TEACHERS' PERCEPTIONS ON HOW SELECTED SCHOOL FACTORS AFFECT LEARNING IN PRE-SCHOOLS IN MERU SOUTH DISTRICT, THARAKA NITHI COUNTY, KENYA

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DECLARATION AND APPROVAL

Declaration

This Research project is my original work and r	has not been presented to any othe
University for award of a diploma or conferment of	a degree.
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Approval	
This Research project has been presented for examin supervisor.	nation with my approval as University
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DEDICATION

With love and affection this work is dedicated to my beloved husband Pharles Gitaari, children Kelvin Mwenda, Martin Muthure and Sicily Kathomi.

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I am indeed grateful to the Almighty for providing me with the opportunity and good health throughout this tedious undertaking of my studies

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ABBREVIATIONS AND ACRONYMS

ADEA Association for Development of Education in Africa

DEO District Education Officer

ECDE Early Childhood Development Education

ECE Early Childhood Education

FPE Free Primary Education

GoK Government of Kenya

KEMACA Kenya Education Management Capacity Assessment

KEMI Kenya Education Management Institute

KIE Kenya Institute of Education

MOE Ministry of Education

P1 Primary Teacher 1

P2 Primary Teacher 2

QASO Quality Assurance and Standards Officer

S1 Secondary Teacher 1

SSA Sub-Saharan Africa

TSC Teacher Service Commission

UNESCO United Nations Educational Scientific and Cultural Organization

ABSTRACT

The objective of early childhood program is to build a strong foundation for cognitive, socio-emotional and health development through learning that will enable children to maximize their learning potential upon entering primary school. However, concerns have been raised regarding the learning in public early childhood centres in Kenya. The goal of this study was to determine teachers' perceptions on how selected school factors affect learning in early childhood centres. The study utilized descriptive survey research design. A sample of 79 ECE teachers was selected using stratified sampling. Questionnaires and interview schedule were used to collect data. The quantitative data collected was analyzed using the SPSS programme, while qualitative data was analyzed thematically. The study established that the teachers perceived that staffing in public early childhood centres was low and that supervision of learning by head teachers was inadequate. The study further found that the learning resources were inadequate including the learning facilities for both indoor and outdoor environment. All these perceptions had a negative influence to learning outcomes. This study concludes that teachers held mixed reactions on how staffing, supervision, resources and learning environment affected learning in ECE. This study makes a raft of recommendations among which includes training of all head teachers to be effective institutional managers. This will make them learn more on supervisory roles. All the stakeholders should co-operate in provision of learning materials such as textbooks, toys, charts, and other teaching aids. School infrastructure should be improved, especially classrooms, desks and teaching/learning material; there is need for fair distribution and utilization of available resources so that all schools in need are adequately catered for and the government to provide enough funds so that schools can meet other challenges; and employing more qualified teaching personnel in order to deal with the problem of high pupil-teacher ratio.

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction

This chapter presents background to study problem, statement of the problem and the purpose of the study. The chapter also provides objectives of the study, research questions and significance of the study. Included in this chapter are limitations and delimitations of the study as well as operational definition of terms.

1.2 Background to Study Problem

Formal schooling is one of several important contributors to the skills and development of an individual and to human capital. The distribution of personal incomes in society is strongly related to the amount of education people have (UNESCO, 2004). Education instills in the young crucial humanitarian values such as equity, tolerance and peace; promotes sustainable development, environmental protection, improvement in maternal and child health and participation in democratic social and political processes; and directly contributes to national economic growth (Serbessa, 2005). Access to good-quality schooling is, of central importance to national development.

Due to the importance placed on education by governments around the world, many countries, Kenya included, have invested heavily on Early Childhood Development and Education (ECE) (Bishop, 1989). The Kenyan government envisages enhanced quality of education especially in ECE (Government of Kenya, 2005). While the investments in education have been quite successful at expanding enrollments in education, for any given level of efficiency, increased enrollments require increased resources, in order to maintain quality of learning (Verspoor, 2008). If these resources are not forthcoming, the increase in educational quantity may come at the expense quality (Duraisamy, James, Lane and Tan, 1997). Increasing the quantity dimensions of education is of little value if the quality dimensions are ignored. Verspoor (2008) argues that the most important concern involves the relevance of program content for the effective preparation of young people for participation in an economy and society certain to see dramatic change over

the next decades. Verspoor (2008) argues that there are concerns on the quality of instruction, learning environment in schools and the level of learning achievement. Learning can be influenced by many factors but this study will focus on staffing, supervision, resources and environment as they are considered to be the most critical in early childhood learning environment.

Edmonds (1981), Kirk and Jones (2004), Daggett (2005), and Lezotte (2010), in their studies conducted in developed countries, have established that learningtakes place in what they refer to as 'effective schools', usually characterized by: strong instructional leadership, clear and focused mission, safe and having climate of high expectations for success, frequent monitoring of learner progress, positive home-school relations, and opportunity to learn. Lezotte (2010) argued that these correlates of effective schools are powerful indicators of successful places where all children learn, regardless of socioeconomic status or ethnicity. This study will seek to establish how staffing, resources, environment and supervision will affect learning in public early childhood learning centres in MeruSouth District.

Verspoor (2008) conducted a study to determine the conditions and factors of effective schools in sub-Saharan Africa (SSA). Verspoor's (2008) findings indicated that schools associated with quality teaching and learning are characterized by emphasis on classroom factors such as time, grouping procedures, and instructional strategies; emphasis on school factors such as leadership, academic achievement, and staff development; focus on system factors like vision, standards, resources, relevant curriculum, and incentives to provide direction, and community factors such as home environment; and emphasis community support for education to ensure local relevance and ownership. The Association for the Development of Education in Africa (ADEA) noted that improvements in education quality and better learning achievements of learners in SSA will be determined in classrooms by motivated teachers who have the skills and resources to respond effectively to learner's needs (ADEA, 2006).

In Kenya, concerns have been raised about learning in public primary schools and early childhood learning centre since the commencement of Free Primary Education (FPE) in

2003 (UNESCO, 2005; Sifuna, 2004) and introduction of community support grant that was aimed at improving learning in ECE. After the introduction of FPE, headteachers in many schools found themselves being faced with many challenges such as increased enrolment, limited resources, understaffing, learning environment and inadequate supervisory time hence compromising Learning (Ng'ethe, 2004). While there is a consensus that FPE coupled with community support grant are appropriate policies in addressing the problem of declining primary school access in Kenya, a serious concern has been raised on the effects these may have on quality of education (Swamura and Sifuna, 2008; Chuck, 2009; Oketch and Somerset, 2010; Shimada, 2010). Of major concern to this study are the factors that may impede learning in early childhood learning environment.

In Meru South District concerns have been raised by stakeholders regarding learning in early childhood and Public Primary Schools; with those in secondary schools complaining about poor performance displayed by students admitted from primary schools in the same district. Literature available indicates that most studies focusing on factors affecting learning have been conducted in secondary and higher institutions of learning. The factors associated with learning which leads to poor performance in primary schools and particularly in early childhood have not adequately been addressed. Data obtained from Kenya National Examination Council revealed that the average national KCPE mean over the last five years was 254 marks while that of Meru South District was 232 marks. This shows that pupils in Meru South District lag behind in academic achievement. This suggests that solutions to the problem of poor performance by learners in public primary schools in Meru South District probably lie in learning in early childhood. This is especially critical when research in other countries of the world indicates that high quality early childhood learning leads to good academic achievement and is a vital foundation for future learning at higher levels. This study will therefore focus on establishing the extent to which teachers' perceptions on how selected school factors affects learning in early childhood centres in Meru South District, TharakaNithi County, Kenya.

1.3 Statement of the Problem

Although access to early childhood education in Kenya has been increasing, concerns have been raised on learning. Mwita (2010) has established that the quality of education in most public early childhood learning centres is low. Despite efforts by the government to improve learning in public early childhood centres through strategies like community support grant, learning environments in most of them remain poor compared to that in private primary schools. In Meru South District concerns have been raised by parents and other stakeholders regarding learning in early childhood and public primary schools. Teachers in secondary schools complain about poor academic achievement by students admitted from public primary schools in the same district. The factors associated with learning which leads to poor performance in primary schools and particularly in early childhood have not adequately been addressed. Research by Akanga, and Osengo, 2011; Dean, 2010; Kipchumba, 2011) dealt with factors such external causes, language barriers and learning disabilities. However, very critical factors such as staffing, supervision, resources and learning environment have inadequately been explored at the ECE level. There is need therefore to investigate teachers' perceptions on how these selected school factors affects learning in early childhood learning centre sin Meru South District. Learning can be influenced by many factors but this study will focus on staffing, supervision, resources and environment as they are considered to be the most critical in early childhood learning context.

1.4 Purpose of the Study

The purpose of this study was to determine whether teachers' perceptions on staffing, supervision, resources and learning environment affect learning in early childhood learning centres in Meru South District, Tharaka Nithi County, Kenya.

1.5 Objectives of the Study

The study was guided by the following objectives:

- i) To establish how teachers perceptions on staffing affects learning in early childhood centres.
- ii) To determine how teachers perceptions on supervision affects learning in early childhood centres.

- iii) To find out teachers perceptions about how learning resources affect learning in early childhood centres.
- iv) To find out teachers perceptions about how learning environment affect learning in early childhood centres.

1.6 Research Questions

The study sought to answer the following research questions:

- i) Does teachers' perceptions on staffing affect learning in early childhood centres?
- ii) How do the teachers' perceptions about staff supervision affect learning in early childhood centres?
- iii) How does teachers' perception regarding use of learning resources affect learning in early childhood centers?
- iv) How do teachers' perceptions regarding learning environment affect learning in early childhood centres?

1.7 Significance of the Study

The findings and recommendations of this study are important to several stakeholders including: the government, Ministry of Education, school administrators, teachers, children and the community. To the government, the study provided data on how early childhood education is being implemented at the school level and unearth the factors that could compromise quality of Early Childhood Education at this level. This will assist the government through the Ministry of Education to come up with the strategies needed to ensure effective implementation of quality early childhood education in Kenya. The study will also provide valuable data to head teachers and teachers on the influence of various school-based factors on quality of Early Childhood Education. Such factors include teaching/learning resources, qualifications of teachers, teacher-pupil ratio and financial management issues. By identifying the effects of such factors, the researcher will be in a position to recommend measures that head teachers and teachers could consider in order to cope with the problems, thereby improving quality of early childhood education as this is foundation for future learning. The parents, school administration and school management committees may use the study findings to design strategies for improving learning in early child hood centres. When quality of education improves,

children perform well and transit well to primary education, secondary, tertiary and other levels, leading to economic and social benefits at the personal and community level. The study will also add to the body of knowledge on learning in public primary schools where most public early childhood classes are mainstreamed. The study will also fill gaps in research and could prompt other researchers to do similar studies in other regions or levels of education.

1.8 Limitations of the Study

One of the limitations of this study is that respondents may have shielded important information for fear of victimisation. In this, the respondents were explained the reason for the anonymous questionnaires, and that nobody would trace the answers they gave. Also, teachers' biases on perceptions of the effect of the factors under investigation may have influenced the findings of the study. This was overcome by use of a different set of instruments (interview guide) to reinforce the responses.

1.9 Delimitations of the Study

This study was conducted in Meru South District. Head teachers, ECE teachers, and ECE officers will be the target for the study. The study focused on how teachers' perceptions on selected school factors affect learning in public early childhood centres. The specific aspects that the study focused on are staffing, resources, supervision and environment by evaluating how they affect learning in public early childhood centres.

1.10 Assumption of the Study

This study assumed that the sample represented the target population and that the respondents were willing to answer the questions put to them truthfully and on time.

1.10 Operational Definition of Terms

Affect: to have an influence on or effect a change in learning in

early childhood centres.

Education: refers to all circumstances leading to the development and

growth of students' intellectual, social, moral and physical

well-being.

Effects: consequences that school selected factors have on the

quality of learning.

Learning environment: refers to the internal and external circumstances and

influences surrounding and affecting pupils' learning.

Learning resources: refer to materials used by pupils in a school for learning

purposes, including textbooks, exercise books, pens, chalk,

classrooms and furniture.

Learning: refers to the ways in which a school provides pupils with

the best possible opportunity to enable them perform well.

Perceptions: feelings of teachers regarding how some school factors

affect learning.

Selected factors: refers to staffing, supervision, resources and learning

environment.

Staffing: refers to the number of teachers in a school in relation to

the number of pupils (teacher-pupils ration), and the

academic qualifications of the teachers.

Supervision: refers to the assistance offered by school administrators for

the improvement of instruction. It comprises guiding, directing, coordinating, advising, evaluating, supporting the work of teachers and providing a pleasant, stimulating

environment in which teachers will want to work and feel

invironment in which teachers will want to w

secure.

1.11 Organization of the Study

The study comprised five chapters. Chapter one, introduction, consists of background to the study, statement of the problem, purpose of the study, objectives and Research questions, significance, limitations, delimitations, basic assumptions and definition of key terms. Chapter two comprises literature review theoretical and conceptual framework. Chapter three deals with the research methodology that comprises the research design, population, sample and sampling procedure, validity and reliability, procedure for data collection and data analysis. Chapter four will present data analysis and discussion of the study findings. Chapter five will deal with the summary, conclusion and recommendations for further research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter provides a review of the related literature under the following subheadings: role of the school in learning, selected school factors namely staffing, supervision, learning resources and environment that influence learning. Finally it sums up with theoretical and conceptual framework.

2.1 Role of the School in Learning

One question that has preoccupied researchers for decades is why some public schools consistently perform well in examinations while others perform poorly. A number of researchers, Edmonds (1981), Scheerens and Bosker (1997), Lezotte, Skaife and Holstead (2002), (Kirk and Jones, 2004), and Daggett (2005) have demonstrated that successful schools have unique characteristics and processes, which help all children learn. Many studies have therefore been carried out to determine what accounts for improved academic outcomes. Academic performance is a key concern for educational researchers because failure in the national examinations spells doom for the pupils whose life becomes uncertain and full of despair (Nyagosia, 2011).

Researchers have shown that public schools require strong instructional leadership to offer quality teaching and learning (Lydiah and Nasongo, 2009; Lezotte, 2010). The core role of the instructional leader is to ensure the achievement of the established mission by creating a good environment for the schools (Lezotte, 2010). Such schools, which are referred to as effective schools, are also characterized by a clearly articulated school mission through which the staff shares an understanding of and commitment to instructional goals, priorities, assessment procedures, and accountability. A study conducted by Kenya Education Management Capacity Assessment (KEMACA, 2008) established that 27% of Kenyan schools did not engage in strategic planning. In addition, of those who claimed they did, only 49% were able to produce the strategic plans. KEMACA (2008) concluded that, mission and vision statements for Kenyan schools tend to be rather general and not sufficiently focused on outputs and outcomes.

According to Lezotte (2010), in an effective school there is an orderly, purposeful, business-like atmosphere, which is free from the threat of physical harm. In such schools, there is a climate of high expectations in which the staff believes and demonstrates that all pupils can obtain mastery of the school's essential curriculum. In high performing schools, pupils are given challenging curricula and demanding tasks, and they are expected to succeed, and each child possess a unique gift to offer to society. Provision of adequate learning materials and time are also necessary for effective instruction. Consideration should always be given between the instruction materials and the limited time for effective teaching (Lezotte, 2010).

In the effective school, progress of pupils on the essential objectives are frequently monitored and the results of those assessments are used to improve the individual pupil's behaviours and performances, as well as to improve the curriculum as a whole (Lezotte, 2010). Learning is also improved when there are strong relationships between the school and the community. Henderson and Berla (2004) argue that the most accurate predictor of a pupil's achievement in school is not income or social status, but the extent to which that pupil's family is able to: create a home environment that encourages learning; express high expectations for their children's achievement and future careers; and become involved in their children's education at school and in the community.

2.3 Teachers perceptions on how selected school factors affect learning

This section reviews literature on the factors that influence learning in public primary schools. The factors considered are staffing, supervision, learning resources and environment.

2.3.1 Staffing in ECE Centres

Teachers are important stakeholders in the school. They form a fundamental resource in an educational organization. The professional role of a teacher is a demanding one and stretches from classroom teaching, curriculum development, examination processing pedagogical material preparation and evaluation, to modelling the behaviour of the students and acting as role models to the society (Okumbe, 2001). The issue of staffing in public early childhood learning centres in Kenya has received less attention by the government yet it falls within the framework of basic education. Very few public primary

schools have adequate trained early childhood teachers. This may influence learning negatively and requires to be investigated.

Bishop (1989) observes that rapid increase in school enrolment has resulted in large classes especially at the lower primary level. This has given rise to overcrowding which in turn can give rise to low pupil performance and less than desirable teaching. The average pupil/teacher ratio in primary schools, in Swaziland for example is 38 to 1. Having such large classes can be detrimental to the quality of teaching especially if the teacher is unqualified or poorly qualified (Bishop, 1989). Olembo and Ross (1992) indicated that the number of public early childhood centres in Kenya was 13,400 with the ratio of teachers to pupils of about 1:50 which was higher than that recommended by UNESCO of 1:36. According to MoE (2011) there are about 40% early childhood trained teachers in Meru South District. There is need to investigate teachers perceptions on the effect of staffing on learning.

Researchers such as Ng'ethe (2004) and Asyago (2005) reported that leaders had expressed dissatisfaction with the employment of teachersto implement early childhood programme because the government had failed to hire enough teachers to cope with the increasing enrolment of pupils in primary schools thus making it difficult for them to offer quality education.

The Ministry of Education recommended multi-grade and multi-shift mode of delivery to cope with over enrolled classes and understaffed schools. It is obvious that most primary school teachers do not have skills for multi-shift and multi-grade teaching as well as skills to handle the early childhood curriculum. The curriculum requires that children be taught using thematic integrated approach which majority of the teachers who underwent P1 training have no knowledge of (Ong'ong'a, 2007). This study will examine the perceptions of teachers regarding how staffing affects learning.

2.3.2 Supervision in ECE centres

The monitoring of teaching-learning process involves school administration and education field officers carrying out assessment of curriculum instruction, subject content delivery as well as curriculum exercise which is aimed at evaluating teachers'

performance in curriculum delivery. Given the potential crowding-out of bottom-up monitoring, top-down monitoring and supervision by the Ministry of Education and its subsidiaries are more important (Minutes, 2009). There is evidence that school inspections are effective in improving educational quality (Bold, Kimenyi, Mwabua and Sandefur, 2009). First, the likelihood of an inspection is sensitive to the performance of the school. Districts with below average test scores have almost 10% more inspections than districts with above average test scores. Second, following an inspection, schools tend to improve (Bold, et al, 2009). Districts with a high percentage of inspections see their test scores increase by an average of 3 points compared with districts with a low percentage of inspections (Bold, et al, 2009).

Following the introduction of FPE, there has been some concern that centralized funding and monitoring has undermined local accountability and ownership (Adam, Ndung'u and Kimenyi, 2009). It has been evident that high levels of community fund-raising, local monitoring and incentive provision in (building and maintaining school facilities, and providing text books and stationery) prior to the introduction of FPE are indeed associated with persistently better performance in examinations (UNESCO, 2005).

There are claims of lack of adequate time for monitoring and evaluation of curriculum instruction in the primary education sector especially after the inception of FPE policy. Monitoring and evaluation of the MOE programs enable QASO's to take stock of levels of curriculum implementation and achievements attained. It also entails ensuring quality teaching-learning materials and school environment. Due to inadequate QASOs some schools go through 3 year cycles without any field officer(s) visiting them; hence there is no monitoring and evaluation of curriculum implementation in such schools (UNESCO, 2005). With change in education as seen in FPE there is need to constantly inspect and supervise teachers and also offer in-service courses. Bishop (1989) observes that without adequate supervision and administrative staff to keep pace with a rapidly expanding education system it is not possible to maintain satisfactory standards.

The Quality Assurance unit of the Ministry of Education is charged with the maintenance and provision of quality education in Kenya. Its roles in curriculum development and implementation are: assisting in gathering of information for needs assessment, supervision of ECE curriculum implementation to ascertain that high quality standards are maintained. Preparing, developing and approving of syllabus and curriculum support materials, in collaboration with Kenya Institute of Education (KIE), organizing in-service course for curriculum implementers, teacher education administration and field officers, participating in vetting committees that scrutinize and recommend textbooks and other support materials to be used in curriculum implementation and assessing teacher trainees during their final teaching practice (Shiundu and Omulando, 1992).

The Quality Assurance unit faces some problems such as inadequate school based supervision of curriculum instruction. There has been inadequate or no supervision of curriculum instruction, learning resources and environment since the inception of early childhood programmes in Kenya. Most early childhood learning centres are run in deplorable conditions, thus compromise quality. This is due to inadequate quality assurance staff and means of transport. The government has only provided one or two vehicles to the district education officer and it cannot serve all education purposes in the district plus the schools' instructions inspection because of their diversity in most districts in the country (Nyabuto, 2008). Lack of action research on teaching and learning methodologies to improve education standards and performance may lower performance in national examinations.

Inadequate means of transport to schools has led to inadequate visits escalating numbers of public primary schools that house early child hood centres. Due to lack of vehicles to travel to various schools most of the curriculum instructional supervision is not done. The QASOs rely on the DEOs' lone vehicle to visit over 300 schools in some districts. Otherwise the monitoring process relies on the heads' supervision which may be inadequate in cases where the head teachers are not thorough in their supervisory work (UNESCO, 2005). Inadequate support by head teachers and teachers may derail the progress of curriculum instruction monitoring hence negatively affecting children's

academic performance. In most of the schools teachers and head teachers feel that the QASO's work is not to evaluate performance but to intimidate them. They are not happy to be supervised because they think their mistakes could be used to victimize them which are a major challenge to pupils' improvement in academic performance (Abiero, 2009).

A study by Eisemon, Schwille, Prouty, Ukobizoba, Kana and Manirabona (1993) in Burundi demonstrated that the most powerful feature of learning has to do with school management in terms of school director visits, the direct effects of visits on learning outcomes as well as the indirect effects through teacher punctuality. A study by Harber (1993) established that low performing schools in Tanzania were characterized by high teacher-pupil ratio which led to teachers being overworked and high rates of indiscipline among learners as a result of inadequate supervision. The effects of supervision on learning in early childhood centres are the primary focus of this study.

2.3.3 Learning Resources in ECE centres

A study by Mbaabu (1983) revealed that lack of physical facilities, materials, equipment and tools was the major intra-organizational problem that headteachers were faced with in Kenya. The study found out that due to increased number of children the primary schools were not enough and therefore those in existence were congested. In most schools classes had over fifty children. Ng'ethe (2004) also found out that one of the major constraints that face quality of education was overcrowding in classrooms. Most programmes of instruction and pupil service require some physical facilities including school buildings, grounds and equipment (Olembo, Wanga andKaragu, 1992). Olembo and Ross (1992) further pointed out that Kenya educational system suffered from inadequate facilities and therefore required proper facilities to satisfy the needs of the expansions that were taking place.

Mbugua (1987) observed that one of the duties of a primary school headteacheris to develop the school's physical facilities. Mbugua argued that in dealing with physical facilities a headteacher has to bear in mind where to house the educational programme, the population to be served by the facility, and ensure that financial resources are readily available for the school expansion. When primary education was declared free, schools

initially encountered a multitude of problems with pupil enrolment rising sharply. The problems mainly hinged on acute shortage of physical facilities and equipment which were sparsely distributed.

Motuka(1999) found that the major problem facing primary schools was lack of school facilities. Individual parents of school going children struggle to finance these facilities but with less success. In 1978 the government directed that all public primary schools form Parents' Association (Republic of Kenya, 1988) to raise funds for the facilities collectively. The decree transferred the burden of paying for school construction costs from families of school going children to the entire local communities. Thus, instead of the schools depending entirely on families of the school going children to pay levies for running the school affairs, communities play a key role in raising funds for their local public primary schools (Motuka, 1999).

The change from 7-4-2-3 to 8-4-4 education system in Kenya requires extra educational facilities in schools. The 8-4-4 system of education required many text books and other physical facilities that were mostly non-existent in most public primary schools since inception in 1985. On 8-4-4 education system, Inyiera (1997) observed that the resources and facilities that a school would need for the achievement of school's mission are qualified teaching staff, physical facilities, textbooks, laboratories, library, furniture, stores and enough play grounds. These facilities are especially important for learning at the early childhood level. This study aims at finding out whether availability of resources has effects on learning in early childhood centres in Meru South District.

The government introduced community support grant to enable primary schools to increase physical and learning resources in early childhood programmes. Despite these efforts, school facilities have not been adequate. Motuka (1999) found that efforts by parents, community and individual schools to mobilize resources through fundraisings had not raised enough funds for the provision of adequate educational facilities in Rigoma Division of Nyamira District.

Koech Report (Republic of Kenya, 1999) received views from the members of the public to the effect that the standards of education at the primary school segment had deteriorated. The falling standards were attributed to various problems, which included inadequate and unsustainable physical facilities, materials and equipment, inappropriately trained teachers and overloaded curriculum.

Olembo, Wanga and Karagu (1992) contend that the headmaster must ensure that all the physical facilities in the school are available and well maintained. Such facilities include classrooms, offices, stores, laboratories, workshops, staff houses, dormitories, sanitation and health units, dining halls and so on. For the headmaster to repair existing facilities or create new ones according to the needs of the school, she/he must make plans ahead of time.

Inyiera (1997) found out that primary schools which had large number of pupils faced a problem of insufficient educational facilities, equipment and supplies leading to over-use of some of the facilities that were available in schools. He noted that in this area, the headteachers were likely to face a constraint in organizing pupils to utilize the limited facilities, equipment and school supplies. This in turn is bound to affect coordination of instructional processes in schools leading to poor achievement of the curriculum objectives by pupils, teachers and other stakeholders. It is against this background that this research seeks to find out the teachers perceptions on how resources affect learning in Early Childhood Development and Education in Meru South District.

2.3.4 Learning Environment in ECE Centres

Studies by Earthman (2004) Fisher (2000) and McGregor (2004) concluded that the quality of the physical environment significantly affects student achievement. The learning environment in which students spend a good deal of their time learning does influence how well they learn (Earthman, 2004). For instance, Fisher (2000) and McGregor (2004) reported that desirable early childhood learning environments should be friendly, safe and stimulating.

McGowen (2007) found that student achievement, attendance and completion rate measures were not statistically significant in relation to school facility conditions. Secondly, discipline was found to be significantly related to the total learning environment. This indicates that the subsections of the total learning environment assessment could be used to predict discipline factors for schools in the study population. Third, teacher turnover rate was found to be related to the total learning environment assessment subsections of specialized learning space and support space, with the correlation to support space being indirect.

According to the Design Council Report of 2005 on the effects of learning environments on students' achievement, engagement, affective state, attendance and well-being, there is clear evidence that extremes of environmental elements (for example, poor ventilation or excessive noise) have negative effects on students and teachers and that improving these elements has significant benefits. However, once school environments come up to minimum standards, the evidence of effect is less clear-cut. The evaluation suggests that the nature of the improvements made in schools may have less to do with the specific element chosen for change than with how the process of change is managed. There is strong evidence for the effect of basic physical variables (air quality, temperature, noise) on learning. Some physical elements in the classroom improve comfort, well-being and probably attitude and so, perhaps, improve achievement.

Play is a pivotal part of a child's life. It fosters creativity, imagination, social connections, and learned behaviors. Play is the activity which can be defined as a range of voluntary, intrinsically motivated activities that are normally associated with pleasure and enjoyment. Play can also be considered a rehearsal for acting-out real life events. For children, play is a critical element of growing- up. Play is essential for helping children reach important social, emotional, and cognitive developmental milestones as well as helping them manage stress and become resilient. Marianne (2009) contends that children's outdoor play environments facilitate play. Marianne further states that not only is play important for brain development, but also helps children develop flexible and

divergent thinking which then provides them with the ability to solve real world problems. The skills are critical in enhancing learning in early childhood.

Fojortoft and Sageie's (2000) research on the natural environment as a playground for children in Norway identified three types of play each of which contributes to different types of learning. Functional play corresponds to gross-motor and basic skill development. This can be seen in running, climbing, and other physically active play. Construction play occurs when children move and create elements within their playscape. This contributes to creative thinking and problem solving skills. Symbolic play or sociodramatic play is the simple "role playing and fantasy play" which allows children to experiment with social skills for use in future real-life situations. According to this study, the stimulation of inventiveness and creativity, and the possibility of discovery are directly related to the number and the kind of features in the environment. Outdoor environment should have equipment and facilities that promote children's development in gross-motor, acquire creativity and problem solving skills that are also key elements in learning at this level. The physical diversity of the natural landscape has a functional impact on children's behaviour and play performance because it increases the opportunities for creativity, learning, and development" and furthermore outdoor environments offer more of these opportunities because of their diversity. However, most early childhood learning centres lack adequate outdoor learning equipment such as jungle-jims, steel climbers, balance beams, ladders, sand boxes, slides and swings among others to facilitates for children to construct knowledge through manipulation and play, thereby affecting learning.

Youell and Staempfli (2008) claim that indoor 'screen-based' activities cause the "demise of play" because media-centered play doesn't offer the variety of spaces that Fjortoft and Sageie suggest is important for different types of development. With increased use of television, computers and video games, children are more inclined to stay indoors than to go outside and develop connections with nature. The connection made between children and their natural environment teaches life-long lessons that cannot be learned through screen-based activities. Children are experiencing less nature than previous generations.

Exposure to nature is needed for children to develop an environmental identity which encourages environmental consciousness. This exposure could potentially offer stronger physical, emotional and social health. Childhood connection with nature is decreasing from generation to generation as emphasis on book-learning, media entertainment, and increased programed time are becoming more prevalent. This creates a disconnection between children and nature. Proponents of constructivism argue that children learn best through active interaction with the environment and particularly through outdoor play. Sobel (2008) states that experiences in nature are more important than facts and book learning commonly found in classrooms.

It is important to note that while there is a great deal of debate over the best specific location for outdoor play (natural or constructed), experts agree that play and specifically outdoor play is a pivotal part of childhood development. Outdoor play offer children a diversity of environmental stimuli that contributes to increased use of senses, increased health benefits, interactive physical activity, and experimentation with social situations that prepare children for future life experiences. Play is both a developmental and cognitive necessity. Outdoor play offer children a richer and more diverse play environment than indoor and digital play which allow children greater creativity and flexibility in their play.

Educational theorists and practitioners have always recognized the importance of physical space in an early learning environment, with prominent theorists such as Werner, Piaget and Montessori arguing that a child's environment is crucial to their development and that educational environments should be rich in stimuli, providing opportunity for exploration and testing (Moore, 1987).

The design of the physical environment should facilitate a child's sense of competence (their capacity to explore their physical world with independence), creating opportunities for learning and play (Maxwell, 2007). Unfortunately, to date, relatively little research has focused explicitly on the role of the physical environment of early childhood centres and the impact of interior and external space design (Moore and Sugiyama, 2007).

Available literature suggests that three physical environment design dimensions are believed to be most influential in early childhood learning: space fostering exploration, independence and development (a child's sense of self and willingness to play), spatial quality (through space, colour, light, noise and materials), and integration of outdoor and the indoor environment.

Integrating the outdoor and the natural environment is extremely important. Through simple measures such as good solar orientation, energy efficiency through natural day lighting and ventilation, and links between the interior and exterior environments, an early learning centre can have natural, healthy and green qualities (Dudek, 2000). Research has demonstrated that natural play environments seem to be better for children's cognitive and physical development than built play areas. For example, children who play in natural areas engage in more physically demanding play compared to traditional playgrounds (Fjortoft, 2004), whilst those who attended a more natural daycare centre showed better motor skills, increased attention spans and less sick days (Bagot, 2005). To date, however, despite educational theorists and practitioners acknowledging the importance of design of the internal and external physical environment in an early learning environment, relatively little is known about the experiences and views of Kenyan educators and parents.

2.4 Theoretical Framework

The study will be based on the Systems Theory by Ludwig von Bertalanffy of 1950. The theory is used to explain and predict behaviour of the complete organization: its people, structure, environment and technology. According to Schemerhorn (1993) a system is a collection of interrelated parts that function together to achieve a common purpose. Owens (1981) views a school as an open system that receives resources (inputs) from the environment and transforms them into products (outputs). As an open system, the school receives inputs from its environment in form of pupils, finances and raw materials, which it utilizes in order to process and bring out the end products, which are then released back into the larger society. The products or outputs are in this case the successful pre scchoolers and the skills they have attained in school while the environment is the larger society.

Inputs from society are transformed through the educational process to outputs in form of educated graduates who should be absorbed in the job market. A system is composed of sub-systems or sub-units that work together in a division of labour so that the entire organization can achieve its goals. The ultimate goal is for all sub-systems to perform in ways that facilitate high productivity for the whole organization. According to the systems theory, if one sub-system fails, the whole system is put in jeopardy. In this study, the school takes inputs from the society and the government in terms of physical, financial and resources. It manipulates these resources through learning process and releases outputs in form of quality graduates transitioning from lower to upper primary and to secondary schools. The theory is relevant to this study because it is conceptualized that schools need to have adequate inputs in terms of staff and resources in order to realize optimal learning outputs. This theory has been used in this study because learning in early childhood centres is influenced by staffing, supervision, resources and the quality of learning environment.

2.5 Conceptual Framework

A conceptual framework that captures the variables to guide the study is shown in figure 2.1.

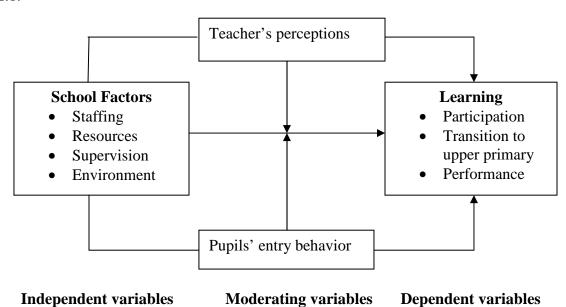


Figure 2.1: Teacher's perceptions on how selected school factors affect learning

The independent variables are the selected factors that could influence learning. These include staffing, resources, supervision and environment. Staffing is measured in terms of the teacher-pupils ratio. Learning resources like text books, learning materials, class rooms and latrines will be measured in terms of their adequacy in relation to the number of children in early childhood learning centres. Supervision will be measured in the number of times teachers get assessed while teaching, evaluating learners, lesson planning and classroom discipline determine the quality of education they offer to children. The dependent variable which is learning will be measured through children participating in different activity areas and the successful transition to other levels of primary education. Moderating variables are government policy and pupils' entry behaviour.

2.6 Conclusion

The literature reviewed in this chapter indicates different factors affecting the learning in pre schools. Most of the reviewed literature is based on different parts of the globe. Missing, is the literature based in Kenya, and especially on the perceptions of the teachers on the factors that affect learning in ECE centres, and therefore, this study aims at filling the gaps in the literature.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology that was used in the study. The chapter covers research design, the study location, the target population, sampling procedures and sample size, research instruments, validity and reliability, data collection procedures and data analysis.

3.2 Research Design

The study employed the descriptive survey research design to find out teachers perceptions on how selected school factors affect learning in early childhood centres in MeruSouth District. According to Gay (1992) a survey is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables. Survey studies are conducted to collect detailed descriptions of existing phenomena with the intention of employing data to justify current conditions and practices or to make more intelligent plans for improving them (Lockesh, 1984). The descriptive survey design was relevant to this study because it enabled the researcher to describe the state of affairs in schools by collecting data without manipulating variables.

3.3 Target Population

The target population for this study was 90 head teachers, 120 ECE teachers and 6 ECE officers in Meru South District total to 216 respondents (District Education Office – Meru South District 2012).

3.4 Sample and Sampling Procedure

Orodho (2001) defines a sample as part of large population, which is supposed to be a representation of the larger population. Sampling is a process of selecting a number of individuals or objects from a population such that the selected group contains representatives of characteristics found in the entire group. A number of scholars have suggested various ways of arriving at a representative sample size. It is generally agreed that the larger the sample, the smaller the error (Kosomo, 2006). Mugenda and Mugenda (2003) articulate that the sample size must be large enough to represent salient

characteristics of the target population. Kathuri and Pals (1993), state that the acceptable sample size of 136 can be drawn from a population of 216. However, Kombo and Tromp (2006) assert that with relatively small, clearly defined population, a sample size of at least 30% of the target population would be representative. The respective subgroups within the population vary in size. Wadsworth (2005) recommends the use of proportionate sampling when the subgroups vary dramatically in size in a population hence be able to obtain a representative sample from each sub category the researcher employed proportionate sampling techniques. Wadsworth (2005) further notes that proportionate sampling strategies begin by stratifying the population into relevant subgroups and then random sampling from each sub group. The target population was distributed as shown on Table 3.1.

Table 3.1: Distribution of the Target Population

Zone	Number of head teachers in the target population	Number of ECE teachers in the target population	
Kiang'ondu/Karingani	15	41	
Mugwe/Kithangani	19	20	
Mwonge/Rubate	13	27	
Magumoni	12	26	
Kajuki/Mutino	18	20	
Kamwimbi	13	16	
Total	90	150	

Source: DEOs office Meru South District (2011)

Stratified sampling was used to obtain proportionate samples of head teachers and ECE teachers utilizing 30% representation of the target (Kombo and Tromp 2006). The rationale for stratifying the population is to obtain proportionate samples according to the geographical areas that the schools exist. Head teachers were targeted because they were deemed more appropriate to provide the information required since they are mandated to enhance quality in the learning institution. ECE teachers were considered key informants as they are responsible for implementing the curriculum. Through stratification and simple random sampling, 5 head teachers from Kiang'ondu/Karingani zone, 6 from Mugwe/Kithangani, 4 from Mwonge/Rubate, 4 from Magumoni, 5 from Kajuki/Mutino and 4 from Kamwimbi zone were sampled to participate in the study. This brought the

head teachers sample size to 28 subjects. A similar sampling strategy was used to obtain a sample size of 150 ECE teachers as follows: 41 from Kiang'ondu/Karingani zone, 20 from Mugwe/Kithangani zone, 27 fromMwonge/Rubate zone, 26 fromMagumoni zone, 20 from Kajuki/Mutino zone and 16 fromKamwimbi zone. The ECE officers were purposively selected as they are charged with the responsibility of ensuring that there is quality education at this level. The study purposively selected 1 ECE officer from each of the 6 education zones in Meru South district to participate in the study. Table 3.2 shows the distribution of the sample size.

Table 3.2: Distribution of Sample Size

Category	Total population	Sampling procedure	Sample	% sample representation
Head teachers	90	Simple random	28	30
ECE teachers	150	Simple random	45	30
ECE officers	6	Purposive	6	100
Total	246		79	

3.5 Research Instruments

Questionnaires and interview schedules were used for data collection. Questionnaires were used to gather data from the ECE teachers and head teachers while interview schedules were used to collect information from ECE officers.

3.5.1 Questionnaire for Head teachers and ECE teachers

This questionnaire contained five sections. Section A collected background information. Section B contained items regarding the effects of staffing on learning. Section C collected data related to the effects of supervision on learning. Section D collected data related to the effects of learning resources on learning while section E collected data regarding the effects of learning environment on learning in public ECE centres in Meru South District.

3.5.2 Interview Schedule for ECE Officers

An interview schedule was used to guide face-to-face interviews with the ECE officers. The interview schedule contained structured items that captured information on the teachers' perceptions on how staffing, supervision, learning resources and environment affect learning in public ECE centres.

3.6 Validity and Reliability of the Instrument

According to Borg and Gall (1986) validity is the degree to which a test measures what it purports to measure. To validate the research instrument the questionnaire were tested in five pilot schools that were not involved in the study. Content validity is a measure of the degree to which data collected using a particular instrument represents a specific domain or content of a particular consent. To assess content validity, the researcher consulted the supervisors since they are experts and professionals in the field. The pilot study assisted in identifying the problems that respondents encounter in the process of answering the questions. From the piloted questionnaires ambiguous items were modified to make them clearer. The respondents from the pilot study were found to fear victimization, as a result of the responses they give, however the researcher explained to them the reason for the use of the anonymous questionnaires.

Reliability is a measure of the degree to which a research instrument yields consistent results after repeated trials (Mugenda and Mugenda, 2003). Prior to the data collection, instrument piloting was conducted in five schools that were not included in the study. This involved administering the instrument only once to a sample of ECE teachers, and head teachers. The split- halves method of measuring reliability was used to estimate the degree to which the same results can be obtained within a repeated measure of the same concept. It involved splitting the pilot questionnaire into halves and finding the extent of correspondence or reliability between the halves; i.e. splitting the items in the instrument into two and giving each group half of the items to respond to. Scores from the two groups will then be correlated in order to establish the extent to which the contents of the questionnaires were consistent in eliciting the same responses every time the instrument is administered. The Spearman's rank correlation coefficient (r) was analyzed for the two scores. A correlation coefficient of 0.72 was obtained from the questionnaires. Gay (1992) states that a correlation coefficient of at least 0.7 and above for the two halves is considered high enough to judge the reliability of the instrument. The reason behind pre-

testing is to assess the clarity of the questionnaire items so that those items that were found to be inadequate or vague are discarded or modified.

3.7 Procedure for Data Collection

A permit to carry out the research was obtained from the National Council for Science and Technology. The permit was presented to the District Education Officer to be allowed to visit the schools. The researcher visited and booked appointments with the respondents to administer the questionnaires and collected them immediately after they were satisfactorily attended to. The researcher then visited every zone to interview the ECE officers.

3.8 Data Analysis Procedure

The field data was cleaned by checking for any missing or inaccurate data and correcting it appropriately. After data cleaning, the data was coded and entered in the computer for analysis. Quantitative and qualitative data was analysed using descriptive statistics such as frequency counts and percentages, and themes. Views of the respondents were analysed using Statistical Package for Social Sciences (SPSS) Version 20 for windows in order to find out how teachers perceptions on selected school factors affect learning. The qualitative data was analysed using themes as a way of enhancing quantitative data. The results of data analysis were presented using frequency distribution tables, bar graphs and pie charts according to the study objectives and research questions. Table 3.2 shows a summary of methods of the data analysis.

Table 3.3: Methods of Data Analysis

Research Questions	Independent Variables	Dependent Variables	Analysis Methods
i) Does teachers' perceptions on staffing affect learning in early	Staffing	Learning	Frequencies, Percentages
childhood centres? ii) How do the teachers' perceptions about staff supervision affect learning in early childhood centres?	Supervision	Learning	Frequencies, Percentages
iii) How does teachers' perception regarding use of learning resources affect learning in early childhood centers?	Learning resources	Learning	Frequencies, Percentages
iv) How do teachers' perceptions regarding learning environment affect learning in early childhood centres?	Learning environment	Learning	Frequencies, Percentages

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents a discussion of the research findings on teachers' perceptions on how selected school factors affect learning in public early childhood education centres in Meru South District. The first section of this chapter presents the demographic characteristics of the respondents. This is then followed by a discussion of the findings of the study based on the four specific objectives as follows; teachers perceptions on the, effect of staffing on learning among children, teachers perceptions on the effect of resources on learning among children and effect of environment on children's learning teachers perceptions on the effect of supervision on learning in ECE centres.

4.2 Socio-Demographic Characteristics of the Respondents

This section presents a brief description of the demographic characteristics of the study sample. Such a description is considered to be very important in providing a better understanding of the respondents included in the study and therefore provide a good foundation for a detailed discussion of the results based on the stipulated objectives of the study. The demographic characteristics included gender, academic qualifications, position held and length of service in the current responsibility. The participants for this study included 28 head teachers, 45 ECE teachers and 6 ECE officers.

4.2.1 Gender

The study sought to establish how the sample population was distributed by gender as shown in Table 4.1

Table 4.1: Gender Distribution of Respondents

Category of	M	ale	Female				
respondent	Frequency	Percent	Frequency	Percent			
Head teachers	16	67.0	8	33.0			
ECE Teachers	17	41.0	24	59.0			
ECE officers	4	67.0	2	33.0			
Total	37		34				

According to the findings in Table 4.1, majority (67.0%) of the head teachers respondents were males and 33.0 were females. Of the 41 ECE teachers who took part in this study, 59.0% were females while 41.0% were males. The data captured on Table 4.1 reveals that 67.0% ECE officers that took part in this study were males while 33.0% were females. This implies that there was gender parity among the respondents that took part in this study.

4.2.2 Academic Qualification

The study sought to establish the academic qualification of the Head teachers and Teachers respondents presented in Table 4.2.

Table 4.2: Head teachers and Teachers Academic Qualification

Qualification	Head Tea	chers	Teachers			
	Frequency	%	Frequency	%		
P2	0	0.0	0	0.0		
P1	19	79.0	35	85.0		
S 1	0	0.0	1	2.0		
Diploma in education	0	0.0	0	0.0		
Bachelor degree	5	21.0	5	12.0		
Masters	0	0.0	0	0.0		
Total	24	100.0	41	100.0		

Data on Table 4.2 shows that majority (79.0%) of the head teachers had P1 qualifications while 21.0% had bachelor degree. None of the head teachers had a S1, P2, diploma and masters qualification. According to the ministry of education, the requisite qualification to be appointed as a head teacher in primary schools is a minimum of P1 with at least five years teaching experience. This implies that head teachers who participated in the study were qualified for that responsibility and were expected to carry out their mandate effectively. The findings further reveal that majority (85.0%) of the teachers had also P1 whereas 12.0% had bachelor degree and 2.0% had S1 qualifications. This further implies that most teachers had the recommended qualifications and training to teach in primary schools in Kenya.

4.2.3 Work Experience

The length of time spent in an organisation leads to the development of shared understandings and experiences (Smoley, 1999). Increased tenure in an organization is positively related to effectiveness and performance (Mahoney, 1988). The study sought to establish the number of head teachers and teacher's years of service and the results as shown in Figure 4.1.



Figure 4.1: Work experience

The information in Figure 4.1 shows that majority (40.0%) of the headteachers who participated in this study had a working experience of between 11-15 years, 30.0% had an experience of 5-10 years while 20.0% had worked in headship below 5 years. Fifty five percent of the teachers had an experience of 5-10 years whereas 30.0% had taught for 11-15 years. This implies that all the respondents had taught for a long time (5 years and above) and hence they could be able to give school related factors which influence quality of learning in school. It also emerged that both head teachers and teachers were able to perform their duties effectively since they had adequate teaching experience. In relation to this finding, Borman (1993) and Schmidt (1986) states that work experience improves performance but only indirectly via relevant knowledge and skills because prior work experience provides the opportunity for individuals to acquire relevant knowledge and skills that in turn enhances performance in the teaching and learning process.

4.2.4Position Held in the School

The study sought to establish the position held by the teachers as shown in Table 4.3.

Table 4.3: Position Held in the School

Position	Frequency	Percentage
Head teachers	24	37.0
Deputy head teacher	14	22.0
Senior teacher	0	0.0
Head of subject	0	0.0
Class teacher	27	42.0
Total	65	100.0

The information presented on Table 4.3 shows the positions held by teachers in their school. The information shows that 37.0% were head teachers, 22.0% were deputy head teachers and 42.0% were class teachers. The data shows that senior teachers and heads of subject were not represented in the sample of respondents. The conclusion that can be drawn from this data is that there might be no framework under the Ministry of Education to have senior and head of subject teachers in primary schools.

4.3 Teachers Perceptions on the Effect of Staffing on Learning among Children

The first objective of the study was to establish the impact of staffing on the learning in ECE. Teachers are important in a school as they form a fundamental resource in an educational organization. The professional role of a teacher is a demanding one and stretches from classroom teaching, curriculum development, examination processing and evaluation, material preparation to modelling the behaviour of the students and acting as role models to the society (Okumbe, 2001). Table 4.4 shows the data obtained from preschoolers.

Table 4.4: Teachers' Responses on the Effect of Staffing on Learning

Statement		SA		A		FA		D		SD
	F	%	F	%	F	%	F	%	F	%
There are adequate teachers for all subjects in my school	0	0	0	0	35	54	10	15	20	31
Frequent transfer of teachers has affected learning	45	69	14	22	6	9	0	0	0	0
Teachers have high work load that has compromised education quality	34	52	31	48	0	0	0	0	0	0
Teachers are overwhelmed by large class sizes	0	0	29	45	22	34	14	22	0	0
Some lessons are not taught due to understaffing	35	54	19	29	11	17	0	0	0	0
Teachers are always punctual to attend classes	10	15	15	23	40	62	0	0	0	0
Adequacy of teachers in my school ensures syllabus coverage	0	0	0	0	0	0	42	65	23	35
The school requires more teachers	50	77	15	23	0	0	0	0	0	0

The information in Table 4.4 shows that 54% of the teachers fairly agreed that teachers were adequate, while 69% strongly agreed that there were frequent teacher transfers and this affected learning. There was however agreement by majority (52%) with the statement that teachers in primary schools had high workloads and that (45%) had difficulties dealing with large number of children. Further, most teachers were in agreement that some lessons were left untaught due to shortage of teachers and that teachers were punctual in attending classes. The study also established that there was no adequate syllabus coverage due to understaffing.

The study established a relationship in the teachers' and ECE officers' responses regarding how staffing affects learning in preschools. From the interview, ECE officers indicated that learning in ECE was being compromised by lack of enough teachers resulting to poor syllabus coverage, high teacher workload that makes it hard for teachers to be available to assist learners when needed. The findings further deduced that learning in primary schools was being affected by too much teachers work load, large class sizes, inability to attend to all lessons and teacher shortage. This concurs with the findings of Ng'ethe (2004) and Asyago (2005) who found that the increasing enrolment of children in preschools was making it difficult for teachers to offer quality education.

With regard to the teacher's responses on challenges facing staffing in preschools, the information generated from the head teachers and teachers is presented in Table 4.5

Table 4.5: Teachers Responses on Challenges Facing Staffing in Preschools

Responses	Frequency	Percentage
Serious teacher shortage	36	55.0
Heavy workloads among the few teachers	20	31.0
Employment of form four leavers	7	11.0
Multi grade teaching	2	3.0
Total	65	100.0

The study established that the staffing challenges facing ECE included serious teacher shortage, as indicated by the majority (55.0%), heavy workloads among the few teachers (31.0%), employment of form four leavers 11.0% and multi grade teaching (3.0%). Most of these challenges were also reported by ECE officers interviewed. When asked what the schools were doing to mitigate the problem of staffing, the information that was provided by the head teachers and teachers is shown in Table 4.6.

Table 4.6: Strategies being employed to Address Staffing Problem

Strategies	Frequency	Percentage
Combining classes	2	27.0
Employing temporary teachers through school		
management committee	56	67.0
Some classes left untaught	7	6.0
Total	65	100.0

Data in Table 4.6 shows that schools were coping with teacher shortages by; employing temporary teachers through school committee (67.0%), combining classes (27.0%), leaving some pupils untaught (6.0%). When asked to suggest strategies that could effectively help address the staffing challenges facing primary schools, their information is presented in Table 4.7

Table 4.7: Suggested Strategies to Address the Staffing Challenges

Strategies	Frequency	Percentage
Employment of more teachers by TSC	50	77.0
Ensure balanced distribution of teachers in schools	15	23.0
Total	65	100.0

From the information shown on Table 4.7, 77.0% teachers reported that the most effective remedy to the problem of understaffing in primary schools was to employ more teachers. This is in tandem with Bishop (1989) recommendations that the number of teachers in most schools in developing countries needs to be refurbished in order to enhance quality of learning. Twenty three per cent of the teachers on the other hand said that the problem of staffing could be addressed by ensuring a balanced distribution of teachers in schools.

4.4 Teachers Perceptions on the Effect of Supervision on Learning in ECE Centres

The second objective of the study sought to determine how teachers' perceptions on supervision affect learning in public early childhood centres. Presented in Table 4.8 are results obtained from the teachers responses.

Table 4.8: Effect of Supervision on Learning among children

Statement	- :	SA	${f A}$]	FA	D		SD	
	F	%	F	%	F	%	F	%	F	%
Supervision of time management in the school is ensured	28	43.0	35	54.0	2	3.0	0	0	0	0
Monitoring of lesson attendance by teachers is well expedited	26	40.0	24	37.0	15	2.0	0	0	0	0
The preparation of teaching and learning resources is adequately monitored	10	15.0	0	0	0	0	23	35.0	32	49.0
Professional teaching documents are regularly checked	27	42.0	13	20.0	16	25.0	9	14.0	0	0
There is constant inspection of school facilities	0	0	0	0	6	9.0	33	51.0	26	40.0
Head teacher checks that the syllabuses are adequately covered in time	0	0	0	0	0	0	35	54.0	30	46.0
Evaluation of learning process is done regularly	40	62.0	8	12.0	10	15.0	7	11.0	0	0
The headteacher always checks to see how teaching is being done	0	0	0	0	0	0	51	78.0	14	22.0
Headteacher is never concerned with what goes on in the class	0	0	0	0	0	0	60	92.0	5	8.0

From the above findings, it is clear that majority (54%) of the teachers agreed that supervision of time management in the ECE centres was ensured. Similarly, more than half of the teachers agreed that monitoring of lesson attendance by teachers was well expedited. The study established that about (49.0%) of the teachers strongly disagreed with the sentiment that there was adequate monitoring of the preparation of teaching and learning resources. The findings reveal that professional teaching documents were regularly checked. The findings further showed that inspection of school facilities was not regularly supervised. Head teachers were found not to be adequately checking and supervising syllabus coverage. The study established that the learning process was regularly evaluated but the headteachers did not always check to see how teaching in the

classrooms was being done. The study found that head teachers were however concerned with what goes on in the classrooms. The findings of this study therefore imply that supervision of teachers and pupils' utilization of time was not effectively being done and that head teachers were not checking on how the teaching was being carried out. Mbugua (1987) observed that school head teachers should regularly supervise and monitor the learning process to enhance quality of learning.

Most of the ECE officers felt that supervision of instruction in ECE had an impact on the way learning takes place in these centres. The common challenges that emerged from the teachers and head teachers' responses are captured in Table 4.9.

Table 4.9: Challenges Facing Supervision of Learning among children

Responses	Frequency	Percentage
Lack of commitment by some teachers	23	35.0
Lack of teachers support	14	22.0
Lack of adequate time by head teachers	16	25.0
Lack of adequate trained teachers to discharge		
supervisory role at the ECE level	12	18.0
Total	65	100.0

From the findings shown in Table 4.9, it is clear that the challenges facing the supervision of teaching and learning in public ECE centres included lack of commitment and support by some teachers, lack of adequate time by the head teachers as they were involved in teaching and overseeing curriculum delivery in upper primary to ensure the school obtains good mean score in national examinations and lack of adequate trained teachers to discharge supervisory. The strategies to enhance supervision of teaching and learning suggested by teachers and head teachers are captured in Table 4.10.

Table 4.10: Suggested Strategies to Enhance Supervision

Strategies	Frequency	Percentage		
Division of supervisory roles	36	55.0		
Participatory approach to supervision	23	35.0		
Less workload for head teachers	6	10.0		
Total	65	100.0		

The strategies to enhance supervision of teaching and learning suggested by teachers and head teachers included; sharing supervisory roles among teachers (55.0%), employing a participatory approach to supervision (35.0%) and having less workload for head teachers in order to have adequate time to supervise teaching and learning (10.0%).

According to ECE officers, the major challenges experienced when engaging in supervisory management in schools were; lack of enough classes to accommodate all pupils, lack of enough teachers, parents not providing basic learning materials, negative attitude towards education by some parents and pupils, drop out cases, and enrolment of over-age pupils. When asked to comment on how supervision had affected learning in ECE, most of the ECE officers pointed that most head teachers in primary schools were concentrating in supervising curriculum delivery in the upper classes to obtain good school mean score in national examinations at the expense of ECE. To solve the above stated challenges, ECE officers proposed that the government in collaboration with the Kenya Education Management Institute (KEMI) should train headteachers to enable them become effective institutional managers, all the stakeholders should co-operate in provision of teaching and learning materials such as textbooks, uniform, teaching resources and facilities; school infrastructure should be improved, especially classrooms, desks and teaching/learning material; there is need for fair distribution and utilisation of available resources so that all schools are adequately catered for; that professionalism be maintained at all levels of education management; strengthening curriculum development; the Government to provide enough funds so that schools can meet other challenges; and employing more qualified teaching personnel in order to deal with the problem of high pupil-teacher ratio.

4.4 Teachers Perceptions on the Effect of Resources on Learning among Children

The third objective of the study was to find out teachers perceptions about how learning resources affect learning in public early childhood centres. Table 4.11 presents the results obtained from teachers.

Table 4.11: Teachers Responses on Effects of Resources on Learning in ECE

Statement	S	SA		A	I	FA		D	5	SD
	F	%	F	%	F	%	F	%	F	%
Picture books are adequate										
-	0	0	0	0	0	0	40	62.0	25	38.0
There are enough toys	0	0	0	0	0	0	10	15.0	55	85.0
Flash cards are available	0	0	0	0	0	0	35	54.0	30	46.0
There are adequate										
flipcharts	0	0	0	0	0	0	5	8.0	60	92.0
Modelling materials are										
adequate	0	0	0	0	10	15.0	15	23.0	45	69.0
Construction blocks are										
enough	0	0	0	0	0	0	46	71.0	19	29.0
Puppets are adequate	0	0	0	0		0	2	3.0	63	97.0

The findings show that majority (62%) teachers strongly disagreed with the statements that learning resources such as picture books, toys, flash cards flip charts, modelling clay, construction blocks and puppets were adequate for learners. This is an indication that, most ECE centres did not have toys, charts and other related learning aids which encourage implementation of ECE Curriculum as young children acquire knowledge in ways that are significantly different from the way older children learn, they learn by manipulating, exploring and experimenting with objects. They learn most exclusively by doing and through movements (National Association of Elementary School Principals, 1990). Mbaabu (1983) found that lack of instructional learning materials was the major intra-organisational problem that head teachers in public learning institutions were facing in Kenya. Mbaabu (1983) established that performance in schools without adequate instructional learning resources in national examinations was low. This implies that learning resources affect learning outcomes.

The study further sought free responses from teachers on the challenges faced ensuring adequacy of teaching and learning resources. The responses were categorised and coded to facilitate analysis. The common challenges that emerged from the teachers' responses are captured in Table 4.12.

Table 4.12: Challenges Faced by Teachers in Ensuring Adequacy of Learning Resources

Responses	Frequency	Percentage
Inadequate funds to procure learning resources	29	45.0
Mutilation and defacing of existing resources	17	26,0
Inadequate storage space	19	29.0
Total	65	100.0

The results obtained show that majority (45.0%) teachers felt that lack of adequate funds to procure learning resources was among the challenges facing public ECE centres in Meru South District. Inadequate storage space was cited by (29.0%) of the teachers as being one of the impediments to acquisition of learning materials. 26% of the teacher respondents held the view that one of the challenges that most schools faced was mutilation and defacing of existing resources thus increasing the cost of maintenance.

When asked to comment on the strategies schools were using to address the problem of shortage of teaching and learning resources, this information is provided in Table 4.13

Table 4.13: Strategies Employed to Address Shortage of Learning Resources

Responses	Frequency	Percentage
Engaging pupils	18	28.0
Improvisation	16	25.0
Buying cheap ones	10	15.0
Educational trips	8	12.0
Recycling of existing old ones	13	20.0
Total	30	100.0

The strategies that were being used by schools to address the shortage of teaching and learning resources elicited from head teachers included buying cheap ones (15.0%), engaging pupils in the preparation and development of some teaching and learning materials (28.0%), improvisation (25.0%), educational trips (12.0%) and recycling of existing old ones (20.0%). When asked to give suggestions on strategies that could enhance the acquisition of teaching and learning resources, the information obtained is presented in Table 4.14.

Table 4.14: Suggested Strategies for Acquisition of Learning Resources

Strategies	Frequency	Percentage
Provision by Ministry of Education	39	60.0
Initiating income generating projects	8	12.0
Donations	5	8.0
Fundraising activities	8	12.0
Purchase by parents	5	8.0
Total	65	100.0

As shown by the data in Table 4.14, majority (60.0%) of the head teachers suggested that the Ministry of Education should provide schools with teaching and learning resources. 12.0% of headteachers suggested mobilization of funds through fundraising to acquire teaching and learning resources. 12.0% of headteachers also suggested that schools should initiate income generating activities whose proceeds can be used to purchase learning resources. 8.0% of the headteacher respondents suggested that schools should consider acquisition of teaching and learning resources through donations while another 8.0% suggested that parents can be sensitized to purchase learning materials for their children. An answer supporting inadequacy of teaching and learning resources in ECE centres, obtained from interviews from the ECE officers was:

"Teaching and learning resources in ECE centres are inadequate in terms of both quality and quantity and sometimes we teach without them." Another respondent stated: "teachers lack time, money and skills of making and buying them because they lacked support from both parents and government."

Learning resources in public early childhood centres were inadequate and that schools were facing a myriad of challenges including financial constraints in trying to ensure their adequacy. In the opinion of ECE officer's lack of teaching and learning resources limits children's exploratory skills thus affected learning negatively.

4.5 Effect of Environment on Children's learning

The fourth objective of the study was to find out teachers perceptions on how school learning environment affects learning in public ECE centres. The responses obtained from pupil respondents are presented in Table 4.15.

Table 4.15: Teachers Responses on the Effects of Indoor Environment on Learning

Statement	S	SA		A	I	FA		D	5	SD
·	F	%	F	%	F	%	F	%	F	%
Classrooms are attractive										
and friendly	0	0	0	0	10	15.0	30	47.0	25	38.0
Learning corners are										
simulative	0	0	5	8.0	5	8.0	10	15.0	45	85.0
Classrooms are not										
congested	0	0	0	0	0	0	35	54.0	30	46.0
Classrooms are clean all the										
time	0	0	0	0	0	0	5	8.0	60	92.0
Classrooms are well										
ventilated	0	0	0	0	45	69.0	15	23.0	10	15.0
There are adequate toilets										
for all pupils and teachers	0	0	0	0	0	0	46	71.0	19	29.0
Dustbins are strategically										
placed in every class to										
dispose of rubbish	0	0	0	0	0	0	2	3.0	63	97.0

The Data contained in Table 4.15 indicate that majority (47.0%) of the teachers who participated in this study felt that classrooms were not attractive and friendly. This implies that indoor learning environment in most public early childhood learning centres were not stimulative and conducive as it ought to be for young children. Similarly, the study found that 54.0% of the respondents said that the classrooms were congested while about 92.0% felt that the classrooms did not meet the hygienic threshold befitting the standards required in ECE learning environment. However the respondents fairly agreed that classrooms were well ventilated. This shows that most ECE classrooms were suitable for ECE Curriculum implementation. It is expected that a room suitable for provision of ECE should be well ventilated, spacious and well aerated with proper roof (Republic of Kenya, 2006b). Participants strongly indicated that the indoor learning environment did not have toilets or dustbins where children could dispose waste in order to maintain a healthy indoor environment.

This study assessed participant's views regarding the general safety, hygiene and adequacy of play and other learning materials in the physical outdoor environment. The views of the respondents on the issues under investigation are captured in Table 4.16.

Table 4.16: Teachers Responses on the Effects of Outdoor Environment on Learning

Statement	SA			A		FA		D		SD	
	F	%	F	%	F	%	F	%	F	%	
Water taps are strategically placed near the toilets for washing hands	0	0	0	0	0	0	3	5.0	62	95.0	
Security of learners is well maintained	58	89.0	5	8.0	2	3.0	0	0	0	0	
Proper hygiene is observed to reduce disease outbreaks	0	0	10	15.0	55	85.0	0	0	0	0	
There are materials to promote free play	0	0	0	0	10	15.0	40	62.0	15	23.0	
Social amenities such as play grounds, halls are adequate	0	0	0	0	24	37.0	29	45.0	12	18.0	
There are a variety of fixed play equipment	0	0	0	0	0	0	60	92.0	5	8.0	
Play grounds are safe	57	88.0	3	5.0	5	8.0	0	0	0	0	

From the information provided in Table 4.16, majority (95.0%) of the respondents who participated in the study reported that their ECE centres did not have water taps strategically placed near the toilets for washing hands. Data analysis in Table 4.16 further shows that out of the 65 teachers who participated in the study, majority (89%) strongly reported that the security of learners in their centres was adequate. Eighty five percent teachers reported that hygiene of the physical outdoor learning environment was observed in most ECE centres. 62.0% of the teachers reported that their ECE centres lacked adequate materials to promote free play. About 45.0% of the participants reported that their ECE centres did not have adequate social amenities such as play grounds while another 92.0% indicated that the centres lacked a variety of fixed play equipment. This inhibits implementation of ECE Curriculum. Koech Education Report (Republic of Kenya,1999) supports this when it reports that many ECE centres in Kenya are characterized by inadequacies in basic facilities such as; properly ventilated classroom, furniture suitable for children, kitchen, safe clean water, playground and toilets, few have adequate qualities of instructional and play material. The physical environment, which includes the classroom setting as well as the outdoor setting, should provide opportunities for children to explore and learn. The International Association for the Education of

Young Children (1991) states that the quality of the physical space and material provided affects the level of involvement of the ECE children and the quality of interaction between the teacher and the children. The Nebraska Department of Education and the Iowa Department of Education (1994) describe an appropriate learning environment for the ECE children as the one that provides time opportunities for children to experience and respond actively to their world. It should be social in nature providing secure and stimulating climate for all children. Lombardi (1992) notes that ECE learning environment should be based on development appropriate practice. This means that an ECE classroom and outside environment should respond to the natural curiosity of young children, reaffirm a sense of self and promote positive dispositions towards learning.

The analysis of the interviews using themes generated from the research questions revealed that ECE officers viewed the state of physical learning environment in public early childhood centres as relatively appropriate for learning although they were quick to point that the quality of staff was predominant. Internationally, there is a growing awareness of the importance of early learning, its impact on the individual child, and the wider implications on the social and economic capacity of communities and nations. Alongside teacher and program quality, the physical environment is seen as a critical partner in a child's cognitive, social and physical development, described by many as the third educator (Moore and Sugiyama, 2007). The quality of the physical environment has been linked to positive learning outcomes, with a small body of research illustrating how the design of interior (for example, room size, layout, furniture, lighting, noise) and external (for example, outdoor spaces, nature, play equipment) space in an early learning childcare environment may enhance children's learning and development (Evans, 2006).

Both educators and parents agreed that, along with staff and program quality, the physical environment of early learning centres contributed significantly to children's development and learning outcomes. In terms of ideal architectural and design characteristics, majority believed that early learning centres should be homely, inviting, bright, linked to the outdoors and designed such that space welcomes the child, makes them feel safe and encourage learning'. Consistent with past research (Moore and Sugiyama, 2007),

specific characteristics of the physical environment such as space, light, colour, and materials were seen by both educators and parents as contributing to the child's enjoyment and learning in the centre. Critically, whilst all ECE officers indicated the value of the physically designed environment, they typically had abstract and emotive responses to space and often struggled to clearly articulate the specific design features or attributes common to architectural language (such as scale, form, organisation, light and air qualities) that enabled children's development and learning. Such findings highlight the importance of designers adopting a human-centred, collaborative and jargon-free approach to designing space, with the tangible examples of ideal space enhancing understanding and communication between architects and educators about how best to design and reconfigure space to enhance learning outcomes

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

After the analysis of the data and the discussion of results in the previous chapter, this chapter presents the summary of the study, conclusions and recommendations arrived at from the results obtained in this study, as well as suggestions for further studies.

5.1 Summary of the Study Findings

The main purpose of this study was to determine teachers' perceptions on how staffing, supervision, resources and learning environment affects learning in early childhood learning centres in Meru South District. The following were the main study findings:

5.1.1 Teachers Perceptions on how Staffing affect Children's Learning

The study established that majority of the participants reported that most public ECE learning centres were experiencing teacher shortage. Thus, the teachers felt that learning in early childhood centres was being compromised by lack of enough teachers resulting to poor syllabus coverage, high teacher workload that made it challenging for teachers to be available to assist learners when needed. From the findings it could probably be concluded that learning in public early childhood centres was being affected by too much work load, large class sizes, inability to attend to all lessons and teacher shortage.

5.1.2 Teachers Perceptions on how Supervision Affects Children's Learning

The study established that the quality of supervision of curriculum implementation in most public early childhood centres was generally poor. Respondents cited lack of support and heavy head teacher's workloads as contributing to ineffectiveness in executing the supervisory role. The study further established that about 49.0% of the teachers reported that monitoring of the preparation of teaching and learning resources was adequate. The findings further showed that inspection of school facilities was not regularly supervised. The study established that the learning process was regularly

evaluated but the headteachers did not always check to see how teaching in the classrooms was being done. The study found that head teachers were however concerned with what goes on in the classrooms. The findings of this study therefore imply that supervision of teachers and pupils' utilization of time was not effectively being done and that head teachers were not checking on how the teaching was being carried out.

5.1.3 Teachers Perceptions on how Learning Resources Affects Children's Learning

Most participants felt that the ECE centres did not have adequate books, toys, flash cards flip charts, modelling clay, construction blocks and puppets were adequate for learners. This is an indication that, most ECE centres did not have learning resources which encourage implementation of ECE Curriculum as young children acquire knowledge in ways that are significantly different from that of the older children. Mbaabu, (1983) found that lack of instructional learning materials was the major problem that head teachers in public learning institutions were facing. Mbaabu (1983) established that performance in schools without adequate instructional learning resources in national examinations was low. This implies that inadequate learning resources affected learning outcomes negatively. To cope with lack of adequate teaching and learning resources, learners were engaged in development of some materials while in most cases teachers were required to improvise.

5.1.4 Teachers Perceptions on how Learning Environment Affects Children's Learning

The teachers and headteachers who participated in this study felt that classrooms were not attractive and friendly. This implies that indoor learning environment in most public early childhood learning centres in Meru South District were not stimulative and conducive as it ought to be for young children. Similarly, the study found that 54.0% of the teachers said that the classrooms were congested while about 92.0% of the teachers felt that the classrooms did not meet the hygienic threshold befitting the standards required in ECE learning environment. However, the respondents fairly agreed that classrooms were well ventilated. This shows that most ECE classrooms were suitable for ECE Curriculum implementation. It is expected that a room suitable for provision of ECE

should be well ventilated, spacious and well aerated with proper roof (Republic of Kenya, 2006b). Participants strongly indicated that the indoor learning environment did not have toilets or dustbins where children could dispose waste in order to maintain a healthy indoor environment.

The respondents who participated in the study further reported that their ECE centres did not have water taps strategically placed near the toilets for washing hands. The teachers felt that the security of learners in their centres was adequate. Eighty five percent teachers reported that hygiene of the physical outdoor learning environment was observed in most ECE centres. 62.0% of the teachers reported that their ECE centres lacked adequate materials to promote free play. About 45.0% of the teachers reported that their ECE centres did not have adequate social amenities such as play grounds while another 92.0% indicated that the centres lacked a variety of fixed play equipment. This inhibits implementation of ECE Curriculum. Koech Education Report (1999) supports this when it reports that many ECE centres in Kenya are characterized by inadequacies in basic facilities such as; properly ventilated classroom, furniture suitable for children, kitchen, safe clean water, playground and toilets, few have adequate qualities of instructional and play material.

5.2 Conclusion

Based on the findings as summarized above, this study concludes that most public ECE learning centres lack adequate teaching staff, teaching and learning facilities, poor sanitations, and inadequate indoor and outdoor learning facilities. The study revealed that due to overcrowding in classrooms, teachers were unable to perform their duties effectively and this affected learning. It further emerged that the learning environment was not conducive for learning and teaching process to take place. Teachers were also not being supervised frequently. This undermined the quality of education at this level.

5.3 Recommendations of the Study

i) The government through the Kenya Education Management Institute (KEMI) should train all head teachers to be effective institutional managers. This will make them learn more on supervisory roles.

- ii) All the stakeholders should co-operate in provision of learning materials such as textbooks, toys, charts, and other teaching aids.
- iii) School infrastructure should be improved, especially classrooms, desks and teaching/learning material; there is need for fair distribution and utilization of available resources so that all schools in need are adequately catered for;
- iv) The Government should provide enough funds so that schools can meet other challenges; and employing more qualified teaching personnel in order to deal with the problem of high pupil-teacher ratio.

5.4 Suggestions for Further Research

- i) A similar study could be carried out in other districts in the country to find out whether similar problems exist, and determine the coping strategies employed.
- ii) A study could be carried out to find out the impact of selected factors on private primary schools academic performance.
- iii) A research could also be carried out on the preschool children's perceptions on the factors affecting learning in preschools.
- iv) A study could also be carried out on other factors affecting learning in ECE centres in the district.

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APPENDICES

APPENDIX A

QUESTIONNAIRE FOR HEAD TEACHERS AND ECE TEACHERS

This research is meant for academic purpose. It will try to find out teachers perceptions on selected school factors affect learning in public early childhood centres. You are kindly requested to provide answers to these questions as honestly and precisely as possible. Responses to these questions will be treated as confidential. Please do not write your name or that of your school anywhere on this questionnaire. Please tick $\lceil \sqrt{\rceil}$ where appropriate or fill in the required information on the spaces provided.

Section A: Background Information

1.	What is your gender?
	☐ Male ☐ Female
2.	What is your academic qualification?
	☐ P2
	☐ P1
	ECE certificate
	ECE diploma
	Diploma in education
	☐ Bachelor degree in education
	☐ Bachelor degree in ECE
	Masters
	Other (Specify)
3.	For how long have you served as a head teacher/ECE teacher?
	Below 5 years
	☐11 – 15 years
	$\Box 16 - 20$ years

	Above 21 years					
4.	What is your current position in your school?					
••	Class teacher					
	<u> </u>					
	Head of subject					
	Senior teacher					
	Deputy head teacher					
	Head teacher					
Sectio	n B: Effects of Staffing on Learning in ECE					
5.	In the table below, indicate whether you agree	e or disag	gree wit	th the s	statem	ent
	given regarding your school is concerned.					
Key:	SA – Strongly Agree; A – Agree; FA – Fairly	y Agree; l	D – Dis	sagree;	SD –	
	Strongly Disagree					
	Statement	SA	A	FA	D	SD
i)	There are adequate teachers for all subjects in my school					
ii)	Frequent transfer of teachers has affected learning					
iii)	Teachers have high work load that has compromised education quality					
iv)	Teachers are overwhelmed by large class sizes					
v)	Some lessons are not taught due to understaffing					
vi)	Teachers are always punctual to attend classes					
vii)	Adequacy of teachers in my school ensures syllabus coverage					
viii)	The school requires more teachers					
i) Wł	nat challenges does the school face on staffing	?				

ii) How are the challenges on staffing addressed in your school?

ffects of Supervision on Learning in latest table below, indicate whether you agree	ECE				
table below, indicate whether you agree					
	ee or disa	gree w	ith the s	statem	ent
regarding your school is concerned.					
Strongly agree; A – Agree; FA – Fairly	Agree; l	D – Dis	sagree;	SD –	Strongly
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Section D: Effects of Resources on Learning in ECE

7. In the table below, indicate whether you agree or disagree with the statement given regarding your school is concerned.

Key: **SA** – Strongly agree; **A** – Agree; **FA** – Fairly Agree; **D** – Disagree; **SD** – Strongly disagree

	Statement	SA	A	FA	D	SD
i)	Picture books are adequate					
ii)	There are enough toys					
iii)	Flash cards are available					
iv)	There are adequate flipcharts					
v)	Modelling materials are adequate					
vi)	Construction blocks are enough					
vii)	Puppets are adequate					
viii)	There are enough crayons					

i) Which are the challenges on supervision of the teaching and learning in your school?
ii) How does your school address the shortage of teaching and learning resources?
iii) Suggest strategies that could enhance the acquisition of teaching and learning resources.

Section E: Effects of Environment on Learning in ECE

8. In the table below, indicate whether you agree or disagree with the statement given regarding your school is concerned.

Key: **SA** – Strongly agree; **A** – Agree; **FA** – Fairly Agree; **D** – Disagree; **SD** – Strongly disagree

Indoor environment

	Statement	SA	A	FA	D	SD
i)	Classrooms are attractive and friendly					
ii)	Learning corners are simulative					
iii)	Classrooms are not congested					
iv)	Classrooms are clean all the time					
	Classrooms are well ventilated					
v)	There are adequate toilets for all pupils and					
	teachers					
vi)	Dustbins are strategically placed in every					
	class to dispose of rubbish					

Outdoor environment

	Statement	SA	A	FA	D	SD
i)	Water taps are strategically placed near the					
	toilets for washing hands					
ii)	Security of learners is well maintained					
iii)	Proper hygiene is observed to reduce					
	disease outbreaks					
iv)	There are materials to promote free play					
v)	Social amenities such as play grounds, halls					
	are adequate					
vi)	There are a variety of fixed play equipment					
vii)	Play grounds are safe					

1)	What challenges do you face in ensuring there is conducive environment for learning in your school?
ii)	Suggest strategies that could be adopted to enhance the school environment for Learning

APPENDIX B

INTERVIEW GUIDE FOR ECE OFFICERS

- 1. a) What is your role as an ECE Officer with regard to public primary schools?
 - b) How would you rate the adequacy of teachers in public primary schools handling ECE in your zone?
 - c) How has staffing affected learning in your zone?
- 2. a) What problems do you face in supervisory management?
 - b) What are the supervisory issues that need to be addressed to improve Learning in the public ECE centres in this zone?
 - c) How has supervision affected learning in this zone?
- 3. a) How would you rate the adequacy of learning resources in ECE centres in this zone?
 - b) What problems are faced in acquiring the teaching and learning resources in this zone?
 - c) How has the problem of teaching and learning resources affected learning in this zone?
- 4. a) What is your opinion regarding the state of the learning environment in ECE centres in this zone?
 - b) What is your opinion regarding the effect of indoor and outdoor learning environment on learning in ECE centres in this zone?
 - c) How does the indoor and outdoor learning environment in an ECE centre affect learning?