researcher. Completion and collection of the TQ and PQ was done the same day they were administered. However, the HTQs were collected after two days to allow the respondents adequate time to complete the questionnaires. The researcher personally did the review of various curriculum documents including syllabuses and course books to obtain data on the curriculum content taught in the NFS.

The researcher interviewed the Director of City Education (DCE) using an interview guide (see Appendix D). The interview enabled the researcher to get more information from the respondent that may not have been possible through use of a questionnaire. The researcher also personally observed and
got a feel of the sampled schools particularly with respect to quality of schools infrastructure. In line with these ethical requirements, the researcher took a number of measures as part of ethical considerations for present study. First, a research permit was obtained from the National Council for Science and Technology (see Appendix G). The application for the research permit was accompanied with a copy of the research proposal complete with abstract giving details that included the purpose of the research (to write a doctoral thesis). The acquired permit allowed the researcher to visit and conduct research in the Non-formal primary schools in Nairobi. The researcher also obtained a letter from the Director of City Education authorizing him to visit the schools within the city (see Appendix H).

During data collection, the researcher started by paying a courtesy call to the District Commissioner (DC) and then proceeded to the District Educational Office where copies of the research permits and a letter of introduction were given to the District Education Officer and the purpose of the study explained. This procedure was repeated in all the eight districts in the City of Nairobi. Permission to conduct research in the sampled schools was sought from the respective head teachers and copies of the research permit and letter from the Director of City Education were given to them. The headteachers then introduced the researcher and the research assistants to the teachers and the pupils.
Before commencement of data collection from the respondents, the researcher first introduced himself to explain that he was carrying out a research on the quality of education provided in the NFS in Nairobi. The researcher then sought consent from the participants to be included in the study. Two types of consent forms, one for the teachers (see appendix I), and the second one for parents/guardians to the pupils (see appendix J) had been designed and used for this purpose.

The researcher also explained that no financial or material benefits would accrue from taking part in the research. The researcher explained that benefits would be in as far as the findings of the study would help in improving the quality of education and human welfare. Copies of the study results would be available at the National Council of Science and Technology, Ministry of Education and the University library where interested teachers, Ministry of Education officials and other interested parties would be able to access the results of the study.

At the data collection stage, ethical matters were taken care of through by upholding honesty during the administration of questionnaires and conducting of interviews. The interviewer limited himself to the questions pertaining to the study as outlined in the interview schedules and questionnaires.

The interview was conducted in private with only the interviewer and interviewee to ensure some privacy and confidentiality during data
collection. The researcher began the data gathering process by explaining the purpose of the study to the respondents, indicating that participation in the research was voluntary. The respondents were asked to voluntarily give information without coercion and the consent form to sign.

During data analysis and dissemination of results privacy, anonymity and confidentiality of the participants were ensured by not including the names of schools in the study report. The researcher took some photographs of the NFS through the consent of the headteachers to include them in the document. (Arthur, Waring, Coe, & Hedges, 2012) argue that in using visual methodologies, the question recognition of participants is vexed.

3.7 Data Analysis
The study produced both quantitative and qualitative data. Quantitative data were obtained using questionnaires and qualitative data were obtained through use of interview schedule, observation and review of documents. The data collected through use of questionnaires were first edited to detect errors and omissions and where possible necessary corrections were made (Kothari, 2004). A comprehensive list of categories that were mutually exclusive was then prepared and codes assigned accordingly. Then coded data were analysed using Statistical Packages for Social Sciences (SPSS) Version 16.0.
Qualitative data (collected through interviews, observation and review of documents) were analysed by first establishing themes, patterns, trends and relationships from the information gathered. Then the patterns and connections revealed by the data were used to draw conclusions. The analysed data were presented largely through frequency distributions tables (showing means and percentages) and bar graphs.
CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.0 Introduction

The findings of the study are presented in this chapter. The chapter is divided into seven sections. The demographic characteristics of the respondents are presented in the second section. From sections three to seven, the analysed data, results and discussions of the findings are presented according to the research questions. Data analyses and interpretation hinged on the purpose of the study which was to evaluate the quality of education provided by non-formal primary schools in Nairobi by use of UNICEF framework of education quality that focuses on five dimensions of quality education, namely; the learner, content, processes, environment and outcomes (UNICEF, 2000). The study sought answers to the following five research questions:

1. What is the quality of learners who attend Non-formal primary schools (NFSs)?
2. What is the quality of the learning environment in the non-formal schools?
3. What is the quality of the curriculum used by the non-formal schools?
4. What is the quality of the educational processes employed in the non-formal Schools?
5. What is the quality of educational outcomes from the non-formal schools?
4.1 Demographic Data of the Respondents

The study collected data on the demographic characteristics of the respondents who comprised the headteachers, teachers, and pupils from the sampled Non-Formal Schools. In this section, data on the headteachers and teachers are presented. The data on pupils demography are presented under the section on pupils characteristics. The study sought data on headteachers and teachers’ professional qualifications, teaching experience at the current school and gender. The data is presented on Table 4.1.

Table 4.1: Headteachers of Non-formal primary schools by Qualification, Gender and Working Experience

<table>
<thead>
<tr>
<th>Highest professional qualification</th>
<th>Yrs served as head in current school</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 3 yrs</td>
<td>3-8yrs</td>
<td>More than 8yrs</td>
</tr>
<tr>
<td>University sex</td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Diploma/S1 Sex</td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>P1</td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>9</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Untrained teacher</td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Total Male</td>
<td>19</td>
<td>31</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>Grand</td>
<td>27</td>
<td>48</td>
<td>26</td>
</tr>
</tbody>
</table>

Source: Researcher
According to Table 4.1 which shows data on head teachers qualification, working experience and gender, the largest number of headteachers have P1 level of training (38 out of 101 or 37.6%), followed by diploma/S1 (30 out of 101 or 29.7%) and then university at 22/101 or 21.8%. Notably, 11 out of 101 (10.9%) of the headteachers were untrained. On gender, 71 out of 101 or 70.3% of the headteachers were males while 30 out of 101 or 29.7% were females. In terms of qualification by gender, 27 out of 38 or 71.1% of the P1 teachers were males and 11 out of 38 (28.9%) were females. On the other hand, 19 out of 30 or 63.3% of those with diploma/S1were males and 11 out of 30 or 36.7% were females. Notably, 17 out of 22 or 77.3% of those with university education were males with females being 5 out of 22 or 22.7%.

Majority of the untrained headteachers were males at 8 out of 11 or 72.7% with just 3 out of 11 or 27.3% being females. The data also indicate that there was stability in school management with a majority of the headteachers having served for more than three years in their current schools at 74 out of 101 or 73.3% of which 48 out of 102 or 47.5% had served between 3-8years and 26 out of 101 or 25.7% had served for over eight years.

Table 4.2 shows the distribution of teachers in the non-formal primary schools by age, gender, and professional qualifications.
Table 4.2: Teachers of Non-formal primary schools by Age, Gender and Professional Qualification

<table>
<thead>
<tr>
<th>Sex</th>
<th>Age</th>
<th>Diploma/S1</th>
<th>P1</th>
<th>P2</th>
<th>Untrained</th>
<th>Graduate</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>24 yrs and below</td>
<td>5</td>
<td>15</td>
<td>2</td>
<td>27</td>
<td>7</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25-34 yrs</td>
<td>15</td>
<td>22</td>
<td>4</td>
<td>23</td>
<td>8</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td></td>
<td>35-44 yrs</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td></td>
<td>45-54 yrs</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>55 yrs and above</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>31</td>
<td>45</td>
<td>11</td>
<td>62</td>
<td>20</td>
<td>169</td>
<td>53.1</td>
</tr>
<tr>
<td>Female</td>
<td>24 yrs and below</td>
<td>9</td>
<td>16</td>
<td>2</td>
<td>22</td>
<td>3</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25-34 yrs</td>
<td>14</td>
<td>20</td>
<td>6</td>
<td>16</td>
<td>9</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>35-44 yrs</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td></td>
<td>45-54 yrs</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>25</td>
<td>45</td>
<td>18</td>
<td>44</td>
<td>17</td>
<td>149</td>
<td>46.9</td>
</tr>
<tr>
<td></td>
<td>Grand Total</td>
<td>56 (17.6%)</td>
<td>90 (28.3%)</td>
<td>29 (9.1%)</td>
<td>106 (33.3%)</td>
<td>37 (11.6%)</td>
<td>318</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Researcher

Majority of the teachers were relatively young with 108 out of 318 (34%) being 24 years and below and 137 (43.1%) aged between 25 and 34 years. Overall 299 out of 318 (94%) of the teachers were aged 44 years and below. On gender there were slightly more male teachers 169 out of 318 (53.1%) than female teachers (149 (46.9%). On professional qualifications, 212 out of 318 (66.7%) of the teachers were trained. However, 106 out of 318 (33.3%) of the teachers had no professional training which could negatively affect their teaching effectiveness.
4.2 The Quality of Pupils in Non-formal Primary Schools

The researcher sought to find out the quality of the pupils who attend education non-formal primary schools (NFS). Data were sought on pupils demography and family background, early childhood and psychosocial experiences, class attendance, health and nutrition, and family support for learning. In this section, data on these important factors are presented and discussed.

4.2.1 Demographic Characteristics of Pupils in Non-Formal Schools

Data on the age and gender obtained from class 7 pupils of Non-formal primary schools is presented on Table 4.3.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Below 13 yrs</th>
<th>13 yrs</th>
<th>14-15 yrs</th>
<th>16-18 yrs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Male</td>
<td>159</td>
<td>45</td>
<td>233</td>
<td>51.8</td>
<td>78</td>
</tr>
<tr>
<td>Female</td>
<td>195</td>
<td>55</td>
<td>217</td>
<td>48.2</td>
<td>84</td>
</tr>
<tr>
<td>Total</td>
<td>354</td>
<td>31.9</td>
<td>450</td>
<td>40.5</td>
<td>162</td>
</tr>
</tbody>
</table>

Source: Researcher

Generally, the data indicate that 354 out of 1110 (31.9%) of the pupils were below 13 years, 450 out of 1110 (40.5%) were aged 13 years, 162 out of 1110 (14.6%) were aged between 14 and 15 years and 144 out of 1110 (13%) were 16 years and over. Considering that the official entry age for primary school education in Kenya is six years of age, pupils are expected
to complete standard eight by the age of fourteen years. Since the data for the current study were collected from standard seven pupils, the pupils who indicated that they were aged 13 years (450 out of 1110 (40.5%) were within the right age range for their grade. Notably, a good proportion of the pupils (354 out of 1110 or 31.9%) were below 13 years of age that suggests they were under age.

The data further show that some 144 out of 1110 (13%) of the pupils were aged 16 years and over which suggests that they were over age. This may probably have been caused by pupils seeking admission when they are over-age or seeking for re-admission after being out of school for some time for various reasons. Such children require flexible school system that takes into account the family challenges that make it difficult for the children to be in school throughout (Admassie, 2003). Presence of a good proportion of over-age pupils suggests that pupils in the urban informal settlements are not able to enrol in school at the right school-going age.

On gender, there were remarkably more girls who were aged below 13 years (195 out of 354 or 55%) as compared to boys (159 out of 354 or 45%). Overall, there were slightly more girls (563 out of 1110 or 50.7%) than to boys (547 out of 1110 or 49.3%). Apparently, there were no major disparities in terms of pupil’s age and gender in the Non-Formal Schools.
Information on pupils’ family background was also collected. The pupils were asked to provide data on their fathers and mothers’ occupation. Table 4.4 shows the occupation of the pupils’ parents.

### Table 4.4: Pupil’s Parental Occupation

<table>
<thead>
<tr>
<th>Parents’ occupation</th>
<th>Father F</th>
<th>%</th>
<th>Mother F</th>
<th>%</th>
<th>Total F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal employment</td>
<td>238</td>
<td>66.9</td>
<td>118</td>
<td>33.1</td>
<td>356</td>
<td>34.4</td>
</tr>
<tr>
<td>Jua Kali business/self-employed</td>
<td>225</td>
<td>50.1</td>
<td>224</td>
<td>49.9</td>
<td>449</td>
<td>43.4</td>
</tr>
<tr>
<td>Unemployed</td>
<td>46</td>
<td>20</td>
<td>184</td>
<td>80</td>
<td>230</td>
<td>22.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>509</strong></td>
<td><strong>49.2</strong></td>
<td><strong>526</strong></td>
<td><strong>50.8</strong></td>
<td><strong>1035</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Researcher

Majority of the parents of children in the Non-formal primary schools are engaged in small businesses/self-employed (449 out of 1035 or 43.4%) which indicates that they are low-income earners and therefore, poor. It is also noted that a big proportion of the parents are unemployed (230 out of 1035 or 22.2% which implies that they have no regular income and therefore, likely to be poor. Poor parents do not have enough funds to meet their children’s basic needs such as food, good shelter, payment of school levies, provision of instructional materials and good healthcare.
4.2.2 Early Childhood Development Education and Psychosocial Development Experiences

The headteachers were asked to indicate whether their schools provided ECDE and those that offered were further asked to rate the level of attendance by the pupils. Additionally, the headteachers were asked if attendance of ECDE was a condition for admission of pupils in Standard One. The headteachers responded that 108 out of 108 or 100% of the schools offered ECDE. On attendance of ECDE, the headteachers were asked to rate the level of class attendance on a scale of 1-3 where 1 represented good attendance (90 to 100% class attendance), 2 represented fair attendance (75 to 90% class attendance), 3 represented poor attendance (below 75% class attendance). About 59 out of 108 (55%) gave an attendance rating of 1, while 32 out of 108 (30%) gave an attendance rating of 2 with 17 out of 108 or 15.7% giving an attendance rating of 3. Therefore, the mean rating was 75, which shows that 75 out of 108 or 69.4% of the schools had good or above average attendance. This suggests that the attendance of ECDE by children from NFS is good. As to whether the attendance of ECDE was a condition for admission of pupils in Standard One, 106 out of 108 or 98% of the headteachers answered in the affirmative. This shows that nearly all the primary school pupils have attended pre-school education thus suggesting that attendance of ECDE by pupils from the NFS was good.
To gain insight into the NFE children’s psychosocial development and experiences, the pupils were asked whether they lived with their parents. Majority of them (717 out of 1082 or 66.3%) indicated that they did live with parents. However, a relatively large proportion of pupils indicated that they did not live with their parents (365 out of 1082 or 33.7%). Children with both parents alive represented 44% or 378 out of 860 while those who were-half orphans represented 22% or 189 out of 860. However, some of the pupils categorized as half-orphans could have been children from single parents. Total orphans represented 17.7% or 152 out of 860. Children whose parents were separated represented 16% or 138 out of 860.

From the above statistics, 365 out of 1082 or 33.7% of NFE children who are mainly orphaned children and others separated from their parents are likely to experience less psychosocial support and this is likely to affect their learning achievement. These findings have implications on the quality of NFE as (Willms & Somer, 2001a) in a study on pre-school education in twelve countries in Latin America, found that pre-school attendance and higher levels of parental involvement were associated with higher test scores and lower rates of grade repetition in primary schools. In view of the fact that the ECDE attendance was good and a good proportion of the pupils got the necessary psychosocial support, then such pupils are likely to do well in school and experience low rate of grade repetition. Conversely, pupils who did attend ECDE but did not get the necessary psychosocial
support may experience learning difficulties that may result to poor performance and high rate of grade repetition.

4.2.3 Pupil’s Access to Health Services

With regard to learner’s health status, the study sought data on health services available to pupils when in and out of school, whether they had received the necessary immunization and if they had access to safe drinking water when in school. Figure 4.1 provides data on medical services available to pupils in Non-Formal Schools.

![Figure 4.1: Medical Care Services Available to Pupils](source: Researcher)
With regard to where the pupils received medical services when sick, the study established that 604/1093 (55.3%) of the pupils got treatment from a health centre with 291/1093 or 26.6% indicating that parents/guardians bought them medicine. Notably, 110/1093 or 10.1% of the respondents indicated that when unwell, they got medicine in school whereas 68/1093 or 6.2% went without treatment. From the above data, it can be concluded that pupils from Non-formal primary schools have fairly good access to health services. Nevertheless, there are a few cases (68 out of 1093 or 6.2%) where children were unable to access medical care when sick, which calls for necessary interventions to enable all children to access health services for them to effectively participate in the learning process.

### 4.2.4 Children Immunization

With regard to prevention of diseases, the study sought data on children immunization. The headteachers were asked to provide data on children immunization prior to enrolment. The data provided by the headteachers indicated that 60/108 (55.6%) of the schools asked for the immunization cards before enrolling children in ECDE. The data indicated that 36/60 (60%) of the schools whose children had immunization cards, their pupils were fully immunized. The remaining 24/60 (40%) of the schools had pupils who were not fully immunized. This suggests that the catchment area for the NFS could be underserved with regard to vaccination and the children thus not so well-protected against common childhood diseases.
These findings compare favourably with findings reported by African Population and Health Research Centre, Nairobi, on the vaccination levels in the informal settlements. The study found full vaccination to be 57.5% and concluded that children from urban informal settlements are underserved with vaccination (Mutua et al., 2011). Given that, children who join Non-formal primary schools are mainly from the informal settlements. It then follows that a good proportion are not-well protected against the common childhood diseases thus putting them at risk of contracting diseases and therefore not well placed to participate fully in education.

On interventions for those children who had not completed the immunization as per the Ministry of Health guidelines, all the 24 headteachers who had indicated that all their pupils were not fully immunized said that they had advised the parents to have the children receive full vaccination. The study did not establish level of compliance to the headteachers’ advice on immunization and recommends a further study to find out levels of immunizations in those schools that do not require pupils to produce immunization cards on admission and the level of adherence to the advice from school headteachers that parents ensure their children are fully immunized.
4.2.5 Water for Drinking

The headteachers were asked if their schools provide safe water for drinking to the pupils. Data obtained indicated that 77 out of 103 or 74% of schools provided pupils with safe water for drinking. However, 26 out of 103 or 25.2% of the schools did not provide safe water for drinking which suggests that pupils in such non-formal schools, use water whose safety may be unknown. This finding is similar to that reported by (O’Reilly et al., 2008) on the impact of school-based safe water and hygiene programme and practices of students and their parents in the former Nyanza Province, Kenya in 2006. The study found that 78% of the primary schools provided safe water to their students. Additionally, the study found that provision of safe water for drinking and good hygiene practices reduced students absenteeism by 35%. These findings suggest that non-provision of safe water for drinking in schools may negatively affect the health of the pupils and consequently on their participation in education.

4.2.6 Pupils’ Nutrition

With regard to learner’s nutrition, the pupils were to indicate the number of meals they took in a day. The data obtained are presented in Table 4.5.
Table 4.5: Number of Meals Taken by Pupils in the NFS in a Day

<table>
<thead>
<tr>
<th>Number of meals</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>one</td>
<td>1062</td>
<td>98.2</td>
</tr>
<tr>
<td>two</td>
<td>1035</td>
<td>95.7</td>
</tr>
<tr>
<td>three</td>
<td>989</td>
<td>91.4</td>
</tr>
<tr>
<td>Unsure of a meal</td>
<td>11</td>
<td>1.0</td>
</tr>
</tbody>
</table>

N=1082 (Those who responded to this item)
Source: Researcher

From Table 4.5, 1062 out of 1082 or 98.2% of pupils who responded to this questionnaire item indicated that they took one meal in a day, 1035 out of 1082 or 95.7% took two meals a day while 989 out of 1082 or 91.4% took three meals a day. Some 11 out of 1082 or 1.0% pupils said that they were not sure of getting a meal every day. From the data, it appears that majority of the children in the NFS get three meals a day with a very small number getting two meals in a day. These research data suggests that those pupils who get only two meals a day and those unsure of getting a meal in a day are likely to experience hunger and discomfort that in turn affects their learning concentration. Further, it was noted that in some instances, the meal provided constituted largely of maize with very few beans and no other ingredients safe for frying oil (See Photograph 4.1) thus suggesting that the pupils may not be taking a balanced diet.
The headteachers were asked if their schools had a hot lunch programme and who financed such programmes where they existed. The data obtained indicated that slightly over half of the non-formal primary schools in Nairobi (52 out of 102 or 51%) had hot lunch programmes while 50 out of 102 (49%) of the schools did not have one. On the funding of the School Feeding Programme (SFP), 31 out of 66 (47%) of the headteachers indicated that SFP was funded mainly by parents whereas 15 out of 66 (22.7%) said it was funded by GoK/WFP. Other donors/sponsors, mainly faith-based organizations (20 out of 66 or 20.3%) gave support to the SFP.
for their sponsored pupils. The study sought to find out whether provision of the hot lunch programme was linked to the type of school management. Conspicuously, all schools managed by Board of Governors (6 out of 6 or 100%) had hot lunch programme. Slightly more than half of schools managed by School Management Committees or community schools (31 out of 59 or 52.5%) had hot lunch programme. However, it was noted that the hot lunch provided in those BoG and SMC schools constituted largely of maize with very little beans (See figure 4.2).

More than half of the schools managed by owners (16/29 or 55%) had no hot lunch programme. Considering that NFS normally serves poor parents it is probable that that some children go without lunch. Provision of meals in school and access to three meals a day is important, as it is likely to lead to improved learners’ nutrition and academic achievement. Some of the studies that support this assertion include one done by (Powel et al., 1998) on the effects of breakfast in rural primary schools that found that provision of breakfast led to learners improved nutritional status, school attendance and academic achievement. Similar results were obtained by (Vermeersch & Kremer, 2005) who carried out an evaluation of school meals, educational achievement and school competition in pre-schools in Western Kenya and found that provision of meals led to higher test scores in schools. Other researchers have asserted that School Feeding Programme is a popular approach to not only improve nutrition but also school attendance (Lloyd, 2005). From the above findings of this study, it can be concluded
that though a large proportion of learners from NFS have access to three meals a day, some only receive two meals while others go without any meal. Such learners are likely to be malnourished thus affecting their health, school attendance and the quality of education they are supposed to receive.

4.2.7 School Attendance

Headteachers were asked to rate pupil attendance on a scale of 1-5 (where I represented excellent, II represented very good, III represented good, IV represented fair and V represented poor attendance). The rating results were as follows: Excellent 22 out of 108 (20%), very good 27 out of 108 (25%), good 32 out of 108 (30%), fair 15 out of 108 (16%) and poor 11 out of 108 (10%). Thus, the headteachers who gave a rating of good attendance and above were 65 out of 108 or 60.2%. These results show that generally class attendance was good. However, 43 out of 108 (39.8%) who gave a rating of fair attendance is relatively high proportion suggesting that a good proportion of the pupils do not attend class on a regular basis. According to (Lloyd, 2005) and (Fuller et al., 1999), consistent or regular class attendance is important as it gives pupils adequate opportunity to learn or interact with the curriculum, which further influences achievement. The fact that 39.8% of the pupils in Non-formal primary schools do not attend class on a regular basis suggests that the quality of learning in the NFS is really affected by poor class attendance.
Further, the pupils were asked to give reasons that keep them away from school. Most pupils said that lack of school fees was the reason that often kept them away from school (553 out of 869 or 63.6%). These data suggest that majority of parents of the NFS are unable to pay school funds to retain their children in school. This may be attributed to the fact that majority of the parents of children in Non-formal primary schools are generally in small business and some unemployed and so find it difficult to meet educational costs for their children. The situation is made worse by the fact that very few Non-formal primary schools (4 out of 108 or 3.8%) receive FPE funds.

The other reason that kept pupils away from school was child labour with 60 out of 869 (6.9%) pupils giving it as the reason for not attending school regularly. These children were at times required to remain at home to perform domestic chores and or take care of other siblings. According to (Heady, 2003), children who are engaged in child labour are likely to have less time to interact with the curriculum and this affects learning achievement. A study on effect of child labour on learning achievement reported that child labour has a substantial effect on learning achievement as such children suffer exhaustion and other times diversion of interest away from academic concerns (Ruto, 2004). This assertion is further supported by (Patrinos & Psacharopoulos, 1995) whose study on education performance and child labour found that children who are not involved in labour are able to concentrate on learning as compared to those who are
required to work. The above study recommends subsides for poor households to enable them to maintain their children in school.

4.2.8 Family Support for Learning

The pupils were asked to rate on a scale of 1-5 (where I represented great extent, II- good extent, III- fair extent, IV-little extent and V-Zero extent), the extent to which their parents /guardians assisted them with their homework. The data obtained showed that 216 out of (20.8%) rated good extent, 476 out of 1038 (45.9%) gave a rating of fair extent, and 162 out of 1038 (15.6%) gave a rating of little extent. Some 97 out of 1038 (9.3 %) pupils said they received great support while 87 out of 1038 (8.4 %) gave a rating of zero extent which implied they received no support.

The computed mean rating shows that 551 out of 1038 (53.1%) of the pupils received above average support whereas 487 out of 1038 (46.9%) received below average support. The results suggest that though majority of pupils from NFSs receive adequate parental support to do their homework, some good proportion receive little or no support. Such pupils are likely to get lower test scores as compared to their colleagues who receive adequate support as research has shown that parental support in home learning helps improve pupils test scores (Willms & Somer, 2001). From the foregoing, it can be concluded that the quality of education received by a good proportion of learners in NFS is negatively affected by lack of /inadequate parental support.
The study sought to find out from the headteachers whether schools helped parents to get involved in their children’s learning at home. The data obtained showed that all the 102 (100%) schools required parents to assist their children with homework. The parents were additionally required to sign the pupils’ diary once they finished doing the homework (80 out of 102 or 78%). Further, parents were also required to sign the pupil’s academic report card issued at the end of every term to monitor their children academic progress (102/102 or 100%).

These data suggest that NFS gave parents opportunities not only to assist their children in the learning process but also to monitor the academic performance of their children. This arrangement by the NFS to involve parents in the learning of their children is essential in the promotion of pupils academic performance as a study by (Jeynes, 2003) found that parental involvement in the supervision of their children’s homework resulted in improved academic achievement. A study by (Baker & Stevenson, 1986) found that parental participation in their children’s learning had direct consequences for the latter educational achievement.

To assess the ability of the parents to assist their children do homework, the pupils were asked to indicate the level of education of their both parents. The results are presented on Table 4.6.
Table 4.6: Level of Education of Parents of Children in Non-Formal Schools

<table>
<thead>
<tr>
<th>Parental level of education</th>
<th>Father/Male Guardian (%)</th>
<th>Mother/Female Guardian (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University education</td>
<td>7 (1)</td>
<td>--</td>
</tr>
<tr>
<td>Secondary education</td>
<td>225 (45)</td>
<td>84 (16)</td>
</tr>
<tr>
<td>Primary education</td>
<td>231 (46)</td>
<td>255 (49)</td>
</tr>
<tr>
<td>Not completed primary school</td>
<td>46 (9)</td>
<td>184 (35)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>502 (100)</strong></td>
<td><strong>526 (100)</strong></td>
</tr>
</tbody>
</table>

Source: Researcher

The presented data indicate that fathers/male guardians of children in Non-formal primary schools were mainly of primary level education (231 out of 502 or 46%) and secondary level education (225 out of 502 or 45%). However, 46 out of 502 (9%) had not completed primary education whereas 7 out of 502 (1%) had university education. With regard to the female parents, the data show that 255 out of 526 (49%) of the female parents were of primary education while 184 out of 526 (35%) had not completed primary school education and further 84 out of 526 (16%) had attended secondary school.

The above data suggest that majority of the parents of children in the NFS have a minimum of primary level of education with more male parents having post-primary level of education. The above findings explain the strong parental support the pupils in the NFS receive for their homework as
nearly half of the parents have basic education that enables them to guide their children.

In spite of this, there are a large proportion of parents especially female parents who have not completed primary education. Such parents possibly may not have attained sustainable literacy skills which can enable them to provide adequate and appropriate assistance to their children in doing school homework, especially for the children in the upper primary school classes.

This argument is supported by (Willms & Somer, 2001) who assert that parental level of education affects their ability to assist the child with homework. Another study by (Baker & Stevenson, 1986) also found that the parental level of education determined the amount of assistance they gave to their children and how they managed their child’s academic achievement.

4.3 Quality of Learning Environment in the Non-Formal Schools

The second question sought to assess the learning environments found in the non-formal schools. The components of the learning environments were placed in three categories, namely; physical, psychosocial and learning support services.
4.3.1 Physical Elements

The various aspects of physical environments were investigated. These were the adequacy and conditions of classrooms and sitting/writing surfaces, availability of playgrounds, availability of workspace for school managers, teachers and available toilets for both boys and girls.

The headteachers were asked if they had enough classrooms. More than half of the headteachers (64 out of 94 or 69.1%) indicated that their schools did not have enough classrooms. Only 29 out of 94 (30.9%) of the headteachers reported that their schools had enough classrooms. The headteachers who said that their schools had a shortage of classrooms were further asked to indicate the number of classrooms their schools lacked.

The data are presented Table 4.7.

### Table 4.7: Level of Shortage of Classrooms

<table>
<thead>
<tr>
<th>No Classrooms missing</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>8</td>
<td>11.3</td>
</tr>
<tr>
<td>3-4</td>
<td>28</td>
<td>39.4</td>
</tr>
<tr>
<td>5 and more</td>
<td>35</td>
<td>49.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>71</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Researcher

Table 4.7 shows that the number of NFS with a shortage of 1-2 classrooms were 8 out of 71 (11.3%), those with a shortage of 3-4 classrooms were 28 out of 71 (39.4%) and those with shortage of 5 or more classrooms were 35 out of 71 (49.3%). This clearly demonstrates that shortage of classrooms is
really a big problem in the Non-Formal Schools. The level of shortage of classrooms ranged from a single classroom to more than five classrooms in some schools. Shortage of classrooms is likely to result in congestion, high pupil-teacher ratio and perhaps in multi-grade classes. This implies that teacher-learner interaction is reduced. According to (UNICEF, 2000) reduced teacher-learner interaction is likely to affect learning.

The study sought to find out whether the classrooms had adequate lighting and ventilation. The teachers of NFS were asked to rate on a 1-3 point scale (where I-very well lit, II- well lit and III-poorly lit). Using a similar scale, the teachers were asked to rate the state of ventilation in the classrooms. The obtained data are presented on Table 4.8.

Table 4.8: Teachers Rating of the State of Lighting and Ventilation of Classrooms in the NFS

<table>
<thead>
<tr>
<th>State of Lighting and Ventilation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting [Very well lit]</td>
<td>43</td>
<td>11.8</td>
</tr>
<tr>
<td>Lighting [Well lit]</td>
<td>102</td>
<td>27.9</td>
</tr>
<tr>
<td>Lighting [Poorly lit]</td>
<td>220</td>
<td>60.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>365</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td>Ventilation [Very well ventilated]</td>
<td>54</td>
<td>14.8</td>
</tr>
<tr>
<td>Ventilation [Well ventilated]</td>
<td>248</td>
<td>67.9</td>
</tr>
<tr>
<td>Ventilation [Poorly ventilated]</td>
<td>63</td>
<td>17.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>365</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Researcher
From Table 4.8, it can be noted that most of the classrooms in the NFS were poorly lit with 220 out of 365 (60.3%) teachers indicating that classrooms in their schools were poorly lit whereas 145 out of 365 teachers reported that classrooms in their schools were well lit. On the state of classroom ventilation, 54/365 or 14.8% of the teachers indicated that the classrooms were very well-ventilated and 248/365 or 67.9% said the classrooms were well-ventilated. However, 63/365 or 17.3% of the teachers pointed out the state of classroom ventilation was very poor. The researcher observed some instances where the classrooms were so poorly lit that pupils seated at the back really strained to see the writing on the chalkboard at the front of the classroom. Poorly lit and ventilated classrooms are likely not to be a conducive environment for learning since the pupils have to strain to read their books and the writings on the chalkboard and do not get fresh air (see Photograph 4.2). Such conditions are likely to expose the pupils to dangers of contracting airborne diseases and as well may get eyesight problems because of straining their eyes. Such pupils are likely to have low academic achievement.
Some classrooms were in very poor state of repair (see Figure 4.3). This finding was supported by some other finding from the pupils who when asked to indicate the major challenges they face in the non-formal schools, 174 out of 869 (20%) gave poor infrastructure (especially shortage of desks and classrooms) as one of the main challenges.
Photograph 4.3: A Non-Formal Classroom in Poor State of Repair

The teachers were asked to indicate the adequacy of sitting/writing surfaces for pupils in class seven. Some 148 out of 307 (48%) of the teachers indicated that sitting surfaces were available however, pupils sat squeezed together. About 80 out of 307 (26%), reported that sitting surfaces were available and pupils sat comfortably. Some 70 out of 307 (23%) teachers indicated sitting surfaces were not enough and thus some pupils sat on the floor while 7 out of 307 (2%) of the teachers claimed writing surfaces were inadequate and pupils wrote on their laps. These data suggests that the sitting and writing surfaces in the NFS are generally poor.
The findings are similar to those of (Ruto, 2004) who found that the NFS had poorly ventilated and overcrowded classrooms that resulted in uncomfortable atmosphere for learning. The above findings on the state of physical facilities in the NFS have implications on the quality of education as studies have shown that space and furniture availability have an impact on the critical learning factor of time on task (Miske & Dowd, 1988). Research indicates that the amount of time devoted for instruction is consistently related to how much children learn in school (Heyneman & Loxley, 1983).

Additionally, shortage of classrooms is likely to result to congestion in the classroom that makes it difficult for the teacher to make free movements and take more time to go round checking pupils work. Since research has shown that the amount of time allocated for classroom instruction influences academic achievement (Stallings, 1980) the academic achievement of pupils in the NFS is likely to be negatively affected by the shortage of the physical facilities. Further studies from India and Latin America have shown a strong correlation between quality of learning environments (classrooms, toilets, classroom materials) and pupils’ achievement (Carron & Chau, 1996), (Fuller et al., 1999) and (Willms & Somer, 2001). From the foregoing, it could be suggested that since the NFS have inadequate and generally poor physical facilities then the quality of education provided there is likely to be poor.
On the provision of co-curricular activities, the head teachers were asked whether their schools had school playgrounds. The data provided indicated that 53 out of 102 (52%) schools did not have school playgrounds while 49/102 (48%) had school playgrounds. The headteachers of schools that had no playgrounds were further asked to indicate where their children went to play. The responses showed that 14/24 (58.35) of the schools that had no playgrounds took their pupils to neighbouring institutions, 5/24 (20.8%) used public playgrounds and 4/24 (16.7%) used public roads. A good proportion of the headteachers (25 out of 102 or 25%) did not indicate where they took their pupils for play that probably suggests that some of the schools did not expose the children to adequate play for lack of playgrounds.

The headteachers were asked to indicate if their schools had offices for use by the head teacher, deputy head teacher and as a staffroom. The data is presented on Table 4.9.

<table>
<thead>
<tr>
<th>Do you have</th>
<th>Head teacher</th>
<th>Deputy Head teacher</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>office/staffroom</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Yes</td>
<td>76</td>
<td>70.4</td>
<td>28</td>
</tr>
<tr>
<td>No</td>
<td>32</td>
<td>29.6</td>
<td>76</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100</td>
<td>104</td>
</tr>
</tbody>
</table>

Source: Researcher
The results shown on Table 4.9 indicate that that 32 out of 108 (26.9\%) of the headteachers did not have offices, 76 out of 104 (73.1\%) of the deputy headteachers did not have offices and 65 out of 102 (63.7\%) of the schools did not have staffroom. The researcher observed in some schools headteachers and teachers would carry out their administrative duties at a corner in classrooms where instruction was already taking place. Lack of office space or preparation rooms for headteachers and teachers could affect their effectiveness in performance of schoolwork.

The headteachers were asked to indicate whether their schools had enough toilets for boys and girls. According to the MOE guidelines for girls, schools are required to provide 4 closets for the first 30 girls then 1 extra per every 30 girls for the next 270 girls and 1 closet per 50 girls for every additional 50 girls. For boys there should be 4 fittings for the first 30 boys, then 1 fitting for every 30 boys for the next 270 boys and 1 fitting per 50 boys for every 50 additional boys, with at least one third of the fittings being closets and the rest urinals (Ministry of Education, Science and Technology, 2000). The headteachers of 69 out of 100 (69\%) did not have adequate toilets and only 31 out of 100 (31\%) headteachers indicated that their schools had enough toilets for both boys and girls.

The headteachers were further requested to indicate the level of shortages of the toilets and the data are presented on Table 4.10.
Table 4.10: The Number of Toilets Lacking in the NFS

<table>
<thead>
<tr>
<th>Number of Toilets not Available</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>6</td>
<td>8.0</td>
</tr>
<tr>
<td>2-3</td>
<td>26</td>
<td>34.7</td>
</tr>
<tr>
<td>4-5</td>
<td>26</td>
<td>34.7</td>
</tr>
<tr>
<td>6 and more</td>
<td>17</td>
<td>22.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Researcher

With regard to the levels of shortages, about 26 out of 75 (34.7%) of the headteachers indicated their schools had a shortage of 2-3 toilets, another 26 out of 75 (34.7%) had a shortage of 4-5 and 17 out of 75 (22.7%) had a shortage of 6 or more toilets. These study findings show that the NFS have serious shortage of toilets for both boys and girls. Inadequate facilities for example toilets would mean that the pupils would have to queue to use the toilets, which is unhealthy.

Shortage of toilets in schools just like shortage of classrooms impact negatively on the critical learning factor of time on task (Miske & Dowd, 1988) and therefore will have implications on the quality of education. Additionally, available literature (UNESCO, 2003 and The World Bank, 2003) show that provision of adequate toilets particularly for girls ensures their full participation in schooling, which in turn affects the quality of education.
4.3.2 Instructional Materials

The availability and suitability of instructional materials in NFS were investigated. Teachers who taught class seven were asked to indicate the adequacy and suitability of various instructional materials (pupils’ course books, teachers’ guides and reference books) for the six examinable subjects, namely English, Kiswahili, Mathematics, Science, Social Studies and Religious Studies. Table 4.11 shows the results on teacher’s responses on adequacy of instructional materials.

<table>
<thead>
<tr>
<th>Instructional Material</th>
<th>Adequate (%)</th>
<th>Not Adequate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maths pupil’s books</td>
<td>187/189 (98.9)</td>
<td>2/189 (1.1)</td>
</tr>
<tr>
<td>Maths teachers guide</td>
<td>166/168 (98.8)</td>
<td>2/168 (1.2)</td>
</tr>
<tr>
<td>Maths reference books</td>
<td>113/114 (99.1)</td>
<td>1/114 (.9)</td>
</tr>
<tr>
<td>English pupils books</td>
<td>180/181 (99.4)</td>
<td>1/181 (.6)</td>
</tr>
<tr>
<td>English teachers guide</td>
<td>158/160 (98.8)</td>
<td>2/160 (1.3)</td>
</tr>
<tr>
<td>English reference books</td>
<td>107/108 (99.1)</td>
<td>1/108 (.9)</td>
</tr>
<tr>
<td>Kiswahili pupils books</td>
<td>184/186 (98.9)</td>
<td>2/186 (1.1)</td>
</tr>
<tr>
<td>Kiswahili teachers guide</td>
<td>177/178 (99.2)</td>
<td>1/178 (1.1)</td>
</tr>
<tr>
<td>Kiswahili reference books</td>
<td>122/124 (98.4)</td>
<td>2/124 (1.6)</td>
</tr>
<tr>
<td>Science pupils books</td>
<td>170/173 (98.3)</td>
<td>3/173(1.7)</td>
</tr>
<tr>
<td>Science teachers guide</td>
<td>129/130(99.2)</td>
<td>1/130 (.7)</td>
</tr>
<tr>
<td>Science reference books</td>
<td>98/100 (98)</td>
<td>2/100 (2)</td>
</tr>
<tr>
<td>Social studies pupils books</td>
<td>181/183 (98.9)</td>
<td>2/183 (1.1)</td>
</tr>
<tr>
<td>Social studies teachers guide</td>
<td>129/130(99.2)</td>
<td>1/130 (.8)</td>
</tr>
<tr>
<td>Social studies reference books</td>
<td>89/90 (98.9)</td>
<td>1/90 (1.1)</td>
</tr>
<tr>
<td>Religious studies pupils books</td>
<td>155/157 (98.7)</td>
<td>2/157 (1.3)</td>
</tr>
<tr>
<td>Religious studies reference books</td>
<td>89/90 (98.9)</td>
<td>1/90 (1.1)</td>
</tr>
</tbody>
</table>

Source: Researcher
The results show that nearly all the teachers who responded to this question indicated that their schools had adequate pupils’ books, teacher’s guides and reference materials for the six subjects that are examinable at KCPE. On their part, the pupils when asked whether they had enough textbooks only 255 out of 1024 (25%) indicated that they had enough textbooks compared to 768 out of 1024 (75%) who reported they did not have enough textbooks. The difference in findings could have been due to different interpretation of what is enough by teachers and pupils. Nevertheless, during data collection the researcher observed that some schools had many new books locked up in the school stores and not in use. This implies schools can have the necessary learning materials but such materials are not available for use by the pupils. It would be necessary to carry out a study to investigate why such books were not issued to pupils for use.

The pupils were asked if they had enough exercise books, pencils and erasers. The obtained data indicated 621 out of 1036 (59.9%) of the pupils had enough exercise books whereas 415 out of 1036 (40.1%) did not have enough exercise books. With regard to pencils and erasers 663 out of 1028 (64.5%) reported they had enough while 365 out of 1028 (35.5%) indicated they had challenges in getting pencils and erasers. The above data shows that though a majority of the pupils in the NFS is adequately provided with writing materials a sizeable number of these children are not adequately provided. This suggests that 415 out of 1036 (40.1%) pupils who did not have enough exercise books and 365 out of 1028 (35.5%) who did not
have enough pencils and erasers are not able to effectively take part in the instructional process for lack of writing materials, which may negatively affect their academic achievement.

The study also sought teachers’ opinions on the suitability of the instructional materials available in their schools. On a scale of 1-4, where 1 represented highly recommend, 2 well recommend, 3 fairly recommend and 4 not recommend the teachers were asked to give their opinion on the suitability of the course books for the six examinable subjects. The results are presented on Table 4.12.

Table 4.12: Teachers Ratings of Suitability of Instructional Materials

<table>
<thead>
<tr>
<th>Course book</th>
<th>Highly Recommended F</th>
<th>%</th>
<th>Well Recommended F</th>
<th>%</th>
<th>Fairly Recommended F</th>
<th>%</th>
<th>Not Recommended F</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maths</td>
<td>99</td>
<td>42.3</td>
<td>95</td>
<td>40.6</td>
<td>36</td>
<td>15.4</td>
<td>4</td>
<td>1.7</td>
<td>234 (100)</td>
</tr>
<tr>
<td>English</td>
<td>96</td>
<td>39.7</td>
<td>87</td>
<td>36</td>
<td>55</td>
<td>22.7</td>
<td>4</td>
<td>1.7</td>
<td>242 (100)</td>
</tr>
<tr>
<td>Kiswahili</td>
<td>76</td>
<td>31.5</td>
<td>104</td>
<td>43.2</td>
<td>57</td>
<td>23.7</td>
<td>4</td>
<td>1.7</td>
<td>241 (100)</td>
</tr>
<tr>
<td>Science</td>
<td>81</td>
<td>35.8</td>
<td>94</td>
<td>41.6</td>
<td>40</td>
<td>17.7</td>
<td>11</td>
<td>4.9</td>
<td>226 (100)</td>
</tr>
<tr>
<td>Social Studies</td>
<td>97</td>
<td>40.2</td>
<td>93</td>
<td>38.6</td>
<td>47</td>
<td>19.5</td>
<td>4</td>
<td>1.7</td>
<td>241 (100)</td>
</tr>
<tr>
<td>Religious Studies</td>
<td>97</td>
<td>46.2</td>
<td>81</td>
<td>38.6</td>
<td>28</td>
<td>13.3</td>
<td>3</td>
<td>1.4</td>
<td>210 (100)</td>
</tr>
</tbody>
</table>

Source: Researcher

The data on Table 4.12 show that over 70% of the teachers would either highly recommend or well recommend the entire course books used in the six examinable subjects in the NFS. This suggests that the course books used in the NFS are suitable. This finding was supported by the headteachers 106 out of 106 (100%) who reported that they used the MoE
approved list of school course books and reference materials for primary schools when procuring instructional materials.

The above findings where a large proportion of pupils (768 out of 1024 or 75%) were found not to have sufficient textbooks and others (663 out of 1028 or 64.5%) did not enough writing materials has implications in the quality of education. Several researchers have documented the consistently positive effect of availability of textbooks and other instructional materials on student achievement (Heyneman et al., 1981), (Heyneman et al., 1978), (Heyneman & Loxley, 1983), (Harbison & Hanushek, 1992) and (Lockheed, 1993). This suggests that due to the shortage of textbooks and instructional materials the quality of education in the NFS is likely to be poor.

4.3.3 Peaceful and Safe Environments for Learners

The level of discipline in the NFS and the security of pupils while in and out of school were investigated. To find out the state of school discipline in the NFS the headteachers were asked to rate the level of pupils’ discipline, on a scale of four: very good, good, fair and poor) in their schools and the results are presented on Figure 4.2.
Figure: 4.2: Level of Pupils Discipline at School

Source: Researcher

Twenty out 106 (19.8) of the headteachers rated discipline in their schools as very good, 60 out of 106 (56.6%) rated it as good, 23 out of 106 (21.7%) rated it as fair and a mere 2 out of 106 (1.9%) rated discipline in their schools as poor. The data suggests that although discipline in the NFS is generally good there a fair proportion of pupils with indiscipline problems.

To investigate the safety of the learners both in school and outside the school, first, the pupils were asked if they had experienced incidences of insecurity while in school. The data obtained indicated that a majority of pupils in the NFS (700 out of 862 or 81.2%) did not experience any form of insecurity. However, a significant number of pupils (162 out of 862 or 18.8%) indicated that they experienced some form of insecurity while in
school. Comparatively more girls than boys had experiences incidences of insecurity with 86 out of 162 or 53.1% of the girls indicating they suffered insecurity as compared to 76 out of 162 or 46.9% of the boys who indicated that they had experienced insecurity. Those pupils who said that they had gone through incidences of insecurity were further asked to describe the form of insecurity experienced. The data obtained are presented on Table 4.13.

Table 4.13: Causes of Insecurity amongst the Pupils of NFS While at School

<table>
<thead>
<tr>
<th>Cause of insecurity</th>
<th>Corporal punishment</th>
<th>Bullying</th>
<th>Sexual harassment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>42</td>
<td>55.3</td>
<td>34</td>
<td>44.7</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>15.1</td>
<td>35</td>
<td>40.7</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>33.9</td>
<td>69</td>
<td>42.6</td>
</tr>
</tbody>
</table>

Source: Researcher

According to Table 4.13 the most common source of insecurity for boys was violence, mainly use of corporal punishment (42 out of 76 or 55.3%) followed by bullying (34 out of 76 or 44.7). On the other hand, the most common source of insecurity for girls while at school was sexual harassment (38 out of 86 or 44.2%), followed by bullying (35 out of 86 or 40.7%) and lastly use of corporal punishment (13 out of 86 or 15.1%). The above data suggests that pupils in the NFS experience insecurity mainly through bullying, sexual harassment and corporal punishment while at school.
The pupils were asked to rate on a scale of 1-5 the practice of the use of corporal punishment in their schools where 1 stood for very high, 2 for high 3 for fairly high 4 for low and 5 for non-existent. Eighty out of 869 pupils (9%) gave a prevalence rate of very high, 350 out of 869 (40%) high, 200 out of 869 (23%) fairly high and 249 out of 869 (28%) gave a rating of low.

The mean prevalence of corporal punishment was found to be 530 out of 868 (61%). This is a very high incidence of Corporal Punishment despite the fact that its use is outlawed in the country under article 29 of the Constitution 2010 (Republic of Kenya, 2010).

In some schools, corporal punishment was administered openly in class during instruction as witnessed by the researcher during data collection. The use of corporal punishment and incidences of bullying indicates there is indiscipline amongst the pupils.

The pupils were further asked if they experienced incidences of insecurity while away from school. The obtained data are presented on Table 4.14.

**Table 4.14: Prevalence of Insecurity amongst the Pupils of NFS While Away From School**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Do you experience incidences of insecurity when out of school (F)</th>
<th>Total F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes (%)</td>
<td>16.1</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>365</td>
<td>83.9</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>14.0</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15.1</td>
<td>84.5</td>
</tr>
</tbody>
</table>

Source: Researcher
As can be seen on Table 4.14, 132 out of 877 (15.1%) of the pupils in the NFS indicated that they experienced insecurity when away from school with 745 out of 877 (84.5%) indicating that they did not experience incidences of insecurity when away from school. Notably more boys (70 out of 132 or 53%) experienced incidences of insecurity as compared to girls (62 out of 132 or 47%). The most common incidence of insecurity when away from school for boys was bullying (42 out of 70 or 60%) followed by violence (28 out of 70 or 40%). On the other hand the most common incidence of insecurity amongst the girls when away from school was sexual harassment (44 out of 62 or 71%) followed by rape (12 out of 62 or 19%) and lastly bullying (6 out of 62 or 10%). The above data suggests that though a majority of pupils in the NFS did not experience incidences of insecurity when away from school a good proportion of pupil’s experience incidences of insecurity, which implies that such children are insecure and so, may not be able to take part in schooling.

The above findings where the journey to schools may be unsafe, pupils experience harassment and bullying are bound to affect the quality of education in the Non-Formal Schools. Studies have shown that a welcoming and violence free climate within schools and classrooms, is critical to creating a quality-learning environment (UNICEF, 2000). Direct physical threats have been shown to affect pupils especially girls confidence, self-esteem and identity (Pigozzi, 2000) and (UNICEF, 2000).
From the foregoing, it can be observed that a good proportion of pupils in the NFSs experience incidences of insecurity that is bound to affect their learning. These findings are similar to those by (Mudege, Zulu, & Izugbara, 2008) who from their study on impact of insecurity on school attendance and school dropout among urban slum children in Nairobi found that insecurity amongst the pupils both in school and within the slum neighbourhoods was a major cause of school dropouts. Insecurity impacts on the education quality as it affects school enrolments, retention and school performance.

Further, insecurity is likely to affect the quality of learning as (Glasser, 1992) asserts if a child undergoes negative early experiences, he or she is apt to become angry, depressed, alienated, lonely and hostile and may express the failure identity through delinquency, withdrawal or development of emotional disturbances. Such experiences are likely to destruct a child from benefitting from the instructional process and impact on the academic achievement and consequently the quality of education.

4.4 Quality of the Curricula Taught in Non-formal primary schools

In this section, data on the planned and taught curriculum in the non-formal primary schools is presented. First data on the planned curriculum were collected; second, data on how the curriculum in the NFS addresses the needs of the learners and finally the non-academic curriculum support programmes.
4.4.1 The Planned Curriculum in the Non-Formal Schools

The current study targeted NFS that followed the Kenya 8-4-4 education curriculum and all the non-formal primary schools under the present study (108/108 or 100%) followed the formal 8-4-4 system primary education curriculum. The primary education curriculum is prepared by the Kenya Institute of Curriculum Development (KICD) and consists of: (a) the national goals of education (see appendix f), (b) the primary education level objectives (see appendix g), (c) the subject’s general and specific objectives, (d) the content, (e) suggested learning/teaching experiences (f) resources/materials and (g) assessment methods.

The national goals of education guide the formulation of the primary education level objectives. The teaching subjects and their respective objectives are generated from the primary level objectives. The subject objectives are translated into measurable objectives that are used to guide the selection of content/learning experiences. The curriculum offers six examinable teaching subjects, namely; English, Kiswahili, Mathematics, Science, Social Studies, and Religious Education. The non-examinable teaching subjects include Mother Tongue, Creative Arts, Physical Education, Life skills and Pastoral programmes. Table 4.15 shows the subjects taught in primary school curriculum and the time allocation.
Table 4.15: Subject Time Allocation for Primary School Curriculum

<table>
<thead>
<tr>
<th>SN</th>
<th>Subject</th>
<th>Classes 1-3</th>
<th>Classes 4-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>English</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>2.</td>
<td>Kiswahili</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>Mathematics</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>4.</td>
<td>Science</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Social Studies</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>Religious Education</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>Mother Tongue</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>8.</td>
<td>Creative Arts</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>Physical Education</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Life Skills</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Pastoral Programmes</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

**Note:** Lower Primary classes will have 35 lessons of 30 minutes each and Upper Primary Classes will have 40 lessons of 35 minutes each.

Source: DQAS, Ministry of Education

From table 4.15, it is observed that examinable subjects are allocated more time on the teaching timetable as compared to the non-examinable subjects. The headteachers were asked to indicate on a five-point scale (very high extent, high extent, moderate extent, low extent and no extent) and the extent to which their schools gave attention to the teaching of non-examinable subjects. In their responses, no headteacher gave very high extent, seven out of 104 (6.7%) gave high extent, 33 out of 104 (31.7%) gave moderate extent, 50 out of 104 (48.1%) gave low extent while 14 out of 104 (13.5%) said teaching of non-examinable subjects was not given any attention. The headteachers who gave average and above rating were thus 65 out 104 (62.5%) while those who indicated non-examinable subjects were given below average attention were 39 out 104 (37.5%).
The headteachers who indicated that their schools gave low and no emphasis were further asked whether such subjects appeared on the school timetable and if so why? In their responses, all the headteachers (102 out of 102 or 100%) reported that all the subjects had to appear on the teaching timetable, as it is a MoEST requirement. Nonetheless 42 out of 102 (41%) of the headteachers indicated that all the subjects appeared on the teaching timetable for official purposes since it was a requirement that all subjects be taught as per the curriculum. This arrangement is meant to create an impression to the QASOs from the MoEST that curriculum implementation in schools is being done as expected.

The above data indicate that a majority of the NFS schools do not implement the school curriculum as planned. These findings suggest that the teaching of the non-examinable subjects in the non-formal primary schools is poor. This further suggests that the learners are not given an opportunity to acquire the competencies envisaged in the part of the curriculum that is not taught.

These findings are similar to those by (Wanyama, 2011). In his study on the challenges of teaching Physical Education in secondary schools in Kenya and Australia, he found that Physical Education was marginalized compared to other subjects though in Victoria, where it was a key learning area the subject was given more prominence compared to Kenya where it was non-examinable subject. The findings are further supported by those of
(Ruto, 2004) who found that the non-formal primary schools that followed the 8-4-4 curriculum concentrated on preparing the learners for the KCPE. This brings question of the rationale for inclusion of non-examinable subjects on the curriculum with full knowledge that schools may not take teaching of such subjects seriously.

4.4.2 How the Curriculum in the NFS Address the Needs of the Learners

In this sub-section, data on how the curriculum in the NFS addresses the needs of the learners are presented.

4.4.2.1 Need for Certificates

An interview with the DCE revealed that the NFS were popular amongst parents of pupils in the informal settlements because the schools follow the formal school curriculum that gave the learners opportunity to sit the KCPE that is a requirement for admission to secondary school and get certificates that could be used for various purposes, including seeking for employment. This suggests that the curriculum offered in the NFS helps meet the learner’s needs for certification and access to secondary education.

4.4.2.2 Flexibility

The pupils in the Non-formal primary schools were asked to indicate the reasons that made them prefer attending Non-Formal Schools. The data obtained are presented on Table 4.16.
From Table 4.16, the most popular reason that made pupils join non-formal primary schools was that such schools had pupils and teachers who were friendlier than formal schools (498/1079 or 46.2%). The second most popular reason was that non-formal primary schools were more accessible and easier to obtain admission (365/1079 or 33.8%). The third most popular reason was that in the Non-formal primary schools fees was low and flexible in terms of payment (252/1080 or 23.3%). The fourth reason given was that school rules in the Non-formal primary schools were friendlier than for formal schools (232/1079 or 21.5%). Another popular reason given was that pupils were allowed to attend Non-formal primary schools in home clothes (216/1080 or 20%). Other reasons given were parents’ preference (185/1079 or 17.1%), provision of lunch (142/1080 or 13.1) and the fact that dropouts could re-enter without problems (135/1080 or
12.5%). The above data suggest that NFS were more flexible and accommodative to the needs of the learners from the informal settlements.

4.4.2.3 Curriculum Delivery

Teacher presence in the classroom and efficient use of school time has significant impact on student learning. The study sought data on the teacher punctuality at school and absenteeism. The headteachers were asked to rate on a scale of one to four (1 for excellent, 2 for good, 3 for fair and 4 for poor) Teachers punctuality in reporting to work in their respective schools. The data obtained indicated that 73 out of 104 (70%) of the headteachers rated teacher punctuality in their schools as excellent, 21 out 104 (20%) gave a rating of good whereas 10 out of 104 (10%) gave a fair rating. These results show that teachers in Non-formal primary schools generally report punctually for work.

On their part, teachers were asked to indicate if they had been, absent from school in the previous one-month. About 176 out of 379 (46.4%) of the teachers reported that they had been absent from school in the previous one month. The above data suggest that teacher’s absenteeism is quite rampant in the Non-Formal Schools.

Teacher absence from school or attendance to non-instructional roles during teaching time has implications on quality of education as pupils have to go without instruction during teacher absence unless other teachers
attend to the classes where teachers are absent. As (Fuller et al., 1999) assert, learning occurs when teachers are present in school and engage pupils in instructional activities. This assertion is further supported by (Lloyd, 2005) and (Verwimp, 1999a) who also indicate that the opportunity learners have to learn and the time teachers spend on instruction have a positive effect on academic achievement.

4.4.2.4 The Non-academic Curriculum Support Programmes

The study sought to find out curriculum support services provided to the pupils in Non-Formal Schools. Data were collected on pupil participation in co-curricular activities, guidance and counseling services and the virtues promoted by the NFS.

The study sought data on the NFS participation in co-curricular activities. Headteachers were asked to indicate whether their schools engaged the learners in co-curricular activities. All headteachers 107/107 or 100% who responded indicated that their pupils took part in co-curricular activities. The headteachers were further requested to indicate the highest level of participation of their schools in various co-curricular activities. The data obtained are presented on table 4.18.
Table 4.17: Non-formal primary schools Participation in Co-curricular Activities

<table>
<thead>
<tr>
<th>Co-curricular Activity</th>
<th>School</th>
<th>Zone</th>
<th>District</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball games</td>
<td>40</td>
<td>12</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Gymnastics</td>
<td>35</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Music</td>
<td>65</td>
<td>24</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Drama</td>
<td>50</td>
<td>20</td>
<td>10</td>
<td>2</td>
</tr>
</tbody>
</table>

N=107 (those who responded to this item)
Source: Researcher

Table 4.18 shows that the most popular co-curricular activity was music (65 out of 107 or 60.7%), followed by drama (50 out of 107 or 46.7%) then ball games (40 out of 107 or 37.4%) and lastly gymnastics (35 out of 107 or 32.7%). These data show that a large proportion of NFS took part in co-curricular activities. From the data, it is evident that a good proportion of the NFS did not take part in competitions in co-curricular activities even at the school level. The non-participation in co-curricular activities by the NFS particularly in ball games and gymnastics could possibly be attributed to the fact that majority of the NFS did not have playgrounds as discussed in section 4.4.1.

The relatively higher level of participation in music and drama could possibly be attributed to the fact that these activities do not require a lot of space and could be carried out in the classrooms and so do not require playgrounds like outdoor ball games. However, the data indicate that some pupils from the Non-formal primary schools got an opportunity to compete with other pupils in various activities at zonal, district and national
competitions. Provision of co-curricular activities improves the learning environments (UNICEF, 2000) and lack of adequate opportunity to take part in various co-curricular activities likely to disadvantage the pupils from Non-Formal Schools, particularly in identifying their special talents in out of class activities and thus negatively affect the quality of education.

On guidance and counseling, the teachers were asked whether their schools offered guidance and counseling services to the pupils. All the teachers who responded (275 out of 275 or 100%) said that their schools offered guidance and counseling services to the pupils.

The teachers were further asked to indicate the virtues they encouraged in their schools as part of good character development and guidance and counseling. The obtained data are presented on Table 4.17.

Table 4.18: Virtues Promoted by the Non-Formal Schools

<table>
<thead>
<tr>
<th>Virtues Promoted by the Schools</th>
<th>Does your school promote the indicated virtue?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Schools Encourage:</td>
<td>N</td>
</tr>
<tr>
<td>Punctuality</td>
<td>299</td>
</tr>
<tr>
<td>Politeness</td>
<td>261</td>
</tr>
<tr>
<td>Neatness</td>
<td>278</td>
</tr>
<tr>
<td>Hard work</td>
<td>306</td>
</tr>
<tr>
<td>Taking responsibility</td>
<td>275</td>
</tr>
<tr>
<td>Care for others</td>
<td>279</td>
</tr>
<tr>
<td>Tolerance</td>
<td>250</td>
</tr>
</tbody>
</table>

Source: Researcher
Table 4.17 shows the number and percentages of teachers who indicated that the respective virtues were promoted by their schools. The virtues promoted by the Non-formal primary schools as indicated by the teachers included hard work (306 out of 379 or 80.7%), punctuality (299 out of 379 or 78.9%), care for others (279 out of 379 or 73.6%) and neatness (278 out of 379 or 73.4%). Others virtues promoted were taking/accepting responsibility (275 out of 379 or 72.6%), politeness (261 out of 68.9%) and tolerance (250 out of 379 or 66%). The data suggest that in addition to providing the academic knowledge through the teaching of formal subjects, the NFS also emphasized the assimilation of good habits by the pupils. Promotion of virtues has been found to improve personal discipline (UNICEF, 2000) which is an important aspect of quality education.

4.5 Quality Processes in Non-Formal Schools

In addressing research question 4 regarding educational processes in NFS the researcher sought to find out teachers’ professional development, the pedagogical approaches they use, teacher feedback mechanisms, their working conditions, and school management practices in the NFS.

4.5.1 Teachers Professional Development

The headteachers of NFS were requested to provide data on the academic and the professional qualifications of teachers in their schools. The results are presented in tables 4.19 and 4.20 respectively.
Table 4.19: Teacher’s Academic Qualifications

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td>42</td>
<td>11.5</td>
</tr>
<tr>
<td>Diploma</td>
<td>99</td>
<td>27.1</td>
</tr>
<tr>
<td>KCSE/KCE</td>
<td>197</td>
<td>54</td>
</tr>
<tr>
<td>KCPE</td>
<td>27</td>
<td>7.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>365</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

N=365 (respondents for this item)

As can be observed on Table 4.19, majority of the teachers (197 out of 365 or 54%) are holders of ordinary level certificates (KCSE/KCE) usually awarded after completion of four-year secondary education. Notably, 99 out of 365 or 27.1% and 42 out of 365 or 11.5% of the teachers had diploma and degree certificates respectively. Cumulatively, the teachers with a diploma or degree certificate were 141 out 365 or 38.6%. Kenya Certificate of secondary education (KCSE) is the recognized academic qualification for the training of P1, diploma and degree certificate holders. Primary Teacher Education (PTE) also referred to as P1 is awarded after completion of two years primary teachers college education to holders of C (plain) in KCSE. Diploma in Teacher Education (DTE) is awarded after completion of two years college education to holders of a mean grade C+ (plus) or above in KCSE with at least C+ (plus) in each of the two teaching subjects taken at the college.

On the other hand, Bachelor of Education Degree is awarded after completion of four years university education to holders of a mean of C+ (plus) in KCSE. Therefore, teachers who possess diploma and degree
certificates are considered to have higher qualifications than those teachers possessing just KCSE certificate or those with P1. From this argument, it can therefore be presumed that the 141 out of 365 (38.6) of the teachers who have either diploma or degree had good mastery of the subject matter.

Conversely the 27 out of 365 (7.4%) who had only the KCPE or primary school level of formal probably do not possess adequate mastery of the content in various subject areas. The above results suggest that though a majority of the teachers in the NFS has good mastery of the subject matter, a small proportion of these teachers do not possess adequate mastery of the subject matter and so may not be able to teach effectively.

**Table 4.20: Teachers’ Professional Qualifications**

<table>
<thead>
<tr>
<th>Professional Qualification</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Ed</td>
<td>27</td>
<td>7.3</td>
</tr>
<tr>
<td>Diploma</td>
<td>63</td>
<td>17.1</td>
</tr>
<tr>
<td>P1</td>
<td>100</td>
<td>27.1</td>
</tr>
<tr>
<td>P2</td>
<td>30</td>
<td>8.1</td>
</tr>
<tr>
<td>ECDE</td>
<td>15</td>
<td>4.1</td>
</tr>
<tr>
<td>Untrained</td>
<td>134</td>
<td>36.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>369</td>
<td>100</td>
</tr>
</tbody>
</table>

N=369 (respondents for this item)
Source: Researcher

As can be observed from Table 4.20, with regard to professional qualifications, 27 out of 369 or 7.3% had B.Ed degree holders, 63 out of 369 or 17.1% had diploma in education, 100 out of 369 had P1 level of training and 30 had P2 level of training. Cumulatively 220 out of 369 or 59.6% of the teachers had professional training. Out of these teachers 90
out of 369 (24.4%) of the teachers had either a diploma in education or a bachelor of education degree. On the other hand 134 out 369 (36.3%) of the teachers were untrained. From the above data, it can be noted that although a majority of the teachers in the NFS are trained there exist a large proportion of untrained teachers. Untrained teachers do not possess the professional competencies that would enable them teach effectively.

The teachers of non-formal primary schools were asked if they had undergone any form of in-service training and those who answered in the affirmative were further asked to describe the nature and duration of the training. On attendance of in-service training, the data obtained showed that majority of the teachers in the non-formal primary schools had never attended an in-service course (231 out of 356 (64.9%) with only 125 out of 356 (35.1%) having attended. The data obtained from teachers’ responses on the type and duration of the in-service seminars/workshops attended are presented on Table 4.21.

**Table 4.21: Teachers’ Attendance of Professional Development Activities**

<table>
<thead>
<tr>
<th>Type of seminar/workshop</th>
<th>Organisers</th>
<th>Duration</th>
<th>Attendance</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching methodology in various subjects</td>
<td>Educational Publishers/ DQAS of the MoE</td>
<td>3-6 hrs</td>
<td>72</td>
<td>20.2</td>
<td></td>
</tr>
<tr>
<td>Marking of English composition and Insha</td>
<td>DQAS of the MoE</td>
<td>3-6 hrs</td>
<td>25</td>
<td>7.0</td>
<td></td>
</tr>
<tr>
<td>Guidance and counseling</td>
<td>Faith-based organizations /NGOs</td>
<td>1-3 days</td>
<td>13</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>Diploma and degree programmes</td>
<td>Diploma colleges/Universities</td>
<td></td>
<td>15</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>125</strong></td>
<td><strong>35.1</strong></td>
<td></td>
</tr>
</tbody>
</table>

N=356 (those who responded to this item)
Source: Researcher
As is observable in table 4.21, teachers who attended various professional development activities were 125 out of 356 (35.1%). Notably 72 out of 356 (20.2%) attended in-service seminar/workshop on teaching methodology in various subjects organized by the Directorate of Quality Assurance and Standards, MoE in conjunction with the educational publishers. On the other hand, 25 out of 356 (7%) attended in-service seminar/workshop on marking of English composition and Insha organized by the Directorate of Quality Assurance and Standards, MoE. Some 13 out of 356 (3.7%) of the teachers had attended guidance and counseling seminars/workshops organized by faith-based organizations/NGOs. The above data show that although a good proportion of the teachers in the NFSs attended various professional development activities, the large majority had not attended any. These findings suggest that professional development of the teachers of NFSs was poor.

The above findings on non-formal teacher’s professional development have implications on the quality of teaching as studies have shown that the highest quality teachers are those capable of helping their pupils learn and must have deep mastery of both their subject matter and pedagogy (Darling-Hammond, 1977). Similar studies confirm the importance of teachers mastery of the subject matter and pedagogy (Angrist & Lavy, 2001), (Goldhaber & Brewer, 2000), (Harris & Sass, 2011), (Hill et al., 2005) and (Lockheed, 1993b). Further (Naureen et al., 2011) established that trained teachers were significantly better than untrained teachers.
On the importance of in-service teacher training, case studies from Bangladesh, Botswana, Guatemala, Namibia and Pakistan (Craig, Kraft, & Du Plessis, 1998) have shown that ongoing professional development particularly after the initial training and then throughout the career, contribute significantly to student learning and retention. Additionally, studies have shown that teachers supported with in-service as well as external workshop training improved significantly in their abilities to use child-centred teaching and learning behaviours (Anderson, 1991). From the foregoing, it can, therefore, be suggested that since majority of teachers in the NFS have low mastery of subject matter, untrained and not attended in-service training, they are likely to produce poor academic achievement amongst the pupils.

4.5.2 Pedagogical Approaches in Non-Formal Schools

The teachers were asked to indicate how often they used various learner-centred instructional techniques and the results are shown on table 4.22.

<table>
<thead>
<tr>
<th>Teaching Method</th>
<th>Frequency of use</th>
<th>Very often</th>
<th>often</th>
<th>Rarely</th>
<th>Not at all</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Discussion</td>
<td></td>
<td>164</td>
<td>46.9</td>
<td>93</td>
<td>26.6</td>
<td>50</td>
</tr>
<tr>
<td>Demonstration/ Experiments</td>
<td></td>
<td>92</td>
<td>26.2</td>
<td>113</td>
<td>32.2</td>
<td>87</td>
</tr>
<tr>
<td>Guided/responsive lecture</td>
<td></td>
<td>207</td>
<td>58.8</td>
<td>105</td>
<td>30.0</td>
<td>40</td>
</tr>
<tr>
<td>Question and answer</td>
<td></td>
<td>230</td>
<td>65.3</td>
<td>82</td>
<td>23.3</td>
<td>21</td>
</tr>
<tr>
<td>Role play</td>
<td></td>
<td>50</td>
<td>14.6</td>
<td>107</td>
<td>31.3</td>
<td>82</td>
</tr>
<tr>
<td>Story telling</td>
<td></td>
<td>124</td>
<td>35.7</td>
<td>101</td>
<td>29.1</td>
<td>104</td>
</tr>
</tbody>
</table>

Source: Researcher
According to table 4.22 the most often used learner-centred instructional method was question and answer which 230 out of 352 (65.%) of the teachers said they used very often. The second most commonly used method was guided or responsive lecture, which 207 out of 352 (58.8%) of the teachers indicated, they used very often. The next commonly used methods were discussion and story-telling techniques with 164/350 or 46.9% and 124/347 or 35.7 % of the teachers indicating they often used them respectively. The demonstration method was the least used method with 92 out of 351 (26.2%) indicating that they used it.

The above data suggest that the teachers of NFS use learner-centred instructional methods with the most popular methods being use of question and answer, followed by guided or responsive lecture and then discussion. These findings have implications on the quality of education since teachers are required to use instructional methods that are learner-centred to help students develop cognitive skills, develop attitudes, beliefs and expand their knowledge base (UNICEF, 2000). Further, learner-centred methods have been found to yield significantly higher achievement scores and a somewhat higher internal motivational orientation amongst the learners (Alfassi, 2004). Additionally, quality teaching and support of students learning normally associated with learner-centred environments have been found to improve academic attainment and retention (Zepke et al., 2006). However, use of learner-centred approaches is likely to be a challenge where majority of the teachers are untrained (O’ Sullivan, 2004). From the
foregoing, it is apparent that use of learner-centred approaches is very important to good academic achievement. However, use of learner centred approaches requires that teachers get the necessary skills for the effective use of the various approaches. It can, be suggested therefore, that effective use of learner-centred approaches by the teachers in NFS is likely to be a challenge, as majority of these teachers were not trained.

4.5.3 Management Processes and Quality Assurance in Non-formal primary schools

The study sought data on the quality of administrative support for teachers, students, and quality assurance in Non-Formal Schools. The study sought to find out the teachers’ working conditions in the Non-Formal Schools. On a scale of four (highly satisfied, satisfied, fairly satisfied and not satisfied), the teachers were asked to indicate their level of satisfaction with respect to amount of salary they received, the way the salary was paid, working time and job security and working environment and the obtained data are presented on Table 4.23.

Table 4.23: Teachers Level of Satisfaction with Working Conditions.

<table>
<thead>
<tr>
<th>Working condition</th>
<th>Level of satisfaction</th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Highly satisfied F</td>
<td>%</td>
<td>Satisfied F</td>
<td>%</td>
<td>Fairly satisfied F</td>
<td>%</td>
<td>Not satisfied F</td>
<td>%</td>
</tr>
<tr>
<td>Amount of salary</td>
<td>17</td>
<td>4.8</td>
<td>57</td>
<td>16</td>
<td>147</td>
<td>41.3</td>
<td>135</td>
<td>37.9</td>
</tr>
<tr>
<td>Salary payment</td>
<td>58</td>
<td>16.3</td>
<td>128</td>
<td>36</td>
<td>108</td>
<td>30.3</td>
<td>62</td>
<td>17.4</td>
</tr>
<tr>
<td>Job security</td>
<td>0</td>
<td>0</td>
<td>34</td>
<td>9.6</td>
<td>67</td>
<td>18.8</td>
<td>255</td>
<td>71.6</td>
</tr>
<tr>
<td>Working environment</td>
<td>24</td>
<td>6.8</td>
<td>139</td>
<td>39.6</td>
<td>107</td>
<td>30.5</td>
<td>81</td>
<td>23.1</td>
</tr>
</tbody>
</table>

N=356 (those who responded to this item)
According to Table 4.23 with regard to the amount of salary paid majority of teachers (147 out of 356 or 41.3%) were fairly satisfied. However, a high proportion of teachers indicated they were not satisfied (135 out of 356 (37.9%). The number of teachers who gave above average level of satisfaction with the salary was 48 out of 356 (41.6%). This implies that on average, 208 out of 356 (58.4%) of the teachers were not satisfied with the amount of salary they were paid. On the mode of salary payment, 143 out of 356 (40.2%) of the teachers had above average level of satisfaction while 213 out of 356 (59.8%) below average level of satisfaction. This suggests that teachers of NFS are poorly paid.

When it came to job security, a large proportion of the teachers (255 out of 356 or 71.6%) said they were not satisfied and 67 out of 356 (18.8%) indicated that they were fairly satisfied. This suggests that teachers of NFS have insecure employment. On the working environment, majority of teachers 217 out of 356 or 61% had above average level of satisfaction with 139 out of 356 (39.6%) having below average level of satisfaction. This suggests that teachers in NFS are generally comfortable with the working environment.

The above findings have implications on the quality of education as poor salaries that are not paid on time have been found to result to teachers taking other jobs which hurt student learning (Postlewaithe, 1998). Such teachers are likely to be associated with lower test scores and/or higher grade repetition (Willms & Somer, 2001a). On the other hand, highly
motivated teachers are likely to be highly committed and care about their students (Craig et al., 1998) which in turn will have a positive effect on the quality of education.

On administrative and leadership, headteachers were asked to indicate whether they had undergone any training. The data obtained showed that large proportion of the headteachers (75 out of 108 or 69.4%) had not attended any leadership and management training while 33 out of 108 (30.6%) had attended. These data suggests that the majority of the headteachers of Non-formal primary schools may not have adequate leadership and management skills.

The study further sought data as to whether the headteachers had adequate time for instructional supervision. The data obtained showed that 66 out of 108 (63%) of the headteachers did not have adequate time for instructional supervision. These headteachers claimed that they had a big teaching load in addition to the administrative duties thus leaving them with inadequate time to attend to instructional supervision. On the other hand, 40 out of 108 (37%) of the headteachers indicated that they had adequate time for instructional supervision, which they attributed to the fact that their schools had managers who perform administrative duties thus leaving headteachers to perform teaching and instruction supervision duties. These data suggest that though a good number of headteachers of NFS have adequate time for instructional supervision large majority probably are not able to effectively carry out instructional supervision for lack time.
The above findings have implications on the quality of education provided by the NFS given that the quality of administrative support and leadership is a crucial element in school processes for both students and teachers (UNICEF, 2000). Further, (Grissom et al., 2013) in their study on effective instructional time use found that specific instructional leadership behaviours were associated with gains in student achievement. Their study found that instructional time spent on teacher’s instructional guidance and developing school educational programmes predict positive attainment gains amongst the students. Headteachers, therefore, need adequate time for instructional leadership to improve the quality of education in their schools.

On quality assurance, the headteachers were asked to indicate whether Quality Assurance and Standards Officers visited their schools from the MoE and further indicated the purpose of such visits. The obtained data are presented on Table 4.24.

<table>
<thead>
<tr>
<th>No. of yearly visits by QASOs</th>
<th>Purpose of the visit by QASOs</th>
<th>Monitoring of FPE programme</th>
<th>Total</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Routine Inspection F</td>
<td>Registration for F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>(9.9)</td>
</tr>
<tr>
<td>Once</td>
<td>22</td>
<td>10</td>
<td>10</td>
<td>42</td>
<td>(51.9)</td>
</tr>
<tr>
<td>Twice</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>17</td>
<td>(20.9)</td>
</tr>
<tr>
<td>More than twice</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>14</td>
<td>(17.3)</td>
</tr>
<tr>
<td>Total</td>
<td>41 (50.6)</td>
<td>20 (24.7)</td>
<td>20 (24.7)</td>
<td>81</td>
<td>(100)</td>
</tr>
</tbody>
</table>

Source: Researcher
As can be observed from Table 4.24, majority of the schools had had one visit (42 out of 81 or 51.9%), 17 out of 81 (20.9%) had two visits, while 14 out of 81 (17.3%) had more than two visits. Notably 8 out of 81 (9.9%) of the schools had never been visited by the QASOs.

With regard to the purpose of the school visits by the quality assurance officers, routine inspections had the highest number of visits (41 out of 81 or 50.6%). School visits for inspections for purposes of registration and monitoring of Free Primary Education had same number of visits (20 out of 81 or 24.7%). Eight schools indicated that the quality assurance and standards officers had never visited them. The above data shows that although a majority of the NFS had been inspected by the QASO, such inspections were few with some schools having never been inspected. This probably suggests that quality assurance by the QASOs in the NFS is poor. Since schools that were regularly evaluated by supervisors have been found to record greater learning gains (Miske & Dowd, 1988), it’s probable that the quality of education in the NFS is affected by poor quality assurance they receive from the MoE.

4.6 Quality of Educational Outcomes from Non-Formal Schools

To address the 5th and last research question, the researcher sought to find out the educational outcomes from the Non-Formal Schools.
4.6.1 Continuous Assessment

Headteachers were asked to indicate the number of formal assessments schools had in a term and how often feedback on pupil performance was communicated to the pupils and parents. Results indicated that all the schools in the present study took the pupils through three formal assessments in a term, namely; end month exam (taken at the end of the school opening month), mid-term and end term assessments.

Further, responses from the headteachers showed that 74 out of 106 (69.8%) communicated results to parents once every month whereas 26 out of 106 (24.6%) communicated twice in a term. Only 6 out 106 (5.6%) of the headteachers communicated results once in a term. The schools require pupils to have report card/books that the teachers record the marks the pupils attain after every assessment. At the end of the term, the teachers do the average of the monthly assessments and the end term examinations and fill in the pupils report book which would now show the performance in all the continuous tests taken in the term and subject teachers, class teachers and headteachers’ comments/feedback. These findings imply that parents are kept well-informed about their children’s academic progress. This in turn suggests that probably the parents are in a position to monitor their children’s academic achievement and seek for the necessary advice and guidance if need be. The overall implication is that children are likely to obtain good grades in the KCPE.
Further, on a scale of 1 to 3 (1=great extent, 2=some extent, 3=no extent), the teachers were asked to indicate the extent to which they used results from formative assessment to improve on instructional strategies and organize for remedial classes. Results to this questionnaire item showed that 202 out of 369 (54.7%) of the teachers gave a rating of high extent, 125 out of 369 (34%) gave the rating of some extent and 43 out of 369 (11.3%) gave no extent. On average 265 out 369 (71.8%) of the teachers affirmed that their schools use formal assessment results to improve instructional strategies and organize for remedial action for the learners. These results probably suggest that that non-formal school recognize the role of formative assessment in improving learning outcomes consequently improving the quality of education.

4.6.2 Non-formal primary schools Performance in Kenya Certificate of Primary Education (KCPE)

The researcher used performance in the Kenya Certificate of Primary Education (KCPE) as a measure of the quality of learning outcomes in the NFS. The headteachers were asked to provide data on the KCPE performance for four years (2006, 2007, 2008 and 2009). The data provided by 78 headteachers who responded to this questionnaire item are presented on Table 4.25.

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</tbody>
</table>

Sample Mean score **268.55  259.99  258.36  258.7  261.4**

NB: The names of schools not displayed for ethical reasons
Source: Researcher
From Table 4.25 shows that in 2009, the mean score of the sampled schools was 268.55 out of 500 and the schools with the highest and the lowest scores had 350 out 500 and 206 out of 500 respectively. In 2008, the mean score of the sampled schools was 259.99 out of 500, the schools with the highest mean, and the lowest mean had 341.1 out of 500 and 204.6 out of 500 respectively. For the year 2007, the mean of the sampled schools was 258.36 out of 500 with the schools with the highest and lowest means having 339 out of 500 and 199.8 out of 500 respectively. In the year 2006, the mean of the sampled schools was 258.7 with the schools with the highest and lowest mean having 376.7 out of 500 and 203.3 out of 500 respectively. The above data show there was a steady rise in mean performance in the KCPE by the non-formal primary schools in four years (2006, 2007, 2008 and 2009) with the highest rise of 8.56 in 2009.

It is also observed that the mean score for the four years for the sampled schools was 261.4 out of 500 showing that more than half of the candidates obtained over 250 marks, the half mark for the KCPE whose highest score is 500 marks in all the five curricula areas that candidates are examined on. This suggest that performance of the NFS is above average and can therefore be considered as fairly good. This data compares well with that obtained from the Director City Education shown on Table 4.26 that indicate that the Mean score for NFS for the four years was 255.61, the mean score for the public schools for the similar period was 248.24 and that for private schools was 305.22. These results suggest that the quality of the
outcomes in the non-formal primary schools (261.4 out of 500) was better than that of public schools (248.24 out of 500) though poorer than that of private schools (305.22 out of 500).


<table>
<thead>
<tr>
<th>School category</th>
<th>2009</th>
<th>2008</th>
<th>2007</th>
<th>2006</th>
<th>Mean</th>
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<td>Private schools</td>
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<td>307.14</td>
<td>306.69</td>
<td>292.83</td>
<td>305.22</td>
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<td>Public schools</td>
<td>252.36</td>
<td>245.85</td>
<td>245.02</td>
<td>249.75</td>
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</tr>
<tr>
<td>Non-Formal Schools</td>
<td>264.56</td>
<td>254.35</td>
<td>252.29</td>
<td>251.23</td>
<td>255.61</td>
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</table>

Source: Director City Education, Nairobi

As can be observed on Table 4.26, in the four years 2006 to 2009 in the City of Nairobi, the private schools led in KCPE performance with a mean score of 305.22, followed by the non-formal primary schools with a mean of 255.61 and the public schools were last with a mean of 248.24. A closer look at the data shows that in 2009, the private schools had a mean of 314.23, followed by the non-formal primary schools with a mean of 264.56 and then the public schools with a mean of 252.36. The above data show that the academic performance of the non-formal primary schools is comparatively better than that of public formal schools in Nairobi. This suggests that probably non-formal primary schools are able to provide quality education to the learners. These findings have implications for the MoE and the City Council of Nairobi to come up with policies that will give pupils in these schools better learning environment.
4.7 Summary

In this chapter first, data on the demographic characteristics of pupils in non-formal schools, early childhood development and psychosocial development experiences, pupils access to health services, children immunization, water for drinking, pupils nutrition, school attendance and family support for learning were presented and discussed. Secondly data on various physical aspects, instructional materials and peaceful and safe environment for learners were presented and discussed. Thirdly, data on the planned curriculum in the non-formal schools, and how the curriculum in the NFSs addresses the needs of the learners were presented and discussed. Fourthly, data on teachers’ professional development, pedagogical approaches used in non-formal primary schools and management processes and quality assurance in non-formal primary schools were presented and discussed. Finally data on continuous assessment and non-formal schools’ performance in Kenya Certificate of Primary Education (KCPE) were presented and discussed. In the next chapter a summary of the Key research findings, the conclusions made and recommendations is presented.
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This study focused on the quality of education provided by the non-formal primary schools in Nairobi, Kenya. The study used the (UNICEF, 2000) framework of education quality and five broad objectives were analyzed. First, the study sought to out the characteristics of the pupils who attend Non-formal primary schools (NFS). Second, the study investigated the quality of the learning environments in the NFS. Third, the quality of the curriculum taught in the Non-formal primary schools was evaluated. Fourth, educational processes in NFS were investigated. Finally, the quality of educational outcomes from the NFS was evaluated. This chapter summarizes the study findings; outlines general conclusions arrived at, gives possible implications of the findings and presents areas for further research.

5.1 Summary of Findings

5.1.1 Quality of Pupils who attend Non-formal primary schools (NFS)

In this section, the researcher has tried to answer the question “What is the quality of pupils in non-formal primary schools (NFSs)?” The main findings are:

i. Although majority of the pupils who attend non-formal primary schools were within the right school-going age, there was a good proportion of
under-age (354 out of 1110 or 31.9%) and over-age (144 out of 1110 or 13%) pupils.

ii. A good number of pupils who attended non-formal primary schools lived with one parent (189 out of 860 or 22%) while those who had no parents (total orphans) were 152 out of 860 or 17.7%.

iii. Majority of the parents of children in the non-formal primary schools are either engaged in Jua kali (small informal businesses)/ self-employed (449 out of 1035 or 43.4%) or are unemployed 230 out of 1035 (22.2%) which indicates they are low-come earners and therefore, poor.

iv. Although nearly all the pupils who attend non-formal primary schools had access to fairly good health services (1005 out of 1093 or 92%), a number of the pupils (88 out of 1093 or 8%) had no access to medical care when sick, which calls for necessary interventions to enable all children access medical care to effectively participate in the learning process.

v. Some headteachers of NFSs (24 out of 60 or 40%) reported there were children in their schools who were not immunized fully against the common childhood diseases suggesting that the catchment area for the NFSs could be underserved with regard to vaccination.

vi. Majority of the pupils who attend non-formal primary schools (989 out of 1082 or 91.4%) have access to three meals a day. However, some 71 out of 1082 or 6.6% of the pupils were only able to access three meals a day with some being unsure of getting a meal a day. Such learners were
likely to experience hunger that affect their concentration and school attendance and negatively affect their learning achievement.

vii. Although majority of the pupils (551 out of 1038 or 53.1%) reported having adequate support family assistance in doing their homework, a good proportion (487 out of 1038 or 46.9%) received poor assistance from the family in doing their school homework.

5.1.2 Quality of Learning Environments in the Non-Formal Schools

In this section, the researcher has tried to answer the question “What is the quality of the learning environment in the non-formal schools?” The main findings are:

i. Non-formal primary schools have big shortage of classrooms with some 35 out of 71 schools or 49%) had shortage of at least 5 classrooms. This results to serious congestion in the available rooms.

ii. Some 70 out of 307 teachers of NFS reported that their classrooms experienced shortage of sitting and writing surfaces for the pupils. Such pupils were forced to squeeze for the available surfaces or sit on the classroom floor and write on their laps.

iii. A large proportion of NFSs (69 out of 100 or 69%) had inadequate toilets for both boys and girls that negatively imparts on the learners schooling.

iv. A large proportion of pupils (768 out of 1024 or 75%) did not have sufficient textbooks and 663 out of 1028 or 64.5%) did not have enough writing materials which affects learning achievement.
v. Use of corporal punishment, though outlawed, was found to be quite prevalent with 530 out of 868 or 61.5% of the pupils indicating to have been subjected to it. Some 132 out of 877 (15.1%) of the pupils indicated they had experienced other forms of insecurity (sexual harassment and/or bullying) when away from school. Insecurity negatively impacts on the quality of education as it negatively affects school enrolments, retention and school performance.

### 5.1.3 Quality of the Curriculum Content Taught in the Non-Formal Schools

In this section, the researcher has tried to answer the question “What is the quality of the curriculum used by the non-formal schools?” The main findings are:

i. The non-formal primary schools were found to follow the 8-4-4 education system curriculum. The study found that there was a lot of emphasis on the teaching of the subjects examined at KCPE namely, English, Kiswahili, Mathematics, Science, Social Studies and Religious. The teaching of non-examinable subjects was found to be very poor.

ii. The study found out that a good proportion of pupils prefers the non-formal primary schools because characteristically the Non-formal primary schools are more flexible and accommodative to the learners needs. Notably pupils are not sent home for lack of uniform, the atmosphere is friendlier, flexibility of programmes and schedules and
more accommodative school rules and regulations. These factors combine to improve learner’s school participation and enhance curriculum coverage.

iii. The study also found in addition to providing the academic knowledge gained/inculcated through the teaching of formal subjects the NFS also emphasized the informal aspects of the school curriculum by promoting various positive values and virtues that lead to assimilation of good habits by the pupils.

iv. The non-formal primary schools do not provide adequate opportunities for the learners to participate in co-curricular activities and therefore, some learners may not be able to identify and develop talents in non-academic areas.

5.1.4 Quality of Processes in the Non-Formal Schools

In this section, the researcher has tried to answer the question “What is the quality of the educational processes employed in the non-formal schools?”

The main findings are:

i. Most teachers in the NFS are untrained and professional development of the teachers was poor, as majority had not attended any in-service course. This is bound to impact negatively on their teaching effectiveness.

ii. On teaching methods most teachers in the NFS used learner-centred methods of teaching with the most commonly used methods being question and answer, responsive lecture and discussion. However,
learner-centred approaches require that teachers get the necessary skills for their effective use. In view of this effective use of learner-centred methods is likely to be a challenge, as majority of these teachers are not trained.

iii. On management processes, majority of the headteachers of the NFS had not attended any management training beyond what they learnt in college during training. This suggests that their school management skills may be poor. Although majority of the teachers in NFS were comfortable with their working environment they complained of low salaries.

iv. It was further found that majority of the headteachers do not have adequate time for monitoring curriculum coverage. The NFS generally did not get quality assurance services from the ministry of education. The study found that those schools that were visited had invited quality assurance personnel for the purposes of schools registration.

5.1.5 Quality of the Outcomes from the Non-Formal Schools

In this last section, the researcher tried to answer the question “What is the quality of educational outcomes from the non-formal schools?” the main findings were:

i. Teachers in the NFS regularly used continuous assessment tests to monitor learner academic achievement. This use of formative assessment is bound to lead to improved learning outcomes and consequently improving the quality of education.
ii. The quality of outcomes in the NFS is good as shown by KCPE results where NFS perform comparatively better than public schools.

5.2 Conclusion

As a result of the need by the Kenya government to fulfil her obligations, to EFA and MDGs to which she is a signatory, on the provision of basic education, and the increased demand for basic education, alternative mode of education delivery that meets the various learners needs have become increasingly popular. Provision of basic education through non-formal primary schools that have tried to fill an existing gap created by population growth that surpassed infrastructure and housing development in Nairobi is one such mode of education delivery.

This study has provided data that suggest that majority of children who attend NFS come from poor families and difficult circumstances and require a lot of support particularly in provision of good health care, nutrition and some require protection and care. On the other hand, although the NFS offer opportunities to the learners to access education, their physical facilities are not conducive for learning. The school programmes and environment are friendly to the pupils and the formal curriculum gives the learners a chance to acquire formal education and so to access the benefits associated with formal schooling. This demands that these children be provided an environment that is conducive for learning both in terms of physical and human resources. The good performance of NFSs in the
KCPE confirms that NFSs provide a suitable alternative mode for delivery of quality basic education. There is need for provision of adequate instructional materials and improve teachers’ professional competencies to make these NFSs perform even better.

5.3 Recommendations

In view of the study findings the following are the main recommendations.

i. There is need for national and the Nairobi county governments to consider provision of SFP to the deserving NFS to enable such schools enroll and retain needy children; improve security within the informal settlements, as currently it is a serious problem; improve health care services including enhancing infant immunization programs particularly targeting the informal settlements.

ii. The Nairobi County government should seriously consider working with the local communities to expand the existing primary schools and construct new schools within to the informal settlements to increase access, instead of leaving the responsibility to the faith based organizations, NGOs, and individuals.

iii. The study recommends for subsides to the very poor households in the urban informal settlements to enable them to maintain their children in school to attain at least for the basic education.

iv. The MOE should enhance quality assurance services to NFS to ensure that children in those schools receive quality education and under favorable/acceptable environments.
v. The MOE and county government should enhance teachers’ professional development that targets NFS where majority of teachers are untrained.

vi. All schools should be encouraged and monitored to ensure that pupils are given opportunity to take part in various co-curricular activities so that talents may be identified and developed.

5.4 Suggestions for further Research

The study identifies following areas for further research.

i. The current study was a descriptive survey that focused on quality of education provided in the non-formal primary schools and used the UNICEF framework and assessed quality in terms of the learner, environments, content, processes and outcomes. A similar study could be conducted using a different framework or research design.

ii. A similar study could be replicated focusing on the formal primary schools in Nairobi county.

iii. The study recommends a study be done to establish the extent of the problem of poor teaching of non-examinable subjects and possible ways to address the problem to justify if need be the continued inclusion of such subjects on the teaching timetable.

iv. The study recommends for a comparative study on KCPE performance between NFS and public primary schools in Nairobi County.
REFERENCES


Torres, M. (1993). reaching the Un-reached: Nonformal Approaches and Universal Primary Education. UNICEF.


UNICEF. (2002). *Quality Education for All from a Girls Point of View*.


Dear headteacher,

This study is designed to find out the quality of education provided by Non-formal primary schools in Nairobi, Kenya. You are kindly requested to answer the following questions by putting a tick where choices are provided and filling in the blank spaces where necessary. Your responses will be treated in great confidence.

Schools Name........................................Division ........................................

1. Indicate your Sex  i) Male          ( )    ii) Female         ( )

2. What is your age?
   i) Below 30 years       ( )
   ii) 31-40 years         ( )
   iii) 41-50 years        ( )
   iv) 51 years and above  ( )

3. Highest professional qualification
   i) Graduate             ( )
   ii) Diploma/S1          ( )
   iii) P1                 ( )
   iv) Other (specify)..............................................................................

4. a) Number of years served as a headteacher at the current school.
   i) Less than three years ( )
   ii) Three to eight years ( )
   iii) More than eight years ( )

b) Have you attended any leadership/school management training?
   i. Yes                ( )    ii. No              ( )
c) Promotions/appointments to headship is based on teacher’s
   i) leadership and management skills ( )
   ii) Students’ academic performance ( )
   iii) Other criteria (specify) .................................... ( )

(Rank 1 to 3 in order of preference with the most preferred criteria as 1)

d) Do you have adequate time for instructional supervision?
   i. Yes ( ) ii. No ( )

   Explain your answer ..............................................................

5. a) Is the school you head registered? i) Yes ( ) ii) No ( )

   b) If yes, indicate the registering body/organization
      i) Ministry of Education ( )
      ii) Ministry of Culture and Social services ( )
      iii) Attorney General Chambers ( )

      Other (specify) ..........................................................................

6. a) Provide data for KCPE candidates and schools’ mean score for the years shown.

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<th>Year</th>
<th>No. of KCPE candidates</th>
<th>School mean score</th>
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<tr>
<td>2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
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</tbody>
</table>

b) How often do you provide feedback to pupils and parents on the learner performance?
   i) Once per month (....)
   ii) Twice per term (.....)
   iii) Once per term (.....)
c) On a scale of 1 to 3 (1=great extent, 2=some extent, 3=no extent) indicate the extent to which results from formative assessment are used to improve on instructional strategies and organize for remedial classes in your school.

7. Indicate the number of items your school presented at the levels shown in the last three years.

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<th>Activity</th>
<th>Level of participation</th>
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<td>2008</td>
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<td>2007</td>
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<td></td>
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<td>2007</td>
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</tbody>
</table>

8. How would you describe the discipline of pupils in your school?
   i) Very good ( ) ii) Good ( ) iii) Fair ( ) iv) Poor ( )

9. On a scale of 1-5 how would you rate pupils class attendance in your school?
   i) Excellent ( ) ii) Very good ( ) iii) Good ( ) iv) Fair ( ) v) Poor ( )
10. Who manages your school/institution?
   i) School board of governors ( )
   ii) School management committee ( )
   iii) The proprietor/Owner ( )
   iv) Other (specify) .................................................................

11. a) What are the sources of funding for your school/institution?
   i) Ministry of Education ( )
   ii) Parents/Community ( )
   iii) Church/Sponsoring Organization ( )
   iv) Other (specify) .................................................................

12. Indicate the number of teachers in your institution under the following categories

<table>
<thead>
<tr>
<th>Grade</th>
<th>Diploma/S1</th>
<th>P1</th>
<th>P2</th>
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</thead>
<tbody>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

13. a) Do you have a hot lunch programme for pupils in the school?
   Yes ( ) No ( )
   b) If yes give reasons for its introduction in the school ..............................................
      .............................................................................................................................................
   c) Who finances the hot lunch programme?
      i) Parents
      ii) Donors
      iii) GOK/WFP
      iv) Other (specify) ...........................................................................................................

14. a) Does your school safe clean water for the pupils?
   Yes ( ) No ( )
b) If No how do children obtain water for drinking while in school?
   i) Go without drinking water (   )
   ii) Carry water to school (   )
   iii) Other (specify) .................................................................

15.   a) Does your school provide ECDE?
      Yes (   ) No (   )

   b) If your answer to 15 (a) is Yes, how would you rate the attendance of ECDE by those already enrolled on a scale of 1-3 where 1 represent good attendance (90 to 100% attendance), 2 represent fair attendance (75 to 90% attendance), 3 represent poor (below 75% attendance)? .................................................................

   c) Is attendance of ECDE a condition for admission of pupils in standard one in your school?
      Yes (   ) No (   )

16. Indicate the school enrolment as at June 2009

<table>
<thead>
<tr>
<th>Class</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
17. a) Do you have enough classrooms for each stream in your school
(NB. In a standard classroom maximum no. of pupils per stream is 50)
Yes ( ) No ( )

b) Indicate number of classrooms not available..................................

c) Indicate with a Yes or No if your school has office for
   i) headteacher.................................................................
   ii) Deputy headteacher..................................................
   iii) staff (staffroom)..........................................................

d) Do you have enough toilets for boys and girls? Yes ( ) No ( )
   NB recommended 1 toilet for 30 boys with a provision of an urinal
   for boys and 1 toilet for 25 girls.

e) Indicate number of toilets not available..................................

18. a) To what extent does your school give attention to the
   teaching of non- examinable subjects?
   i) Very high extent..........................................................
   ii) High extent.............................................................
   iii) Moderate extent......................................................
   iv) Low extent.............................................................
   v) No extent............................................................... 

b) Do you include the examinable subjects on the teaching timetable?
   Briefly explain..........................................................
   .............................................................................

19. a) Does your school require parents to produce immunization cards on
   admission to your school?
   i) Yes ( ) ii) No ( )
b) If yes are all the pupils with immunization cards fully immunized?
   i) Yes ( ) ii) No ( )

c) If your response to 17c is No what do you do to those not fully immunized?

20. a) How many times has your school/institution been visited by the Quality Assurance and Standards Officers in the last one year (as per the school logbook/visitors book)
   i) None ( ) ii) Once ( )
   iii) Twice ( ) iv) Thrice and more ( )

b) Indicate the main reasons for the visit (Tick where applicable)
   i) Routine School Inspection ( )
   ii) Inspection for the purpose of registration ( )
   iii) Monitoring of FPE programme ( )
   Other (Specify) .................................................................

21. a) In what ways does your school get parents involved in their children’s learning at home? (Tick where applicable)
   i). Asking parents to assist their children with homework ( )
   ii). Asking parents to sign the students diary once the homework is done ( )
   iii). Asking parents to sign students academic report card ( )
   iv). Getting parents involved in decision making at the school level ( )
   Other (specify) ..................................................

b) What language of instruction is used
   i) in lower primary ..........................................................
   ii) in upper Primary ............................................................
22. (a) Are the teachers required to sign in and out daily when they report for work?

Yes (   )   No (   )

(b) On a scale of 1-4 (where 1 stands for excellent, 2 for good, 3 for fair and 4 for poor) rate the teachers punctuality in school attendance.

1. Excellent
2. Good
3. Fair
4. Poor

Thank you for your help!
APPENDIX B: QUESTIONNAIRE FOR TEACHERS’ OF NON-FORMAL SCHOOLS

Dear Teacher,

This study is designed to investigate the quality of education provided by Non-formal primary schools in Nairobi, Kenya. You are kindly requested to answer the following questions by putting a tick where choices are provided and filling in the blank spaces where necessary. Your responses will be treated in great confidence.

Schools name ............................................................................................................
Division ......................................................................................................................

1. Your age
   i) 24 years and below ( )   iii) 35-44 years ( )
   ii) 25-34 years ( )   iv) 45-54 ( )
   v) 55 and above ( )

2. Sex
   i) Male ( )   ii) Female ( )

3. Marital status (Tick one)
   (i) Married ( )
   (ii) Divorced ( )
   (iii) Single ( )
   (iv) Separated ( )

4. Indicate your academic qualifications
   i) KCSE /KCE ( )
   ii) Diploma ( )
   iii) Graduate ( )
   Other (Specify) .................................................................

5. Indicate your professional qualifications
   (i) Diploma/S1 ( )
   (ii) P1 ( )
   (iii) P2 ( )
   iv) Untrained ( )
   v) Other (specify).........................................................

6. For how long have you taught at the current school? ( tick appropriate answer)
   i) Less than a year ( )
   (ii) 1-5 year ( )
   (iii) 6-10 years ( )
   iv) 11-15 years ( )
   v) 16-20 years ( )
   vi) More than 20 years ( )
7. a) Have you undergone any form of in-service training or attended workshops/seminars on teaching in Non-Formal Schools?
   i) Yes (   )   ii) No (   )

b) If yes briefly explain the nature of training, the duration it took and the organisation that arranged for the training

8. Does your school have adequate books for teachers and pupils in the following subjects for class seven (Tick as appropriate). NB For the upper primary school books are considered adequate when there is a book for every two pupils.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Pupils’ books</th>
<th>Teachers’ guide</th>
<th>Reference books/readers</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kiswahili</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maths</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Studies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Studies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Would you recommend the course books currently used for class seven in your school to others? (Tick as appropriate)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Highly recommend</th>
<th>Well recommend</th>
<th>Fairly recommend</th>
<th>Not recommend</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kiswahili</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maths</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. (a) On a scale of 1-3 describe the state of lighting of the classrooms in your school.
   i) Very well light
   ii) Well light
   iii) Poorly light
(b) On a scale of 1-3 describe the state of lighting of the classrooms in your school.
   i) Very well ventilated
   ii) Well ventilated
   iii) Poorly ventilated

(c) How adequate are the sitting/writing surfaces for pupils in class seven?
   i) Sitting/writing surfaces available and pupils sit comfortably
   ii) Sitting/writing surfaces available but pupils sit squeezed together
   iii) Sitting surfaces not enough some pupils sit on the floor
   iv) Writing surfaces not enough pupils write on their laps

(d) How often do you use the following learner-centred instructional techniques?

<table>
<thead>
<tr>
<th>Teaching method</th>
<th>How often do you use each of these techniques?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Often</td>
</tr>
<tr>
<td>Story-telling</td>
<td></td>
</tr>
<tr>
<td>Displays, pictures, flash cards and models</td>
<td></td>
</tr>
<tr>
<td>Experiments/demonstrations</td>
<td></td>
</tr>
<tr>
<td>Question and answer</td>
<td></td>
</tr>
<tr>
<td>Discussion</td>
<td></td>
</tr>
<tr>
<td>Role-play</td>
<td></td>
</tr>
</tbody>
</table>

(e) Indicate your current employer
   Government/TSC ( ) Volunteer ( )
   School PTA/Community ( ) Church/NGO/CBO ( )
13. Indicate your level of satisfaction in the aspects of your job indicated

<table>
<thead>
<tr>
<th>Aspects of the work</th>
<th>Level of satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highly satisfied</td>
</tr>
<tr>
<td>Amount of salary</td>
<td>satisfied</td>
</tr>
<tr>
<td>Mode of salary payment</td>
<td>Fairly satisfied</td>
</tr>
<tr>
<td>Working time</td>
<td>Not satisfied</td>
</tr>
<tr>
<td>Job security</td>
<td></td>
</tr>
<tr>
<td>Working environment</td>
<td></td>
</tr>
</tbody>
</table>

14. What are the main methods you use to measure the progress and achievement of your pupils?

<table>
<thead>
<tr>
<th>Assessment method</th>
<th>How often it is used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>External exams (other than KCPE)</td>
<td>Once a fortnight</td>
</tr>
<tr>
<td></td>
<td>Once a Month</td>
</tr>
<tr>
<td></td>
<td>Once a term</td>
</tr>
<tr>
<td></td>
<td>Once a year</td>
</tr>
<tr>
<td>School based exams</td>
<td></td>
</tr>
<tr>
<td>Continuous Assessment</td>
<td></td>
</tr>
<tr>
<td>Observation</td>
<td></td>
</tr>
</tbody>
</table>

15. Which of the following attitude behaviour do you encourage in your school?
   i) Tolerance (   )
   ii) Care for others (   )
   iii) Taking and accepting responsibility (   )
   iv) Working hard (   )
   v) Neatness (   )
   vi) Politeness (   )
   vii) Punctuality (   )

16. (a) Have you been absent from school in the last one month?
    Yes (   ) No (   )

(b) Are you assigned any administrative duties that it difficult for you to perform your teaching assignments effectively.
    Yes (   ) No (   )

Thank you for your help
APPENDIX C: QUESTIONNAIRE FOR PUPILS

Dear Pupil,
This study is designed to find out the quality of education provided by Non-Formal Schools. You are requested to answer all the questions by putting a tick where choices are provided and filling in the blank spaces where necessary. Note that this is not a test. Do not write your name. You cooperation is appreciated.

Schools name ........................................ Division ........................................

1. Indicate your Sex. (Tick one)  i) Male ( )  ii) Female ( )

2. Age (Tick one)  
   i) Less than 13 years old ( )
   ii) 13 years old ( )
   iii) 14-15 years old ( )
   iv) 16 and above ( )

3. a) Do you live with your parents?  i) Yes ( )  No ( )
   
   b) If yes indicate the current occupation of your parents (where applicable)  i) Father .........................  ii) Mother .........................
   
   c) If no,
   i) Indicate whether both your parents are alive ( )
   ii) One of the parents alive ( )
   iii) None of parents is alive ( )
   iv) Parents separated ( )
   v) Other (specify) .................................................................

4. Indicate where you stay/live to be able to attend school?
   i) With parents ( )
   ii) With relatives/guardian ( )
   iii) At a children home ( )
   iv) On the street ( )
   v) Other (specify) ........................................................................................................................................................................
5. Where applicable indicate
   (a) Your mother’s/female guardian’s level of education
       i) University/post secondary college ( )
       ii) Secondary ( )
       iii) Primary ( )
       iv) iv) Not completed primary school ( )

   (b) Your father’s/male guardian’s level of education
       i) University/post secondary college ( )
       ii) Secondary ( )
       iii) Primary ( )
       iv) Not completed primary school ( )

6. To what extent do your parents/guardians assist you with school homework?
   i) To a great extent ( )
   ii) To some good extent ( )
   iii) To some fair extent ( )
   iv) To some little extent ( )
   v) Not at all ( )
   vi) Other (specify)........................................................................................................

7. Why did you join a non-formal school (Tick relevant reasons)
   It was nearer our home/residence ( )
   My parents/guardians could not afford levies in formal schools ( )
   Lunch is provided to us and was not in formal schools ( )
   Pupils who drop out of school can re-join without problem ( )
   Incase of lack of school uniform, one can use home clothes ( )
   Teachers and pupils are more friendly and understanding ( )
   My parents/guardians insisted that I attend non-formal school ( )
   The rules and regulations are friendlier than those in formal ( )
   schools
8. Provide the information in the following table

<table>
<thead>
<tr>
<th>Resource</th>
<th>Who provides</th>
<th>Do you have enough</th>
<th>Are you allowed to carry them home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbooks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise books</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pencils/erasers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(NB. Textbooks are considered enough when every two pupils have a book. Exercise books are considered enough when there is an exercise book for every subject or as required by the teacher).

9. Are you normally provided with lunch at school?
   Yes ( )    ii) No ( )

10. Are you allowed in school incase you have no school uniform?
    Yes ( )    ii) No ( )

11. a) When you are sick, while at home where do you obtain treatment?
    i) Health centre
    ii) Home with drugs from shop/chemist
    iii) Rarely get treated /go without treatment
    iv) Taken for treatment at any facility by well wishers

    b) How do get treatment incase you fall sick in school?
    i) Given pain killers in school
    ii) Taken to health centre
    iii) Parents/guardians called to take one to hospital

12. a) How many meals do you normally take in a day?
    i) One
    ii) Two
    iii) Three
    iv) Other
b) Is the amount of food you get adequate?
   i) Yes
   ii) No
   iii) Not applicable

13. a) On a scale of 1-5 (where 1 stood for very high, 2 for high 3 for fairly high 4 for low and 5 for non-extent) rate the practice of the use of corporal punishment in their schools.

b) Do you experience other forms of insecurity at school?
   i) Yes ( )  ii) No ( )

c) If your response for (b) is yes, what are the common forms of insecurity?
   i) violence ( )  ii) rape ( )
   iii) sexual harassment ( )  iv) bullying ( )

d) Do you experience incidences of insecurity on your way to and from school?  i) Yes ( )  ii) No ( )

e) If your response for (d) is yes, what are the common forms of insecurity?
   i) violence ( )  ii) rape ( )  iii) sexual harassment ( )
   iv) bullying ( )  v) corporal punishment ( )

14. What are the main challenges you experience in attending school? .......

Thank you so much!
APPENDIX D: INTERVIEW GUIDE FOR DIRECTOR

CITY EDUCATION

This study is designed to investigate the quality of education provided by non-formal primary schools in Nairobi, Kenya. You are kindly requested first, to kindly provide us with the following data:

i) Enrolments for primary schools by class and gender.

ii) Enrolments for non-formal primary schools by class and gender

iii) Staffing in non-formal primary schools by grade and gender

iv) Number of school going-age children likely not to be attending any form of schooling

v) KCPE performance for non-formal primary schools for the last four years

Secondly, answer the following questions. Your responses will be treated in great confidence.

1. What reasons make parents from the urban informal settlements send their children to the NFS?

2. How would you describe the staffing in the non-formal primary schools with regard to
   i) Quality of teachers (Training status)
   ii) Staffing levels (adequacy)
   iii) Remuneration, terms and conditions of service

3. What quality assurances services does your office provide to the NFS and what challenges do you face as you provide these services?

4. How would you describe the quality and adequacy of the physical facilities in the non-formal institutions?
5. What is your assessment of the non-formal programmes
   i). They offer an equal opportunity to the pupils just like formal ( ) schools
   ii). They are good but not as good as formal schools ( )
   iii). The pupils who attend them are greatly disadvantaged ( )
   iv). They waste the pupils opportunity of being in school ( )

6. List the ways in which the government supports Non-formal primary schools in your area.

   ...................................................................................................................
   ...................................................................................................................
   ...................................................................................................................
   ...................................................................................................................

7. Briefly explain the challenges facing the non-formal education programme in your city?

   ...................................................................................................................
   ...................................................................................................................
   ...................................................................................................................
   ...................................................................................................................

   Thank you very much!
APPENDIX E: NATIONAL GOALS OF EDUCATION

Education in Kenya should:

i. foster nationalism, patriotism and promote national unity,

ii. promote the social economic, technological and industrial needs for national development,

iii. promote individual development and self-fulfillment,

iv. promote sound moral and religious values,

v. promote social equality and responsibility,

vi. promote respect for and development of Kenya’s rich and varied cultures,

vii. promote international consciousness and foster positive attitudes towards other nations and

viii. promote positive attitudes towards good health and environmental protection (KIE, 2002).
APPENDIX F: OBJECTIVES OF PRIMARY EDUCATION IN KENYA

Primary Education should provide the learner with the opportunities to:
1. acquire literacy, numeracy, creative and communication skills,
2. enjoy learning and develop desire to continue learning,
3. develop the ability for critical thinking and logical judgment,
4. appreciate and respect the dignity of work,
5. develop desirable social standards, moral and religious values,
6. develop into a self-disciplined, physically fit and healthy person,
7. develop aesthetic values and appreciate own and other peoples culture,
8. develop awareness and appreciation of the environment,
9. develop awareness of and appreciation for other nations and international community,
10. instill respect and love for own country and the need for other nations and international community,
11. develop individual talents,
12. promote social responsibility and make proper use of leisure time, and
13. develop awareness and appreciation of the role of technology in national development (KIE)
APPENDIX G: RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
Prof./Dr./Mr./Mrs./Miss. EPHRIATUS
of Address: KENYATTA UNIVERSITY
P.O. BOX 87432, NAIROBI
has been permitted to conduct research in
Location, District, Province,
on the topic: THE QUALITY OF EDUCATION PROVIDED BY NON-FORMAL SCHOOLS IN NAIROBI, KENYA
for a period ending 30TH JUNE, 2012.

Research Permit No. NCST/RRI/12/1/SS/579
Date of issue: 24/06/2013
Fee received: MKS 2,200

[Signature]
Applicant's Signature

[Signature]
Secretary
National Council for Science and Technology
APPENDIX H: INTRODUCTION LETTER BY DCE TO SCHOOLS

CITY COUNCIL OF NAIROBI
CITY EDUCATION DEPARTMENT

GL/NC/141 VOL.III/239 10TH September, 2010

Ephantus M. Kangi
Department of Education Management, Policy & Curriculum Studies
Kenyatta University
P.O Box 43844
NAIROBI

RE: RESEARCH AUTHORIZATION

Reference is made to your letter dated 15th July, 2010 requesting for authority to conduct a research in City Council Primary Schools.

This is to inform you that authority has been granted to you to visit primary schools in Nairobi both public, private and Non-Formal for the purpose of your research on “Quality of Education provided by Non-Formal Schools in Nairobi, Kenya”.

You are advised to liaise with Headteachers of the target schools for the success of your research.

You will be expected to submit a copy of your research report on completion of your study.

TABITHA T. KAMAU
AG. CHIEF ADVISOR TO SCHOOLS
FOR: DIRECTOR CITY EDUCATION

C.C All Education Officers
APPENDIX I: TEACHERS’ CONSENT FORM

I am doing a study on The Quality of Education provided by the Non-formal primary schools in Nairobi, Kenya for my PhD in the School of Education, Kenyatta University. To facilitate this research I require participation of and information from the head teacher, teachers who teach class seven and pupils in this school. This form is to request your consent to be a participant in the study. The form provides important information related to the study to help you make an informed decision.

(NAME)

I ………………………………………………………………………………………………………………………………

…………………………………………………………….understand the following:

1. That the research “The Quality of Education provided by the Non-formal primary schools in Nairobi, Kenya is for the purposes of pursuing PhD in the School of Education, Kenyatta University.

2. That my name will not be used in the thesis that will eventually be written.

3. That the information gathered will be confidential and will only be used for the purposes of the above study and other related academic presentations.

4. That I will not be subjected to any harm or danger in the course of or as result this research.

5. That there are no monetary gains attached to participation in the research.

6. That participation in the research is voluntary and I am free to drop out in case I am uncomfortable.

Having read and understood the above I undertake to participate in the indicated research.

Signature…………………………………………………… Date ………………………………………...
APPENDIX J: PARENTS/GUARDIANS CONSENT FORM

PARENTS/GUARDIANS CONSENT FORM (to be signed by the parent/guardian/teacher on behalf of pupils as they are minors)

I am doing a study on The Quality of Education provided by the Non-formal primary schools in Nairobi, Kenya for my PhD in the School of Education, Kenyatta University. To facilitate this research I require participation of and information from the head teacher, teachers who teach class seven and pupils in this school. This form is to request for you on behalf of your son/daughter/student to be participant in the study. The form provides important information related to the study to help you make an informed decision.

(NAME)

I understand the following:
1. That the research “The Quality of Education provided by the Non-formal primary schools in Nairobi, Kenya is for the purposes of pursuing PhD in the School of Education, Kenyatta University.
2. That my son’s/daughter’s/students’ name will not be used in the thesis that will eventually be written.
3. That the information gathered will be confidential and will only be used for the purposes of the above study and other related academic presentations.
4. That my son/daughter/student will not be subjected to any harm or danger in the course of or as result this research.
5. That there are no monetary gains attached to participation in the research.
6. That participation in the research is voluntary and my son/daughter/students is free to drop out in case I am uncomfortable.

Having read and understood the above I hereby give consent for my son/daughter/student to participate in the indicated research.

Signature…………………………………………………………Date……………………