

**INFLUENCE OF TEACHING AND LEARNING MATERIALS ON  
CHILDREN PERFORMANCE IN PRE-SCHOOLS IN BORABU  
DISTRICT, NYAMIRA COUNTY, KENYA**

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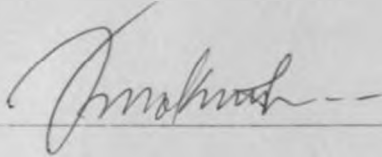
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**A Research Project Submitted in Partial Fulfillment of the Requirements for  
the Award of the Degree of Master of Education in Curriculum Studies,  
University of Nairobi**

**2012**

## DECLARATION

This research project is my original work and has not been presented in any other university.

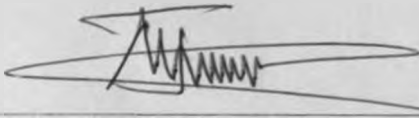


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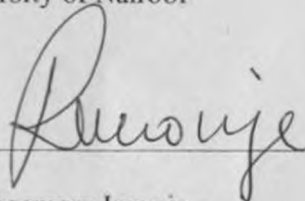


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## DEDICATION

This work is dedicated to my wife Eva. My father David Monda and my mother Alice Monda.

## ACKNOWLEDGEMENT

My heartfelt acknowledgement goes to Prof. Winston Akala Jumba and Dr. Rosemary Imonje for the professional assistance and motivation they gave, during the research period. My gratitude also goes to lecturers of the Department of Educational Administration and Planning who also gave moral support that enabled this project research to be successful. May they be blessed.

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## LIST OF ABBREVIATIONS AND ACRONYMS

<b>DEO</b>	District Education Officer
<b>DICECE</b>	District Centre for Early Childhood Education
<b>ECD</b>	Early Childhood Development
<b>ECDE</b>	Early Childhood Development Education
<b>ECE</b>	Early Childhood Education
<b>EFA</b>	Education for All
<b>GOK</b>	Government of Kenya
<b>KIE</b>	Kenya Institute of Education
<b>MOE</b>	Ministry of Education
<b>NACECE</b>	National Centre for Early Childhood Education
<b>TAC</b>	Teachers Service Commission
<b>UNESCO</b>	United Nations Educational Scientific and Cultural Organization
<b>UNICEF</b>	United Nations Children Fund

## ABSTRACT

The purpose of the study was to examine the influence of the use of teaching and learning materials on children performance in pre-schools in Borabu District, Nyamira country. The following were objectives of the study: to establish the teaching and learning materials used in pre-schools, to find out the effects of teaching and learning materials on children performance in pre-schools, to determine the attitude of teachers towards the use of teaching and learning materials in pre-schools, to establish the importance of using teaching and learning materials in pre-schools and to establish the availability of teaching and learning materials in pre-schools.

The study adopted a descriptive survey design to establish the influence of teaching and learning materials on the performance of learners in Borabu District. The study targeted a sample of 97 teachers and 52 head teachers. Data were collected using questionnaires and an observation schedule.

Qualitative data was analyzed thematically by classifying into major themes from which opinions from respondents were coded and put into frequency tables. Data analyzed formed the basis for research findings, conclusions and recommendations of the study.

Findings from the study indicated that majority of teachers use visual materials such as charts and pictures. The findings reveal that there are minimal resources the classroom teacher needs to use to achieve a long lasting learning in pre-schools. Findings obtained from the study indicated that teaching and learning resources create motivation in learning by supporting the learning process. Findings obtained from pre-school teachers revealed that pre-school learners seem to enjoy learning when teaching and learning materials are used resulting in achievement.

The following recommendations were drawn from the study. In-service courses for pre-school teachers should be held to remind them the importance of using teaching and learning materials. The government should employ pre-school teachers and ensure that they are well paid so as to create a service of motivation which could be in turn ensure that teachers do their work perfectly. The government should take an initiative to ensure that it takes up the responsibility of financing pre-schools in Kenya, the way it was done with the free primary education to eradicate the problem of inadequacy of teaching and learning materials. There is need to sensitize parents and the community on the provision of adequate teaching and learning materials in pre-schools through holding workshops and seminars with ECD facilitators, to create awareness.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the Study

Every child has a right to education as emphasized by American Journal (1979). The journal sees the school as an alternative home where the child gets to develop cognitively, morally and physically. According to the Journal there is a great disparity among children who have grown up in schools or homes and those brought up individually. Those who are isolated tend to look shy in their future lives while those brought up in schools and homes for children are free in expressing themselves.

There was a global campaign for Education For All in 1992, it was found necessary and thus decided to form a coalition to strengthen the promotion of Early Childhood Education as an integral component of the expanded vision of the basic education framework agreed upon in 1990 during the world conference of education as an integral component of the expanded vision of the basic Education For All (EFA). In Jomtien Thailand capacity building was acknowledge as the key strategy in improving the quality of EFA and maximizing its contribution to EFA movement but the problem of teaching and learning materials found in pre-schools has remained a question to address EFA ( 2007).

A wide variety of teaching and learning materials and equipments are vital for play, learning and the development of children. Teachers should regularly provide children materials like pencils, glue, scissors, sticks, tapes and rulers. Materials like corn, flour, clay and water should be provided to ensure that children are offered with opportunities to practice and master new skills, develop their creativity and imagination. Young children should be encouraged to interact with teaching and learning materials regularly (Bruce, 2007).

Children learn through activities which are the highest phrase for children's development. Through activities, they are able to discover, explore and achieve optimum learning. Early childhood learning is through getting involved in manipulating objects (by doing) which nourishes every aspect of children's development that forms the foundation of intellectual social and emotional skills necessary for school and in life. Therefore, the provisions of teaching and learning materials to children is essential since they provide new experience for children and encourage them learn from one another, Froebel (1840). Children at 3-5 years learn best through concrete materials which are manipulated through sorting and grouping. These materials enable them to develop of their senses at pre – school. The use of teaching learning materials gives more direct emphasis, rewards and reinforces in the teaching process. Teachers who vary children's learning through action and interaction with others and the environment with a variety of materials, or aids, makes the class room look colourful and portray the

relevance and learnt themes in each lesson for children. The use of instructional materials also makes the teaching easier, hence understanding and retention on the part of learners. Therefore, the use of teaching / learning materials may affect performance either positively or negatively, Montessori (1870).

Exposing learners to the environment is very important. Using the environment as a teaching / learning resource lead the learner to the development of sense of wonder, appreciation for the beauty and mastery of natural world, opportunities to experience joy of closeness to nature and respect for other creatures. It also includes the development of problems solving skills, development of interest and appreciation of the world around us, Rivkin (2008).

The use of teaching and learning materials help children understand abstract concept, solve problems and develop critical thought process, for example they teach the concept of number (building blocks). Instructional materials also encourage collaboration in solving problems by having children work in groups to discuss and solve problems together. Children also are able to interact with others, adapt new technology and think through logically, Burns (2001).

The environment plays a direct role in child's cognitive and emotional development which conditions his/her ability and willingness to learn. Early childhood educators should provide opportunities for children to experience

peace, joy and fascination with nature because these emotions under – guard their developing knowledge skills and dispositions. Gardner (1999).

The pre – school years are very important in life of an individual. The foundation for learning and for basic attitudes is laid during the five years of life. To stimulate learning and foster healthy growth and development, children should be provided with appropriate materials and care. During pre – school years, basic skills such as jumping, climbing, dancing and hopping can be developed, KIE (2008).

Instructional materials include text books, maps, charts, photographs, play materials flash cards, chalkboard, coloured chalks, pencils, colours and water. Play materials are for example swings, ropes and ropes, see saw and balls. They are very essential because they make teaching more effective, meaningful, increase learners motivation on concentration span and simplify concepts. Performance among the learners can be affected by teaching learning resources, on how they are utilized by the learners in terms of availability frequency of utilization and time allowed for use, M.O.E (2001).

Teachers can help learners to control their emotions as they interact with teaching and learning materials. For example, problems such as aggression shyness, thumb sucking, bullying fighting and temper are associated at early stage and through the



teachers and parents they are able to help solve the problem as early as possible. Pre – school improve the physical health and abilities of the child through the emotional and social development. The child is encouraged by his or her self confidence, curiosity and self discipline. Pre – School are significant in that they establish patterns and expectations of success which help create a climate of confidence for the child's future learning effort, Papalia, (2005).

Teachers should understand the objectives of play materials to the children which are to explore, and develop personal talents and skills. Play materials increase children's vocabulary and self expression as children play freely, their large and small motor skills develop, body muscles are strengthened, control and coordinate different parts of the body, develop their accuracy estimation of skills, relax and enjoy themselves. Therefore it is very necessary for pre – school educators to provide young children with a variety of play materials, NACECE (2001).

For a teacher to promote brain development in a child, one should expose the child to music, dance and new environment, provide the child with play materials and time for play for the child to explore, observe experiment and manipulate things. This will help the child through discovery and able to acquire new skills. Teaching and learning materials help the children to develop intellectually, socially and physically (holistic development). The child must be provided with

adequate materials so as to involve all the senses in learning. These materials deepen children's thinking. Njenga. (2007).

Teaching and learning materials are meant to stimulate the total growth and development of children. The materials are used to cater for the following areas, manipulating skills, visual perception, motor skills, auditory perception, language development, exploration through feeling and social emotional needs. They should be adequate for all the children / learners to interact with them, K.I.E (2008). Children learn from other children. By interacting with their peers, children learn much about the world. They can learn much better if they are provided with teaching / learning materials. This builds their self confidence self – esteem and master contain skills, K.I.E (2002).

In Borabu district, pre – school learners have not had much success in academic performance. This has made the researcher to investigate the influence of teaching and learning materials on children performance in pre – school. Pre – school learners should be provided with a variety of teaching and learning materials as a vehicle through which they learn. Without instructional resources they learn very little or nothing at all.

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## **1.2 Statement of the Problem**

Teaching and learning materials are materials used by teachers in teaching pre – schools. They are used for teaching young children to understand what they are being taught. Provision of teaching and learning resources make the bone of the environment in that children are able to relate what is in the environment and what they are being taught in classroom. Children learn better with real direct first hand experience. Children in pre – schools learn through their senses of hearing, tasting, feeling, seeing and touching, KIE (2003). For them to learn well they should be provided with a variety of instructional materials. In pre – school teaching and learning resources play an important role in instilling knowledge, skills and values to the learners.

Teaching and Learning materials help learners to participate effectively in their learning environment. In spite of the fact that teaching and learning resources are encouraged so as to enable the learners retain what they have been taught, still the learners have difficulties in retaining what they have been taught, KIE (2008). Therefore, the study attempted to investigate the influence of the use of teaching and learning materials on children performance in pre – schools in Borabu District.

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### **1.3 Purpose of the Study**

The purpose of the study was to investigate the influence of teaching and learning materials on children performance in public pre-schools in Borabu District.

### **1.4 Objective of the Study**

The following were the objectives of the study:

- i. To establish the teaching and learning materials used in pre-schools in Borabu District.
- ii. To find out the effects of teaching and learning materials on children performance in pre-schools in Borabu District.
- iii. To determine the attitude of teachers towards the use of teaching and learning materials in pre-schools in Borabu District.
- iv. To establish the importance of using teaching and learning materials in pre-schools in Borabu District.
- v. To establish the available of teaching and learning materials in pre-schools in Borabu District.

### **1.5 Research Questions**

The following were the research questions:

- i. What are the teaching and learning materials used by pre-school teachers in teaching pre-schools in Borabu district?

- ii. What are the effects of teaching and learning materials on children in pre-schools in Borabu district?
- iii. To what extent is the attitude of teachers towards the use of teaching and learning materials affect performance of children in pre-schools in Borabu district?
- iv. To what extent is the use of teaching and learning materials important to pre-school learners in Borabu district?
- v. How does the level of supply teaching and learning materials affect performance of pre-school learners in Borabu district?

#### **1.6. Significance of the Study**

The study would be significant in the following ways.

The study findings may equip pre-school teachers with new knowledge on the use of teaching and learning materials in pre-schools in order to improve performance more and be equipped with new approaches in choosing and using the teaching and learning materials in their school to prepare the young children for further stages in education process. Findings of the study could be found useful by several institutions such as Kenya Institute of Education (K.I.E), which has the Mandate of developing the teaching learning materials for pre-schools and teacher training programmes. KIE used the information in identifying gaps in the teacher training programmes.

The study may also be significant to the Ministry of Education (MoE) which is responsible for policy formulation. The results of the study may also help pre-school teachers to realize the importance of using teaching and learning materials for further preparation of pre-school children to primary education. The findings of the study helped the community to increase knowledge and have positive attitude towards the provision of instructional resources in pre-schools. The findings of the study were of great importance to educationist who were to create awareness on the use of teaching and learning materials to pre-school teachers.

### **1.7 Limitations of the Study**

It was difficult to control the respondent's attitude as they responded to questions in the questionnaire. However, the researcher overcame this by assuring the respondents of the confidentiality of their identity. Also scarcity of current literature review delayed the completion of research project.

### **1.8 Delimitations of the Study**

The study was confined to public and private schools in Borabu District. It was also delimited to head teachers of primary school and pre – school teachers. The study was located in Borabu District. There were 61 pre – schools in Borabu district, 51 were public pre-schools and 10 were private ECDE centres. Head teachers and pre – school teachers were involved in the study.



## **1.9 Basic Assumptions of the Study**

The researcher assumed that:

- i. Pre-school teachers used the teaching/Learning materials in their pre-schools.
- ii. All the teachers in pre-schools were trained to teach learners effectively.
- iii. Pre-school teachers used relevant teaching/learning resources for teaching.
- iv. Information given out by the respondents were to be treated with great confidentiality.
- v. Data gathered was accurate and correct.

## **1.10 Definitions of Significant Terms**

The following were definitions of significant terms.

**Achievement** refers to what has been done successfully especially by making an effort and skill.

**Attainment** refers to what one has achieved in education.

**Attitude** refers to feelings and believes that direct us the way we respond to objects and people, classroom, playing around laboratory and other learning environment.

**Community** refers to people living in the same geographical area and have common beliefs.

**Curriculum** refers to the totaling of experience attained by the learners in

**Education** refers to actions which are intended to induce or cause learning.

**Environment** refers to the natural world in which people, animals and plants live.

**Influence** refers to the effects one has on the way a person thinks or behaves.

**Interaction** refers to people working together and having an influence on each other.

**Learning** refers to relatively permanent change in behaviors potentially. This occurs as a result of reinforcement

**Performance** refers to how well or badly one does in his/her duties or actions

**Pre-school** refers to a school for children between the ages of about two to five years.

**Retention** refers to continue having of holding.

**Teaching materials** refers to all materials, equipments, furniture, electronic media that are used to facilitate learning in both teachers and learners.

**Transition** refers to the act of changing or passing from one stage to another.

### **1.11 Organization of the Study**

The study is divided into five chapters; chapter one covers the introduction which comprises the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations of the study, delimitations of the study, basic assumptions of the study, definition of significant terms and organization of the study. Chapter two consists of the literature review of the study. Chapter three covers the research

methodology used in the study, which are research design, target population, sample size and sampling procedures, data collection procedures and data collection instruments. Chapter consists of data analysis, interpretation and presentation. Chapter four focuses on the summary of the findings of the study, conclusions, recommendations of the study and suggestions for further reading.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The literature review is organized into various sections which included the following: Types of teaching and learning materials used in pre-school, effects of using teaching / learning materials on performance in pre – schools, teachers' attitudes towards the use of teaching/ learning materials in pre – school, Importance of using teaching/learning materials in pre – schools, availability of teaching/learning materials in pre – school. Finally summary of the literature review, theoretical framework and conceptual framework.

#### **2.2 Types of Teaching and Learning Materials Used in Pre-Schools**

Early Childhood Development Education handbook by K.I.E (2008) categorizes teaching/learning materials (instructional materials) in four types. These are the audio visual instructional materials which are sound and visual. A good example of these audio visual is television. The second type of visual only deals with sight. An example of visual materials is charts and pictures. The third category of instructional materials is audio, an example is the radio. The fourth category is the tactile teaching/learning material. These are materials which are manipulated like a toy or an orange KIE. (2008).

Some of the play materials which should be provided are for example yoghurt pots for pouring, pegs for sorting; posting toys, paint, Climbing frame, skipping ropes and swings. There is a wide variety of drawing materials that pre-school learners should be provided with, these are for example crayon, wax crayon and chalks. Children can use these as a medium of their mixed together. The medium provided to “draw” on will encourage children to explore their imagination Harriet, (2002).

In pre-school instructional materials are also categorized into two groups. These groups are indoor and outdoor instructional materials. The indoor ones are the ones that are found inside the classrooms. These include the following, charts, flash cards, dolls, wooden blocks, counters, water corner and pictures but a few to mention. Outdoor instructional materials are mainly located outside the classroom. Examples of outdoor instructional materials include the followings sandpit, tyres, balls, swings, rope and ropes, KIE. (2008).

As quoted by Sheridan (1999) "Play in early childhood" states a number of art work. Teaching / learning materials for art work includes the following, pencils, erasers, papers rulers and felt pens. Other materials necessary for other activities are pictures, seeds, mattresses and books. Nasibi (2005) noted that the classroom teacher needs to emphasize the use of both visual resources and words to achieve long lasting learning. He further adds that a careful selection and use of audio

visual resources make it possible a successful combination of seeing and hearing hence deeper understanding and greater permanency of what is learnt. For example overhead projects, slide projectors and moving projectors like cinema, video and television can enhance classroom teaching and learning process.

The chalkboard should serve as constant example of neat planned and the work should be well executed. It is the chalkboard that clean work, better writing, figuring and drawing are displayed. Wilkims (1975) supported Wilke's observation when he noted that the blackboard is the mostly used in the classroom lessons and it should be planned to be used in explanations, demonstrations, summaries and children's exercises.

### **2.3. Effects of Teaching and Learning Materials on Performance in Pre-Schools**

Eshiwani (1983) states that differences in instructional materials in pre-schools seem to account for differences in achievement. Instruction materials such as books, charts, models, visual aids and play materials have some bearing in school performance. Schools that are found having good and enough instructional materials are also performing well academically. Language is very important tool for communication. Through language children are able to express their feelings, emotions, desires and ideas. It is important therefore that every avenue be utilized to promote language development at preschool level and all other levels of

education. This has been stressed in the book (Toys and materials for play and Learning, East Africa publishers, (2001).

According to K.I.E, (2003) teaching learning materials stimulate the total growth and development of children. Materials are used to cater for the following areas. Manipulation skills, visual perception, motor-skills, auditory perception, language development, exploration through feelings and social emotional needs. Learning resources involve buildings and their surrounding, physical plant, people in their own capacity, and even actions resulting from a change in any particular section. Availability of learning resources and effective use reflect on quality of teaching of the subject. This is because most of the resources play an important role in understanding of concepts and imparting skills to the learner. Use of resources in pre-schools is essential, it promotes experiential learning Davis, (1975).

Nasibi (2005) says that use of learning resources involves the use of more than one of the human senses at the same time during learning process therefore the use of instructional resources is very vital to the pre-schoolers and the teachers.

According to KIE, (1995), Educational researchers have rationalized why children enjoy playing with toys by asserting that those children who are exposed to a variety of toys at an early age develop a higher level of intellectual functioning than those who receive little or no stimulation and have no toys to play with, they also enhance a high degree of socialization and develop creativity as they play.

#### **2.4. Teachers' Attitude Towards the use of Teaching/Learning Materials in Pre-Schools**

According to Larson, (1990) states that many teachers ignore the use of learning visual aids because they feel that learning is an abstract process that has completely nothing to do with semi-concrete materials like pictures, real objects and models. Suzzbly and Teale, (1985) noted from their research on learning and teaching materials that reading is an abstract process and completely has nothing to do with semi-concrete materials like pictures and really objects. Suzzbly and Teale. (1985) further noted from their research on resources of learning and teaching in their reading lessons that teachers tend to use choral reading. This is because it requires little preparations for teaching.

Teachers should always find time and energy trying to determine why a particular child has a problem in reading and design a particular resource to deal with the child's problem, Almay, (1973) given an opportunity, children discover much more of what they need to know and learn, they receive answers to their questions about their learning process. Some teachers don't use teaching/learning materials for their learners therefore affecting the overall reading/development, Broker, (1981).



## **2.5 Importance of Teaching and Learning Materials in Pre-Schools**

According to Montessori, (1870), without teaching/ learning materials, no learning can take place. She suggested that there will be quality education to pre-school learners if instructional materials are provided in our pre-schools. Pre-school learners should be provided with a variety of teaching /learning materials, (Pre-school Educational project K.I.E, (1982).

Learning /teaching materials attract the attention of learners. In this manner, pre-school children become creative and imaginative UNICEF, (2003). Plenty of instructional materials should be used in pre-schools. Young children must see, feel, touch and taste. Lessons cannot be successful unless the instructional materials are available and enough for all learners in class, so that children can manipulate them freely, Anroga (1997).

Children develop their imaginative, discovery and creative skills through the use of teaching/ learning materials, learners are able to explore familiarize and eventually understand unfamiliar objects when they interact with them, (K.I.E) Handbook for ECDE Syllabus (2007:27). Instructional resources provide children with a means of expressive feelings, concerns, and interests as well as acting as a channel for social interactions with adults and other children. Through the use of instructional materials learners are able to explore, familiarize and eventually understand unfamiliar objects when they interact with them, Kaburu. (2007).

Play materials are part of teaching and learning materials. Play is an important vehicle of learning among children. Although the children spontaneously device play, an attentive teacher needs to support and nourish it by providing play materials to children. Children as they play can gain important insights, in what children are thinking and feeling. Play gives a child a chance to develop the qualities of endurance, tolerance, sympathy, self control, the art of giving and receiving, Juma (2004).

Creative play is an important means of encouraging children to experiment and explore the world around. It helps to discover through the learners' senses and properties of different materials. If provided with a wide range of activities they can develop, physical, social, emotional and intellectual skills. When activities are led in a positive way children can gain a great deal of satisfaction from creative play and increase their confidence, Harriet (2002).

Young learners can be given any type of object that will be safe for them to touch and hold. Some of these materials are for example wood, shell, fruits and natural sponges. These objects promote children's development which thus promotes a different range of hand movement. Therefore it is good to provide learners various teaching materials, Penny (2002).

Teaching and learning resources are aids that enhance effective teaching and learning. The usage of these resources in learning process arouse interest that create a desire to learn, stimulate the pupils imagination, give a concrete impression of the concept and promote retention of ideas. They as well help consolidate what has been learned, illustrate relationships, making learning more real and develop in learner manipulative skills. Grenda, (2003).

## **2.6 Teaching and Learning Materials in Pre – Schools**

Learning is a process of acquiring knowledge skills, and attitude through observation, manipulation and being taught by use of instructional resources. Teaching / learning materials are aids that enhance effective teaching and learning. Some of the teaching / learning materials are for example; charts, chalk board, radio projectors and textbooks. For example charts and textbooks should be adequate for every individual learner to interact with them, KIE (2008).

Availability of teaching and learning materials and effective use reflects on quality of teaching of the subject. This is because most of the resources play an important role in understanding of concepts and importing skills to the learner. Use of resources in pre-schools is essential, it promotes experiential learning. Literate parents are aware of the impact of resources and their use. Parents looking for a school to enroll their children consider the availability of both

indoor and out door resources. Schools that have good and adequate instructional resources perform well, Wachieye, (2009).

A child doesn't require expensive play materials to physically grow and mentally develop, but even the locally available materials can be improvised to serve the same purposes. According to this premise, teachers in pre-schools should not only yearn to buy already materials or resources for teaching but rather become innovative and use the available resources. The available resources can be made or improvised to become teaching and learning materials. The improvisation of locally available materials requires skilled teachers who understand the level of conceptual development of the children in ECDE centres. Thus by improvising the teaching and learning materials, interests and concerns by teaching in the learning process increases, thus the scarcity of teaching and learning materials will be very minimal, Bruce (2005).

## **2.7 Summary of the Literature Review**

Much of the knowledge children absorb it best by exploration in the real world where they may freely, actively construct their vision of realities rather than be passively instructed about it. Young children learn by observing what happens when they interact with materials and people. Development of their skills is achieved through hands on learning.

Visual and relevant pictures should be used because they are generally understood and remembered easily. Children understand things they see more easily than abstract ideas represented just in words. Direct experience involving learning through doing, leads to a deeper understanding of the subject and issues involved. Sawdners, (1979).

Teachers should provide pre – school learners adequate teaching and learning materials that will inspire children's self confidence. They should provide learners activities which help them learn. They should use teaching and learning materials and discourage memorization without understanding. They should also encourage learning by experience and experimentation. Children should be taught new knowledge by the teacher by associating it with what is already familiar to the children. The school system should do all it can with what it has to enhance proper early stimulation in young children and this can be done through the use of teaching and learning materials.

Teaching and learning materials stimulates the child and mentally prepares him/her for the steady routine of formal schooling. Children must be made to learn essential things for their all – round survival. For example, acquisition of the basic skills necessary for higher intellectual development. Comenius (1970).

## **2.8. Theoretical Framework**

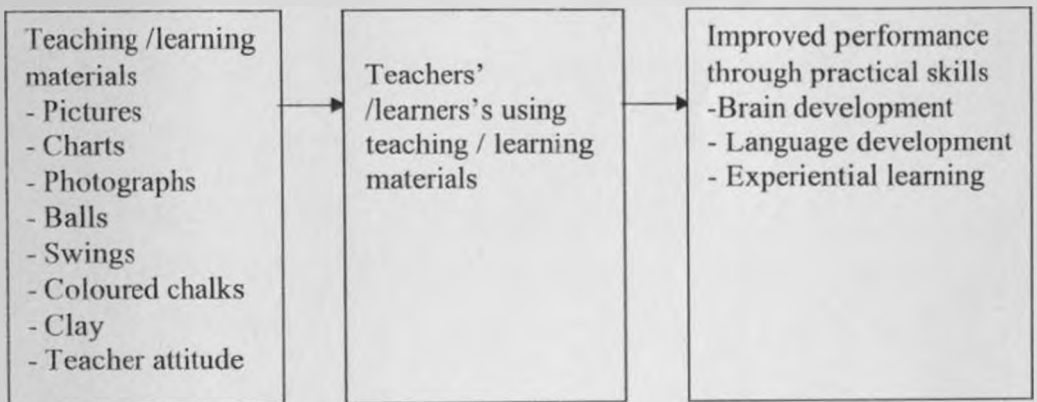
This study was guided by the objective model of Ralph Tyler (1949). Ralph Tyler has attempted to explain the rationale of viewing analyzing and interpreting the school curriculum as a programme for an educational institution. Tyler argued that objectives when written must be drawn from three sources, which included learners, contemporary life in the society and suggested from subject specialist. Objectives selected should be attainable, achievable and reliable, Oluoch (2006).

Tyler further outlines the learning experience as important in the attainment of objectives. He noted that appropriate learning experiences must be selected and well organized as a means of achieving the stated objectives. Teaching and learning materials are very important in this stage. They help in the selection of learning experiences. He further outlines the general criteria for the selection and organization of learning and experiencing; Therefore learners must be given time to do things by themselves. They can do this by being provided with the teaching/learning materials, pre – school teachers are able to organize group activities for the young children to participate for example games.

## 2.9 Conceptual Framework

The following conceptual framework was used in the study.

**Figure 1 Conceptual Framework**



**Source: Brunner (1966)**

Although in pre – school education there is no set up examinations, the major yardstick used to measure output is performance examinations. In pre – schools the yard stick for measuring is retention of the concept. The output is achieved after various input are put into the education production process include the pupils, the teachers, parents and the necessary instructional materials such as pictures, charts, books, facilities, photographs, colours, clay, felt pens, other materials include toys and table. If the interaction of the pupils, teachers and parents and resources is healthy then the outcome is good and improved performance and vice versa.

The study sought to establish the kind of interaction taking place in schools with regard to teaching and learning materials. Availability of resources affects the learning which ultimately affects the learning outcome or output. In conceptualizing the researcher attempts to point out how teaching and learning materials affect learning, which eventually affect performance.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research methodology discusses various methods that were used in carrying out the study. They include the following subsections which are research design, target population, sample size and sampling procedures, research instruments, instrument validity, reliability of instruments, data collection procedures and data analysis techniques.

#### **3.2 Research Design**

Research design is defined as plans, or outlines to generate answers to research problem Orodho, (2004). The study employed a descriptive survey design because it enabled the researcher to collect detailed information as respondents noted answers without any limitation by the researcher. The design enabled the researcher to seek responses from a relatively large number of responses of pre-schools in Borabu district. This method helped to collect quantitative data in its current and natural setting. Descriptive research survey was designed to allow a researcher obtain information of a problem at hand, Orodho, (2004) also explains that survey research is the most commonly used descriptive method in education research.

### **3.3 Target Population**

Population refers to all items or people under consideration in a particular field Orodho, (2004). According to Mugenda and Mugenda (2003), target population is where the sample is taken from. The population of the study consists of 61 pre-schools, 51 are public (ECD) centres and ten are private (ECD) centers. The total number of Pre-school teachers was 130 and 61 head teachers.

### **3.4 Sample Size and Sampling Procedures**

A sample is a sub-group of population that the researcher is interested in to generalize the results Kumari, (2005). Sampling is the process of selecting a number of individuals for the study in such a way that the individuals selected represent the larger group which they are selected, hence representing the characteristics found in the entire group Orodho, (2003). According to Best and Kahn, (2004) the ideal sample size should be large enough to serve adequate representation of the population about which the researcher wishes to generalize the findings. Mugenda and Mugenda (2003) recommends a sample size of 10 percent, 30 percent for descriptive study.

There were 61 head teachers in Borabu district. Out of the 61 head teachers 52 head teachers were sampled using purposive sampling. Since there are three divisions in the district 17 head teachers were selected to represent each division. The researcher used the Krejcie and Morgan (1973) table to establish the sample

for the study. According to the table a sample for 61 headteachers was 52 while a sample of 130 teachers was 97. This formed the sample for the study. The total respondents for the study were 149.

### **3.5 Research Instruments**

The research instruments that were used in this study were a questionnaire and an observation schedule. Mugenda and Mugenda (2003) define questionnaire as a written set of questions to which the subjects responds in writing. Orodho, (2005) notes that questionnaires are more efficient because they require less time, are less expensive and are permit to collect data from a wide population. There were two types of questionnaires. One was administered to head teachers in Borabu District, the other one was given to pre-school teachers. The researcher used observation schedule. The researcher observed whether teaching and learning materials were available in pre-schools in Borabu District. The observation checklist aimed at finding whether preschoolers interacted with the instructional materials.

### **3.6 Instrument Validity**

Validity is the degree to which a test instrument measure what it purports to measure and consequently permits appropriate interpretation of scores Nachmias and Nachmias, (2006).

Instrument validity refers to as the accuracy and meaningfulness of inferences of instruments to measure what they are intended to measure Mugenda and Mugenda (2003). Validity refers to the extent to which the instrument measures what it purports to measure, (Borg and Gall, (1996). To determine content validity of the instrument, a pilot study was carried out in one pilot school which helped the researcher to evaluate validity, clarity of questionnaires, suitability of language used in the instrument and the feasibility of the study. Items which failed to measure were modified. Piloting addressed many questions which include, Do respondents interpret the questions differently? Do questionnaires measure what they are supposed to measure? Do questions provoke respondents answers (Orodho, 2004).

### **3.7 Instrument Reliability**

Reliability is the measure of the degree to which a research instrument yields consistent result or data after repeated trials Mugenda and Mugenda (2003). The researcher employed the test and retest technique in order to improve reliability whereby the questionnaires were administered twice to head teachers and pre-school teachers. After the first administration the researcher revisited the schools after two weeks for the second administration. The research then used the person correlation coefficient formula to determine the reliability of instruments. This formula was used:

$$r = \frac{N \sum XY - (\sum X) \sum Y}{\sqrt{[N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y)^2]}}$$

Where

R is the degree of reliability

X is the score obtained during the first test

Y is the score obtained during the second test

$\sum$  is the summation sign

N is the number of scores within each distribution

Correlation coefficient of 0.84 for head teachers, 0.86 for pre-school teachers were obtained which indicated that the instruments were reliable, Gatimu and Ingule, (1995).

### 3.8 Data Collection Procedures

A research permit to conduct the study was obtained from the National Council of Science and Technology (NCST). The researcher then reported to the District Education Officer (DEO) in Borabu District to obtain permission in order to proceed with the study. Permission was also requested from various head teachers to conduct research in their schools. The questionnaires were given to head teachers and pre-school teachers. The questionnaires were collected in good time after completion. The observation schedule was conducted in school with arrangement of head teachers and pre-school teachers.

### **3.9 Data Analysis Techniques**

The researcher first edited the data by identifying items that were not responded to and the blank spaces left unfilled by respondents. The poorly responded questionnaires were then regarded as spoiled, and therefore were not included in the analysis. Qualitative data was analyzed thematically by classifying it into major themes from which opinions from respondents were coded and put into frequency tables. Quantitative data was analyzed by use of descriptive statistics supported by tables, frequency distributions and percentages using the statistical package for social sciences (SPSS), a computer software that generated frequencies (f) and percentage was used in analysis.

## **CHAPTER FOUR**

### **DATA ANALYSIS, INTERPETATION AND PRESENTATION**

#### **4.1 Introduction**

This chapter presents the analysis of the data collected from the study. The chapter begins with the analysis of the questionnaire return rate and then presents the analysis of the demographic information of the respondents including gender, age, marital status, academic qualifications, category of pre-school and sponsor of pre-school. The sub-topics which cover the research questions of the study on types of teaching materials, effects of using teaching and learning materials, attitude of teachers to the use of teaching and learning materials, importance using teaching and learning materials and available teaching and learning resources in pre-schools. Frequency tables, percentages, pie charts and graphs have been used to present the findings of the study. The chapter ends with the summary of the findings.

#### **4.2 Questionnaire Return Rate**

A sample of 52 head teachers, 97 teachers and were selected from a population of 61 head teachers and 130 teachers. These respondents were given questionnaires which they filled in and returned to the researcher. The questionnaire return rate is presented on Table 1.

**Table 1: Questionnaire Return Rate**

<b>Category of Respondents</b>	<b>Sample</b>	<b>Questionnaire Returned</b>	<b>Percentage Return Rate</b>
Head teachers	52	45	87.0
Teachers	97	80	82.5
<b>Total</b>	<b>149</b>	<b>125</b>	

According to table 1, out of a sample of 52 head teachers 45 of them returned dully filled questionnaires making 87.0 percent return rate; out of a sample of 97 teachers, 80 returned the dully filled questionnaires making a questionnaire return rate of 82.5 percent. The average return rate was calculated as 86.5 per cent which was found to be an acceptable representation of the target population. 7 questionnaires from the head teachers were not returned and were counted as spoilt ones and were not used in the study. 17 questionnaires from the pre-school teachers were not well filled. They were also counted as spoilt questionnaires.

#### **4.3 Demographic Information of Respondents**

This section presented the analysis of the demographic information of respondents are revealed from the data collected from head teachers, teachers and pre-school learners of pre-schools in Borabu District, Nyamira county. The section includes the respondent's academic qualification and teaching experience.



#### 4.3.1 Pre-school Teacher's Academic Qualification

The researcher asked teachers of pre-schools in Borabu District to indicate their highest academic qualification. The findings are presented in table 2.

**Table 2: Pre-school Teachers' Highest Academic Qualification**

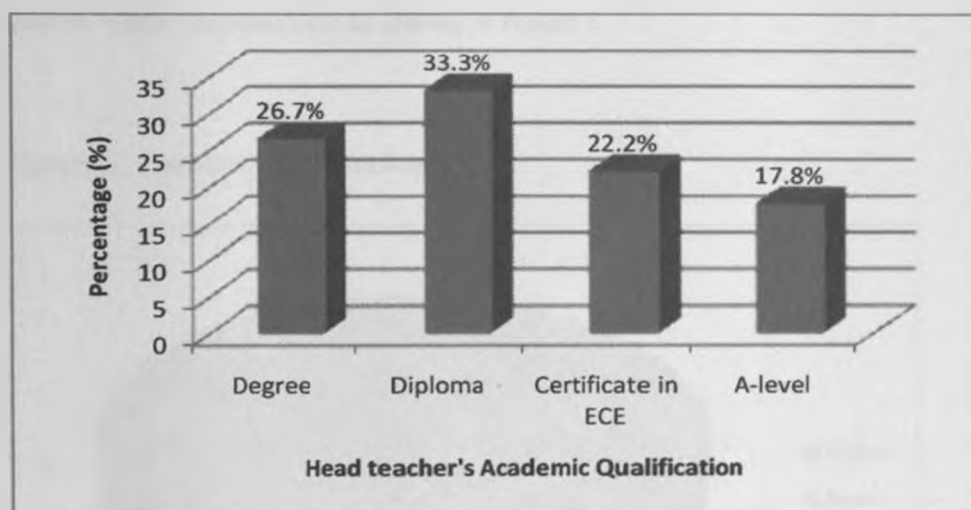
Response	Frequency	Percentage
Degree B.ED (ECDE)	20	25.0
Diploma in ECDE	32	40.0
Certificate Course (ECEC)	11	13.7
K.C.S.E	13	16.3
K.C.P.E	4	5.0
<b>Total</b>	<b>80.0</b>	<b>100.0</b>

The findings on Table 2 indicate that majority of teachers in pre-schools in Borabu District (40.0%) had a Diploma in ECDE, 20 (25.0%) had a Degree in ECE, 11 (16.3) had a certificate in ECE (ECEC), 13(16.3%) had a KCSE certificate whereas 4 (5.0%) had a K.C.P.E certificate. The findings are and indication that majority of teachers had good academic qualification to teach pre-schools. The findings indicate that pre-schoolers in ECD centres are taught by people with knowledge and skills which are instrumental in the management and teaching in the pre-schools. This implies that they have the knowledge of the use of teaching and learning materials for improved practical skills in learners.

### 4.3.2 Head teachers Academic Qualification

The researcher asked head teachers to indicate their highest academic qualification. The findings are presented in figure 2.

**Figure 2: Head teacher's Academic Qualification**



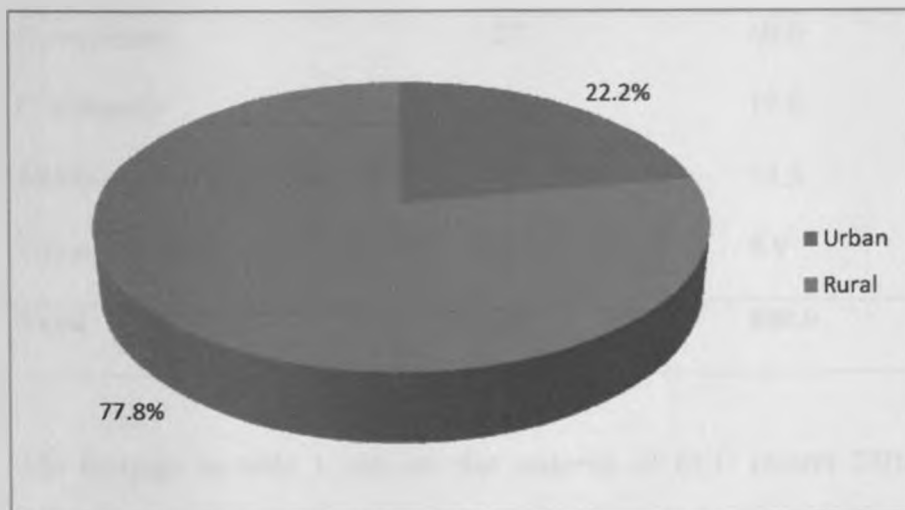
The findings on figure 2 indicate that majority of head teachers 15 (33.30%) in Borabu District had a Diploma in ECE qualification, 12 (26.7%) had a degree in ECE, 10 (22.2%) had a certificate in ECE (ECEC) whereas 8 (17.8%) had an A – level certificate. These findings are an indication that majority of head teachers had excellent academic qualification to head ECD centres. The findings indicate that ECD centres are headed by people with knowledge and skills which are instrumental in the management and teaching in schools which implies that they

are able to seminize pre-school teachers the importance of using teaching learning materials.

#### 4.3.3 Location of Pre-schools

The researcher required head teachers to indicate the location of their ECD centers. Their responses are as shown in figure 3.

**Figure 3: Location of Pre-Schools**



The findings on figure 3 shows that majority of pre-schools in Borabu District (77.8%) were established in rural areas compared to (22.2%) established in urban (semi-urban, rural urban) areas. These findings are an indicator that majority of pre-schools are served by the rural population where poverty is highly

pronounced affecting parents not to provide teaching and learning materials to pre-schools.

The head teachers were required to indicate the sponsor of their ECD centres. The findings are presented in table 3.

**Table 3: Sponsorship of ECD Centres**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Government	27	60.0
Community	8	17.8
NGOs e.g. Religious Organization	6	13.3
Private Ownership	6	8.9
<b>Total</b>	<b>45</b>	<b>100.0</b>

The findings in table 3 indicate that majority of ECD centres 27(60.0%) are sponsored by the government, 8(17.8%) are sponsored by the community 6(13.3%) are sponsored by NGOs whereas 6 (8.9%) are sponsored by private individuals (privately owned). The findings indicate that there is a likelihood of disparity in availability of teaching and learning resources between the public and private ECD centres which is likely to influence performance of the pre-schoolers in the centres.

#### **4.4 Influence of Teaching and Learning Materials on Children's Performance in Pre-schools in Borabu District**

##### **4.4.1 Available Materials in Pre-schools**

The first objective of the study sought to establish the types of teaching and learning materials used in pre-schools in Borabu District. The researcher required the respondents to indicate the types of resources and materials available in their pre-school. Head teacher's responses are shown in table 4.

**Table 4: Teacher's Responses on the available Materials in Pre-schools**

<b>Resource /Materials</b>	<b>Frequency</b>	<b>Percentage</b>
Audio-visual	10	12.5
Visual charts	32	40.0
Audio	16	20.0
Tactile	22	27.5
<b>Total</b>	<b>80</b>	<b>100.0</b>

Data in table 4 indicates that majority of teachers 32 (40.0%) indicated that visual materials such as charts and pictures are the available materials, 22 (27.5%) indicated the availability of tactile materials such as toys, dolls, 16 (20.0%) indicated radio while 10 (12.5%) indicated audio-visual materials. The findings reveal that there are minimal resources that the classroom teacher needs to use to achieve long lasting learning in the pre-schools. The findings also point out to the

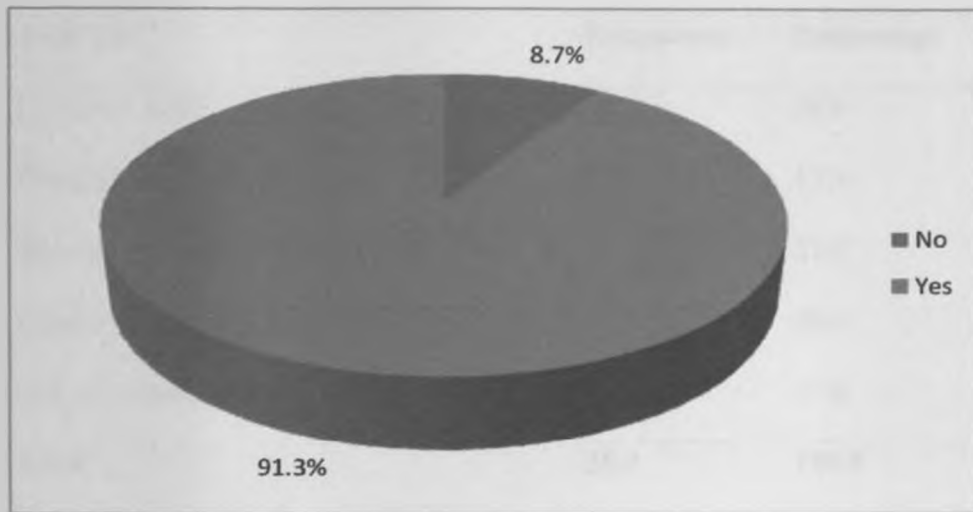
fact that there are very few schools 10 (12.5%) with audio-visual resources such as television. This can be attributed to the fact that most of the pre-schools are located in rural areas which are not fully served with electricity.

#### **4.4.2 Effects of Teaching and Learning Materials on Learner's Achievement in Pre-schools in Borabu District**

The second objective of the study sought to establish the effect of using teaching / learning materials in children's performance in pre-schools in Borabu District. The researcher formulated questionnaire items to elicit responses from the respondents.

Teachers were asked to indicate whether teaching and learning resources stimulate the total growth and development of children. This was intended to find out learner's achievement through enhanced manipulation skills, motor skills, perception, language development and social emotional needs. The results are shown in figure 4.

**Figure 4: Teachers' Responses Towards the Use of Teaching Materials**



The findings on figure 4 indicate that (91.3%) of the teachers agreed that teaching and learning resources affect the quality of educational output as compared to (8.7%) of the teachers who disagreed. The findings indicate that teaching and learning resources creates motivation in learning by supporting the learning process. They enable learners to participate in assignments, support the use of teaching and learning materials. The findings reveal that availability of resources play an important role in understanding of concepts and imparting skills to the learner.

The researcher interviewed the pre-school teachers and sought to establish if the use of teaching and learning materials affect the performance. The findings are presented in Table 5.

**Table 5: Teachers' Responses on Effect of Teaching and Learning Materials**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Language abilities improve	60	24.0
Physical domains developed	32	12.8
Stimulate growth and development	53	21.2
Creates mutual relationship with teachers	61	24.4
Helps in socialization	44	17.6
<b>Total</b>	<b>25.0</b>	<b>100.0</b>

Data in table 5 indicates that majority of learners 61(24.4%) indicated that teaching learning materials creates mutual relationship with teachers, 60 (24.0%) cited the sharpening of language abilities, 44 (17.6%) indicated that it helps in socialization whereas 32 (12.8%) indicated that it develops their physical domain.

The findings indicate that pre-school learners seem to enjoy learning when teaching and learning materials are used resulting in achievement. The findings reveal that if properly used and organized instructional materials such as books, charts, models, visual aids and play materials have some learning in school performance. The findings concur with K.I.E (2003), Eshiwani (1983) and Davis (1975) who asserted that teaching and learning resources play an important role in understanding of concepts and importing of skills to the learner hence promoting experiential learning. The findings indicate that children who are exposed to



teaching and learning resources develop a higher level of intellectual functioning which in turn enhances a higher degree of socialization and develops creativity as they play.

#### **4.4.3 Teacher's Attitude Towards Use of Teaching and Learning Materials**

In the third objective, the study sought to establish teacher's attitude towards the use of teaching and learning. The researcher designed a likert scale type of items to elicit responses from the teachers on their attitude towards the use of teaching and learning materials to enhance learner's achievement in pre-schools in Borabu district. The findings were presented in table 6.

**Table 6: Teachers' Attitude towards Use of Teaching and Learning Materials**

Response	SA	A	N	D	SD					
Teachers recognizes need to use materials	36	45.0	14	17.5	18	22.5	7	8.7	5	6.3
Children are interested in materials	44	55.0	26	32.5	5	6.25	5	6.3	-	-
Children concentrate more when using materials	38	47.5	22	27.5	6	7.5	7	8.7	7	8.7
Children able to acquire language skills	42	52.5	22	27.5	9	11.3	3	3.8	4	5.0
Materials make learning learner –friendly	52	65.0	12	15.0	8	10.0	5	6.3	3	3.8
Easier for learners to understand when materials are used	56	70.0	8	10.0	8	10.0	4	5.0	4	5.0

Data in table 6 indicates that (45.0%) of teachers strongly agreed that they recognize the need to use materials with the pre-schoolers, (17.5%) agreed, (70%) disagreed whereas (6.3%) strongly disagreed. The results indicate that teachers

are aware that there is need to use teaching and learning resources in pre-schools. Further, (55.0%) of teachers indicated that children are interested, (3.25%) agreed that (6.3%) disagreed. The study also established that majority of teachers (52.5%) indicated that children who use teaching and learning materials are also to acquire language skills, (27.5%) agreed whereas (3.8%) disagreed whether materials make the classroom learner-friendly, (65.0%) of teachers strongly agreed, (15.0%) agreed whereas (6.3%) disagreed. The findings reveal that teachers acknowledge the fact that using teaching and learning materials in pre-school classroom environments enhances language skills, motor skills development, social development through play –interaction hence enhanced practical skills. The study found out that teachers find more positive benefits motivational skills, concentration, cognitive processing, independent learning and social relationships. Children discover much more of what they used to know and learn, receive answers to their questions about their learning process and therefore affecting the overall reading and development.

**Table 7: Availability and Adequacy of ECD Facilities**

<b>Resource</b>	<b>Adequate</b>	<b>Inadequate</b>	<b>Not available</b>	<b>Total</b>
Classrooms	18(40)	23 (51.0)	4 (8.9)	45 (100)
Toilets	5 (11.1)	22 (48.9)	18 (40)	45 (100)
Kitchen	6 (13.3)	12 (26.7)	27 (60)	45 (100)

Key: percentages in Parentheses.

The findings in table 7 indicate that majority of head teachers 23 (51.1%) had inadequate classrooms, 36 (80.0%) had adequate playgrounds, 22 (48.0%) had inadequate toilets, 17 (37.8) had inadequate library / books shelves. The study indicates that ECD facilities are inadequate for the implementation of ECD programme. ECD facilities such as classrooms, libraries, toilets, kitchen and water among others have a direct bearing on good performance. These resources encourage learners to participate in the learning process, motivate them, cater for their individual differences and enable them to gain experience by using their senses. Therefore resources are instrumental for improved performance in pre-schoolers.

In the observation checklist for pre-school teachers, the researcher sought to establish the adequacy of teaching and learning resources in pre-schools in Borabu District. Their responses are presented in Table 8.

**Table 8: Adequacy of Teaching and Learning Resources**

Resource	Adequate	Inadequate	Not available	Total
Desks	9 (61.2)	31 (38.8)	-	80 (100)
Chairs	52 (65.0)	28 (35.0)	-	80 (100)
Text books	9 (23.7)	61 (76.3)	-	80 (100)
T/Aids	16 (20.0)	43 (53.8)	21 (26.3)	80 (100)

Key: percentages in Parentheses.

According to the findings presented on table 8, majority of ECD centers had inadequate desks (38.8%), inadequate chairs (65.0%), inadequate textbooks (76.3%), inadequate teaching aids (53.8%), inadequate science kit (37.5%) and inadequate exercise books (46.2%). The study observed that learners congested on each desk which could limit their capacity of participating in class activities. ECD teachers find it hard to control the class where some pupils sit at the floor while others are congested. The findings showed that ECD teachers were not comfortable in their working place because of inadequacy of chairs. It becomes difficult to mark pupils' assignments without sufficient chairs in the pre-schools.

Inadequacy of teaching aids is an indication that a pupil finds it hard to grasp what has been taught in class properly. Teaching aids assists pupils to get a clear image of the content being taught and their inadequacy indicates that curriculum content is not being delivered properly to learners. Therefore poor performance in ECD centres could be attributed to inadequate teaching aids.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter looks at the summary of the findings as obtained from respondents who included head teachers and teachers of pre-schools in Borabu District. It also contains the conclusion of the study, recommendations and suggestions for further research.

#### **5.2 Summary of the Findings**

The purpose of the study was to examine the influence of the use of teaching and learning materials on children performance in pre-schools in Borabu district, Nyamira country. To achieve this, research questions on types of teaching and learning materials, effects of using teaching learning materials, attitudes of teachers towards use of the materials and availability of teaching and learning materials were formulated.

The study adopted a descriptive survey design to establish the influence of teaching and learning materials on the performance of learners in Borabu District. The study targeted a sample of teachers and 52 head teachers. Data were collected using questionnaires and an observation schedule, coded, and classified into major themes from which a summary report was made.

Quantitative data was analyzed using descriptive statistics supported by tables, graphs, frequency distributions and percentages. Data analyzed formed the basis for research findings, conclusions and recommendations of the study. The findings on highest professional qualifications revealed that head teachers had a minimum qualification to head ECD centres and therefore failure of the ECD programme could not very much be attributed to their professional qualifications.

Findings on the location of ECD centres indicated that they were located in rural areas where poverty prevails, limiting performance due to lack of resources. On class size the study revealed that teacher's individual attention to pupils was affected by class size. The result indicated that an increase in class size negatively affected teacher's individual attention to pupils.

The findings obtained from head teachers, teachers and an observation schedule indicated that teaching and learning resources were inadequate in most ECD centres in Borabu district. The study revealed that desks, textbooks, chairs, science kits, classrooms and were inadequate in the centres.

### **5.3 Conclusions of the Study**

Pre-schools face many challenges as they strive to improve educational standard. The ECD programme should be seen as a move to lay a strong foundation on children so that they can have a strong start. The community has become aware of

the programme and increased their enrolment in pre-schools in order to give their children holistic development. This was however been overshadowed by a number of challenges facing the implementation of the ECD programme. Some of the factors such as inadequacy of resources, training of teachers and remuneration should be improved.

Teaching and learning materials are an important aspect of the teaching and learning process of pre-schools. These materials are part of the process. They help children to develop imaginative, discovery and creative skills through familiarization with the materials as they interact with them. Instructional resources if properly used by teachers provide pre-schoolers with a means of expressing feelings, concerns and interests while attaining social interaction. An attentive teacher ought to support children by helping them develop as all-round individuals.

The pre-school stage of education is the most important for every child. It is here that basic knowledge is given to children and foundation for an economically productive and satisfactory life is given. For this to be achieved there is reason to provide adequate teaching and learning materials to teachers and pre-schools. The quantity and quality of teaching materials that are available in the schools determines the quality of education that learners experience. When the learners share instructional materials, this bridges the interactive process of the text and



context, which determines the nature and quality of their comprehension. Reading and manipulative skills develop. This also gives learners chance to discover their position in life as human beings and help them to know the philosophy of life. The classroom teacher should plan his /her teaching and assessing schedules by considering the learners' needs and weaknesses.

#### **5.4 Recommendations of the Study**

Based on the findings, the study makes the following recommendation:

- (i) In-service courses for pre-school teachers should be held to remind them the importance of using teaching/learning materials. There is need for the pre-school education to be incorporated to primary so that the government can supply pre-schools with funds to buy instructional materials. This will ensure that there is appropriate and adequate facilities in schools making children in an environment that is conducive for learning.
  
- (ii) The government should take an initiative to ensure that it takes up the responsibility of financing pre-schools in Kenya the way it has done with the free primary education to eradicate the problem of inadequacy of teaching / learning materials. There is need to sensitize parents and the community on the provision of adequate teaching/learning resources in pre-schools through holding workshops and seminars with ECID facilitators to create awareness.

- (iii) The government should employ pre-school teachers and ensure that they are well paid so as to create a service of motivation which would be in turn ensure that teachers do their work perfectly. The government parents communities, and private sector (private companies NGOs', Religious donors and individuals should collectively provide teaching / learning materials to pre-schools.

### **5.5 Suggestions for Further Reading**

The study suggests that the following areas need further research.

1. A study should be conducted on factors that affect provision of instructional materials in pre-schools.
2. A similar study should be carried in pre-schools in other Districts to provide a clear picture of the situation.
3. Since this study used teachers and head teachers as the key respondents, a study should be carried out involving the parents, learners and ECD officials so as to provide the real picture on the influence of teaching and learning materials on learners' achievement in pre- school.

## REFERENCES

- Best and Kahn (2004) *Research in Education*. New Jersey: Englewood Cliffs.
- Borg R. & Gall M. (1996) *Educational Research. An Introduction*. New York. Longman.
- Bruce T. (2005) ECE 3<sup>rd</sup> Edition: New York., Oxford University Press
- Brunner J. S. (1966) *The Process of Education*, Cambridge, Harvard University Press.
- Education For All (2007) *Global Monitoring Report*.
- Eshiwani G.S. (1983) *Factors Influencing Performance Among Primary and Secondary Pupils in Western Province in Kenya*. Unpublished Thesis. Kenyatta University.
- Gatimu G. & Ingule, N. (1995) *Educational Statistics* Nairobi MacMillan.
- Grenda, M (2003); *Shaping Early Childhood Learners, Curriculum and Contexts. Guidelines for Early Childhood Education in Kenya*, TUE (2001). Nairobi Kenya.
- Harriet E. (2002) *Diploma in Childcare and Education*, Heinemann Publishers, Halley Court, Jordan Hill Oxford.
- Juma A. (2004); *Improving in Early Childhood Classroom in Pakistan. Issues and Challenges from the Field, Contemporary Issues in Early Childhood* Vol. 5 No. 3.
- Kenya Institute of Education (2003) *Play and Creative Activities, Activity Book 2*, Nairobi Kenya Literature Bureau.

- Kenya Institute of Education (2008) *Play and Creative Activities*, Activity Book 2, Nairobi Kenya Literature Bureau.
- Kenya Institute of Education (2008) *Play and Creative Activities, National Centre for Early Childhood Education NACECE*.
- Kenya Institute of Education (KIE), (1999); *Guideline for Early Childhood Development in Kenya*.
- Kenya Institute of Education KIE (2008) *Play and Creative Activities, National Centre for Early Childhood in Kenya*.
- KIE (2003) *National Earlyhood Framework* Nairobi.
- Krejcie, C. and Morgan, (1973) Sampling Table in Mulwa, T. (1990): *Evaluation Research for Beginners: a Practical Guide Nairobi: Nairobi University Press*.
- Kumari R. (2005) *Research Methodology. A Step by Step Gide for Beginners, 2<sup>nd</sup> Edition*. London: SAGE Publishers Ltd.
- Ministry of Education Science and Technology (MOEST) (2001); *The Transition Guideline for Pre-School and Lower Primary Teachers*, Nairobi, MOEST.
- MoE 2001 – *Teaching and Learning in Primary Classroom* Nairobi Jomo Kenyatta Foundation.
- Mugenda, D. M and Mugenda, A. G (1999); *Research Methods, Qualitative Approaches*, Nairobi. Acts Press.
- NACECE (2001) *Guidelines for Early Childhood Development ECD* Kenya Institute of Education (KIE).

- NACECE (2001) *Toys and Materials for Play and Learning*, East Africa, Education publishers Nairobi and Kampala, Ujuzi Publishers Dar-es Salaam.
- Nachmias C.F. & Nachmias A. (2005) *Research Methods in Social Sciences*, 5<sup>th</sup> Edition London, Arnold.
- Nasibi M, (2005); *Early Childhood Education Teaching at School*. Rehema Publishers.
- Njenga W. (2007) *Child Development*, Enterprise Road Industrial Area Nrb, UNICEF. A Human Based Approach to Education for All.
- Oluoch (2006) *Essentials of Curriculum Development* Nairobi, Longhorn Publishers.
- Orodho (J.A) (2003) *Essentials of Educational and Social Sciences Research Methods*. Nairobi.
- Orodho J.A. (2004); *Techniques of Writing Research Proposals and Reports Education and Social Sciences*, Nairobi, Mosola Publishers.
- Penny T. (2002) *Certificate in Child care and Education*, Heinemann Educational Publishers, Halley Court, Jordan Hill, Oxford.
- Republic of Kenya (2006); *Early Childhood Development Services*, Standard of Guidelines for Kenya Government, Government Printers, Nairobi, Kenya.

Sheridan M. D. (1999) *Play in Early Childhood from birth to six years* London  
Routledge.

Wilkins E. (1975) *Education in Practice; A handbook for teachers*, London, Evans  
brothers.

**APPENDICES**

**APPENDIX 1**

**Letter of Introduction**

Monda Moku Thomas

P. O. Box 280

SOTIK

Date:.....

To the Head teachers

.....Primary School

P. O. Box .....

Date:.....

Dear Sir / Madam,

**RE: INVOLVEMENT OF YOUR SCHOOL IN RESEARCH**

I am undertaking post graduate Masters in Education (MED) at the University of Nairobi. I am doing research on the influence of teaching / learning material on children performance in pre-school in Borabu District. You have been chosen to participate in this research. I kindly request you to give information which will assist the research project go through. The identity will remain confidential.

Yours faithfully,

Monda Moku Thomas

## APPENDIX II

### Questionnaire for Head teachers

This questionnaire aims at gathering data on influence of the use of teaching and learning materials on children performance in pre-schools. The information provided will be treated with confidentiality. Please respond to all questions.

#### Instructions

Tick (✓) on the spaces provided where applicable.

1. Pre-school name

2. Indicate your pre-school category

(a) Public [ ] (b) Private [ ]

3. Who supports your school?

(a) Government [ ] (b) NGO [ ] (c) Community [ ]

4. Are there different types of teaching/learning materials in your school?

(a) Yes [ ] (b) No [ ]

5. Are teaching/learning materials adequate in your pre-school?

(a) Yes [ ] (b) No [ ]

6. What are the sources of teaching/learning materials for your pre-school children?

(i) .....

(ii) .....

(iii) .....

(iv) .....



7. Indicate the storage facilities for the teaching/learning materials.

(i) .....

(ii) .....

(iii) .....

(iv) .....

8. How many pre-schools teachers do you have?

9. Do you have enough indoor and outdoor materials for your pre-school children?

Yes [ ] No [ ]

If no give reasons.....

10. Do the outdoor materials applied to the level of the learners?

Yes [ ] No [ ]

11. If no give reasons.....

.....

12. How often do you visit pre-school classes?

Always [ ] Occasionally [ ] None [ ]

13. Do your pre-school teachers prepare schemes of work and lesson plan?

Yes [ ] No [ ]

14. Are the schemes of work and lesson plan relevant to ECDE curriculum?

15. Do your pre- school teachers use the syllabus when scheming?

Yes [ ] No [ ]

**Thank you for your co-operation.**

## APPENDIX III

### Questionnaire for Pre-School Teachers

This questionnaire aims at gathering data on influence of the use of teaching and learning materials on children performance in pre-schools. The information provided will be treated with confidentiality. Please respond to all questions.

#### Instructions

Tick (✓) on the spaces provided where applicable.

1. Gender: (a) Male [ ] (b) Female [ ]
2. Age: 20-30 [ ] (b) 30 - 40 [ ] (c) 41 - 50 [ ]
3. Marital Status (a) Married [ ] (b) Single [ ]
4. Academic qualification (a) KCPE [ ] (b) KCSE [ ]  
(c) DIPL [ ] (d) Others [ ]
5. How is the influence of the use of teaching/learning resources on learners performance in your school?  
(a) Fair [ ] (b) Good [ ] (c) Very Good [ ]
6. How frequent do you use the teaching/learning materials?  
(a) Frequently [ ] (b) Not Frequently [ ] (c) Sometimes [ ]
7. Do you use the available learning resources in learning activities?  
(a) Yes [ ] (b) No [ ]

8. How do the learning resources assist you? Explain

.....

.....

9. How is the learners performance after using the instructional resources?

(a) Very Good [ ] (b) Good [ ] (c) Fair [ ] (d) Poor [ ]

10. How often do pupils interact with teaching/learning materials?

(a) Very Often [ ] (b) Often [ ] (c) Hardly [ ]

11. Are there lockable cupboards for keeping teaching/learning materials?

(a)Yes [ ] (b)No [ ]

12. Are your classrooms lockable?

(a)Yes [ ] b)No [ ]

13. Tick the following teaching/learning materials available in your school.

Indoor				Outdoor			
Counters	Pictures	Charts	Coloured chalks	Swings	Tyres	Seesaws	Playground

14. Do you have ECD kitchen?

Yes [ ] No [ ]

15. Do you agree that instructional resources are very important in pre-school children.

Yes [ ] No [ ]

If yes explain.....

Strongly Agree (SA) = 5 Agree (A) = 4 Neutral (N) = 3 Disagree D = 2 Strongly Disagree SD = 1

		SA	A	N	D	SD
A	It is very important for me to teach with the materials					
B	I use materials because children are interested in them.					
C	The children concentrate more when using materials					
D.	Materials allow children to learn language skills.					
E	Materials make learning learner – friendly.					
F	Learners find it easier to understand.					

**Thank you for your co-operation.**

## APPENDIX IV

### Observation Checklists for Pre-School Teachers

Name of the school.....

Evaluation of teaching and learning materials

Teaching and learning materials	Available and adequate	Available but inadequate	Not available
Wall charts			
Coloured chalks			
Balls			
Swings			
Pictures			
Photographs			
Textbooks			
Playing ground			
See saw			
Chalkboard			
Hoops and ropes			
Pencils			
Felt pens			
Toys			
Handbook			

**Thank you for your co-operation.**

**APPENDIX V**

**Identification Details for Researcher**

PAGE 2

PAGE 3

Research Permit No. **NCST/RCD/14/012/767**

**THIS IS TO CERTIFY THAT:**

**Date of issue**

**22<sup>nd</sup> June, 2012**

**Prof./Dr./Mr./Mrs./Miss/Institution**

**Fee received**

**KSH. 1,000**

**Morda Mokuia Thomas  
of (Address) University of Nairobi  
P.O.Box 30197-00100, Nairobi.  
has been permitted to conduct research in**



**Location  
District  
Province**

**Borabu  
Nyanza**

**on the topic: Influence of the use of teaching  
materials on children performance in  
pre-schools in Borabu District, Nyamira  
County.**

**Applicant's  
Signature**

**Secretary  
National Council for  
Science & Technology**

**for a period ending: 30<sup>th</sup> September, 2012.**

**APPENDIX V**

**Identification Details for Researcher**

**PAGE 2**

**PAGE 3**

**Research Permit No. NCST/RCD/14/012/767**

**THIS IS TO CERTIFY THAT:**

**Date of issue**

**22<sup>nd</sup> June, 2012**

**Prof./Dr./Mr./Mrs./Miss/Institution**

**Fee received**

**KSH. 1,000**

**Monda Mokuia Thomas**

**of (Address) University of Nairobi**

**P.O.Box 30197-00100, Nairobi.**

**has been permitted to conduct research in**



**Location**

**Borabu**

**District**

**Nyanza**

**Province**

**on the topic: Influence of the use of teaching materials on children performance in pre-schools in Borabu District, Nyamira County.**

*Monda Mokuia Thomas*

**Applicant's Signature**

*[Signature]*

**Secretary  
National Council for  
Science & Technology**

**for a period ending: 30<sup>th</sup> September, 2012.**

## APPENDIX VI

### Conditions to Carry Out the Research

#### CONDITIONS



REPUBLIC OF KENYA

#### RESEARCH CLEARANCE PERMIT

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.
2. Government Officers will not be interviewed with-out prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2)/four(4) bound copies of your final report for Kenyans and non-Kenyans respectively.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.

GPK60553mt10/2011

(CONDITIONS see back page)



## APPENDIX VII

### Research Authorization Letter

REPUBLIC OF KENYA



## NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349  
254-020-310571, 2213123, 2219420  
Fax: 254-020-318245, 318249  
When replying please quote  
secretary@ncst.go.ke

P.O. Box 30623-00100  
NAIROBI-KENYA  
Website: www.ncst.go.ke

NCST/RCD/14/012/767

22nd June 2012

Our Ref:

Date:

Monda Moku Thomas  
University of Nairobi  
P.O Box 30197  
Nairobi

### RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Influence of the use of teaching materials on children performance in pre-schools in Borabu District, Nyamira County*" I am pleased to inform you that you have been authorized to undertake research in **Borabu District** for a period ending **30<sup>th</sup> September, 2012**.

You are advised to report to the **District Commissioner and the District Education Officer, Borabu District** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

A handwritten signature in black ink, appearing to read 'M. K. Rugutt'.

**DR. M. K. RUGUTT, PhD, HSC**  
**DEPUTY COUNCIL SECRETARY**

Copy to:

District Commissioner  
District Education Officer  
Borabu District

## APPENDIX VII

### Research Authorization Letter

REPUBLIC OF KENYA



## NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349  
254-020-310571, 2213123, 2219420  
Fax: 254-020-318245, 318249  
When replying please quote  
secretary@ncst.go.ke

P.O. Box 30623-00100  
NAIROBI-KENYA  
Website: www.ncst.go.ke

**NCST/RCD/14/012/767**

**22nd June 2012**

Our Ref

Date:

Monda Mokua Thomas  
University of Nairobi  
P.O Box 30197  
Nairobi

### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "*Influence of the use of teaching materials on children performance in pre-schools in Borabu District, Nyamira County*" I am pleased to inform you that you have been authorized to undertake research in **Borabu District** for a period ending **30<sup>th</sup> September, 2012**.

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A handwritten signature in black ink, appearing to read 'M. K. Rugutt'.

**DR. M. K. RUGUTT, PhD, HSC**  
**DEPUTY COUNCIL SECRETARY**

Copy to:

District Commissioner  
District Education Officer  
Borabu District