TEACHERS’ ACQUISITION AND USE OF VISUAL TEACHING-LEARNING MATERIALS IN PUBLIC PRE-PRIMARY SCHOOLS IN KASARANI DIVISION, NAIROBI COUNTY

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E55/OL/22317/2011

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MARCH, 2017
DECLARATION

This research project report is my original work and has not been presented for a degree in any other university/institution for consideration of any certification. This research report has been complemented by referenced sources duly acknowledged. Where text, data (including spoken words), graphics, pictures or tables have been borrowed from other sources, including the internet, these are specifically accredited and references cited using current APA system and in accordance with anti-plagiarism regulations.

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Department of Early Childhood Studies
Kenyatta University
DEDICATION

I dedicate this work to my wife Mary Njoki and our children Faith Muthoni, Philip Burugu and Phyllis Wanjiru for their encouragement and moral support which has been a major source of inspiration to me.
ACKNOWLEDGEMENT

I would like to appreciate all those who gave me moral and material support as well as encouragement during the time of writing this project. I am particularly indebted to my supervisors Dr. Gladwell Wambiri and Dr. Nyakwara Begi for their guidance and steadfast support throughout the writing of this project. I am also grateful to members of staff of department of Early Childhood Studies, Kenyatta University for taking me through the course. I am also grateful to my wife and children for their moral and material support and for their encouragement. May God bless you all.
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# ABBREVIATIONS AND ACRONYMS

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<thead>
<tr>
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<th>Description</th>
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<tr>
<td>BOM</td>
<td>Board of Management</td>
</tr>
<tr>
<td>DICECE</td>
<td>District Centre for Early Childhood Education</td>
</tr>
<tr>
<td>ECD</td>
<td>Early Childhood Development</td>
</tr>
<tr>
<td>ECDE</td>
<td>Early Childhood Development and Education</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Education, Scientific and Cultural Organisation</td>
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</tbody>
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ABSTRACT

Despite the efforts of teachers to improve acquisition and use of visual teaching-learning materials, the teachers face challenges that are not scholarly documented in Kasarani Sub-County. The purpose of this study was to investigate the teacher challenges on acquisition and use of visual teaching–learning materials in public pre-primary schools in Kasarani Sub-County in Nairobi. This study was significant to teachers, curriculum developers and policy makers. In the course of carrying out this study, the researcher encountered some challenges including lack of cooperation from respondents. However, the study was done in Kasarani Sub-County because studies to determine teacher challenges in acquiring and use of visual teaching-learning materials are limited. This study was guided by Dales (1954) theory of instruction. The independent variables include challenges experienced by teachers while acquiring materials as well as limitations to usage of materials. The indicators of independent variables include requisition, improvisation, selection, distribution and application of materials. The dependent variable is the acquisition of visual teaching-learning materials. Previous studies indicate that the scope is in primary schools and secondary schools and little has been covered in pre-primary schools which this study sought to investigate in Kasarani Sub-County. This study utilised descriptive survey research design that facilitated use of qualitative and quantitative data collection approaches. The researcher targeted 54 teachers in all 18 pre-primary schools out of which simple random sampling technique was used to obtain a sample size of 15 teachers. The researcher used questionnaires to obtain data from the sampled teachers. Both qualitative and quantitative data obtained from the teacher questionnaire were analysed descriptively. Quantitative data yielded descriptive information in form of means and percentages and presented in frequency tables. Moreover, content of qualitative data were analysed and presented thematically. The findings of the study revealed that many teachers in Kasarani are overwhelmed in improvising the materials. The findings have also revealed that the schools do not have action plans for acquisition and use of teaching and learning materials. Other challenges encountered include high costs, lack of storage space, low knowledge and experience among teachers. The study has found that teachers propose for proper budgeting, training, involvement of all stakeholders, capacity building and improvement of pedagogy as possible processes that will help in limiting the challenges encountered by teachers. The study concludes that many teachers face both manipulative and non-manipulative challenges that limit their ability to acquire and use visual teaching and learning materials. The study recommends for capacity building in schools to improve the acquisition and use of visual teaching-learning materials.
CHAPTER ONE

INTRODUCTION AND CONTEXT OF THE STUDY

1.0 Introduction

This chapter presented the background to the study, statement of the problem, purpose of the study, objectives of the study, significance of the study, delimitation and limitations of the study, assumption of the study and theoretical framework. The chapter also contains operational definition of items.

1.1 Background to the Study

Early life experience influences later learning and development of children (United Nations Education and Cultural Organisation [UNESCO], 2007). The early life experiences include exposure of children to adequate visual teaching-learning materials (Neo, 2007). According to Oguranti and Ihongbe (1981) visual teaching-learning materials is any picture, model, object or device which provide visual experiences to the learner purposely for introducing, building and enriching ideas, hence clarifies, difficult notions.

A child who is provided with suitable materials stands very good chance of learning. Use of visual teaching and learning materials help in sustaining learners’ attention, increases understanding of concepts and improves performance of the learners (Gravoso, Pasa, Laba, & Mori, 2008; Kadzera 2006; Rakes, Fields & Cox, 2006). The need to motivate children to learn has contributed to use of
instructional resources as an integral part of teaching learning process in the face of rapid technological changes all over the world (Abdo & Semela, 2010).

Ngure (2014) observes that today virtually any instructional setting can become a classroom with the aid of and sometimes even near total dependence upon instructional technology. However, there are challenges in the use and acquisition of the visual instructional materials. The challenges limit the interaction between learners and teachers thereby making learning for learners and teaching for teachers difficult (Moore, Morales and Carel, 2004; Afshari, Bakar & Luan, 2009; Onasanya 2008; Kadzera, 2006; Ngure, Begi, Kimani & Mweru, 2014). The identification of the teacher challenges in acquiring and use of visual teaching-learning materials is significant to countering the challenges yet this is far from being realised.

In the United States of America, Moore, Morales and Carel (2004) found that teachers with experience of less than two years had difficulties in using visual instructional media. Out of the 228 teachers surveyed, 50% in the category of 0-2 years obtained high scores while 50% obtained low scores in implementation of instructional media. This indicates that half of the teachers found it difficult to use visual teaching and learning materials. In the United Kingdom, Barnard (2007) found that one of the challenges that limit acquisition and use of visual teaching and learning materials is teacher experiences. According to Barnard, increased
exposure to use of visual instruction media by teachers increased teachers’ chances of acquiring such media.

In Malaysia, challenges to acquisition and use of visual instructional materials include teachers’ manipulative and non-manipulative factors (Afshari, Bakar & Luan, 2009). According to Afshari, Bakar & Luan (2009), manipulative factors include attitude, knowledge and skills commitment of teachers as well as commitment of the school in use of modern teaching and learning materials. Non-manipulative factors cannot be influenced by the teacher and include age and teaching experience of teachers as well as government policies (Afshari, Bakar & Luan, 2009).

In Nigeria, Onasanya (2008) found that teachers’ bad attitude towards visual instructional media was a challenge to acquisition and use of visual teaching and learning materials. Onasanya (2008) argues that teachers who are innovative spend more time to develop the visual materials while those who had bad attitude do not spend time in developing the materials. Also, in Zambia, lack of storage facilities for visual teaching and learning materials limited the acquisition and use of the materials by teachers (Akakandelwa & Musanje, 2011).

In Malawi, Kadzera (2006) found that unavailability of visual instructional materials during teacher training made teachers not to include visual materials in planning of preschool lessons. In the survey done in Malawi’s teacher training
colleges, Kadzera (2006) found that classrooms without power connection points limited the use of instructional materials such as projectors by the tutors. This condition limited trained teachers from improvising available resources for visual teaching and learning materials (Kadzera, 2006; Onasanya, 2008).

In Kenya, the level of training of teachers is a challenge to acquisition and use visual teaching and learning materials (Ngure, Begi, Kimani & Mweru, 2014). Ngure et al. (2014) argue that pre-primary teachers in Nairobi County with inadequate pedagogical skills on use of visual teaching and learning materials have difficulties in planning to acquire and use visual teaching and learning materials. Also, in Kibwezi Sub-County of Makueni County, a survey by Mwololo (2009) showed that minimal knowledge of teachers in instructional materials was a challenge to acquisition and use of visual teaching and learning materials. Low exposure to instructional materials also poses challenges to use and acquisition of visual teaching and learning materials in Asego (Aila, 2005) and in Nairobi (Begi, 2007).

The studies in Kenya indicate that the inadequate competencies of pre-primary teachers about instructional materials such as visual materials are a challenge to acquisition and use of visual teaching and learning materials. Ngure et. al. (2014) argue that pre-primary teachers are afraid to attempt using new instructional materials thereby becoming a challenge to acquire and use the visual teaching and learning materials. Aila (2005) found out that the longer pre-school teachers
remain in their profession, the more they develop, poor attitude towards use of visual aids in instruction. Studies in Kasarani Sub-County in Nairobi have not been done to determine the teacher challenges to acquisition and use of visual teaching and learning materials.

Despite the identification of the teacher challenges to acquisition and use of visual teaching-learning materials in many regions across the world, Kenya’s case is not adequately covered. This is because teachers continue to be enrolled in teaching institutions and eventually undergo training that includes acquisition and use of visual teaching-learning materials yet they continue to face challenges in acquiring and using visual teaching-learning materials. Also, the reviewed studies reveal different challenges to acquisition and use of visual materials in different regions. With limited studies in the area, could Kasarani Sub-County be facing different challenges from other areas? This formed the basis for this study.

1.2 Statement of the Problem

In Kasarani Sub-County there lacks documented evidence showing the extent to which teachers acquire and use the visual teaching-learning materials. As some pre-primary schools in Kasarani Sub-County have the adequate and variety of materials, some children end up not utilizing the materials fully and the lesson objectives are not achieved. Also, as some pre-primary schools have inadequate materials requisitions and improvisations of the materials made do not improve the adequacy of the materials in numbers and variety.
These conditions clearly indicate that despite the efforts of the teachers to improve use and acquisition of visual materials, the teachers face challenges that are not comprehensively identified and documented in Kasarani Sub-County. The unknown challenges to acquisition and use of the visual teaching–learning materials limit enhanced learning in children. The information on the challenges is necessary to improve learning of the children yet it is not available. This indicates that the children in the area will continue to lack adequate learning experiences supported by visual teaching–learning materials unless the challenges to the acquisition and use are identified and intervention measures put in place.

**1.2.1 Purpose of the Study**

The purpose of this study was to investigate the teacher challenges on acquisition and use of visual teaching–learning materials in public pre-primary schools in Kasarani Sub-County in Nairobi. The identification of the teacher challenges in acquisition and use of visual teaching–learning materials is necessary for providing recommendations to improve teaching and learning.

**1.2.2 Objectives of the Study**

This study was guided by the following objectives:

i) To identify the challenges experienced by teachers while acquiring visual teaching–learning materials in pre-primary schools in Kasarani Sub-County in Nairobi.
ii) To determine the challenges experienced by teachers while using visual teaching–learning materials in pre-primary schools in Kasarani Sub-County in Nairobi.

iii) To find out strategies used by teachers to overcome the challenges on acquisition and use of visual teaching–learning materials in pre-primary schools in Kasarani Sub-County in Nairobi.

1.2.3 Research Questions

The study was guided by the following research questions:

i) What are the challenges experienced by teachers while acquiring visual teaching–learning materials in pre-primary schools in Kasarani Sub-County in Nairobi?

ii) What are the challenges experienced by teachers while using visual teaching–learning materials in pre-primary schools in Kasarani Sub-County in Nairobi?

iii) What are the strategies used by teachers to overcome the challenges on acquisition and use of visual teaching–learning materials in pre-primary schools in Kasarani Sub-County in Nairobi?

1.3 Significance of the Study

This study is significant to parents, teachers, Board of Management (BOM), curriculum developers and policy makers. To the parents, this study will provide information on how they should support teachers in acquisition of visual teaching
and learning materials. The parents will be informed on their roles of providing the materials for effective teaching and learning. For the BOM, this study will provide assessment information critical to their decision making on provision of visual teaching and learning materials. The findings of the study will also highlight the administrative and management activities that limit provision and use of the materials from which solutions will be pursued.

The findings of this study will highlight ways on how teachers acquire visual teaching-learning materials. It is hoped that the findings of the study produced relevant information relating to challenges pre-primary teachers experience in acquisition of teaching-learning materials. The pre-primary teacher trainers are expected to note the need for instilling more emphasis on use of visual teaching-learning materials during training. Similarly, the researcher’s findings may be useful to the curriculum planners and other stakeholders in designing in-service programmes for pre-primary school teachers in relation to acquisition of teaching-learning materials in schools.

This study will hopefully be useful to the Ministry of Education policy makers on how to address challenges facing Early Childhood Education (ECD) education. The teacher challenges on acquisition and use of visual teaching-learning necessary materials identified will be support the changes in the policies governing Early Childhood Development and Education (ECDE) pertaining to teaching-learning materials. In addition, this study might help District Centres for
Early Childhood Education (DICECE) personnel to provide the necessary help needed by the teachers in order to facilitate teaching-learning in pre-primary schools.

1.4 Limitations and Delimitation of the Study

The following are limitations and delimitations of the study:

1.4.1 Limitations of the Study

In the course of carrying out this study, the researcher encountered some challenges. First, the researcher selected a few schools to represent the Kasarani Sub-County and the results cannot be generalized to all schools in the country. Also, some respondents did not cooperate within the scheduled time thus making the researcher to spend more time during data collection.

1.4.2 Delimitations of the Study

Despite the limitations, this study focused on investigating challenges of acquiring and using visual teaching-learning materials in public pre-primary schools in Kasarani Sub-County, Nairobi. The study was done in Kasarani Sub-County because studies to determine teacher challenges in acquiring and use of visual teaching-learning materials are limited. Also, the focus of the study on public pre-primary schools is because the schools are managed by County Government of Nairobi that employs qualified teachers as well as equips the schools with visual teaching-learning materials. The private schools were not
chosen because most teachers hired are not qualified. It was expected that qualified teachers are equipped with knowledge and skills of acquiring and use of teaching-learning materials.

1.5 Assumptions of Study

This study was based on the following assumptions:

i) Pre-primary schools in Kasarani Sub-County have some visual teaching–learning materials obtained from parents and school purchases. This implied that not all materials were provided by the school or teachers. This also implied that the sources of the materials were many.

ii) The pre-primary teachers have varied skills and knowledge on acquisition and use of visual teaching and learning materials. This implied that the teachers can partly handle the challenges.

1.6 Theoretical and Conceptual Framework

The following are theoretical and conceptual frameworks for the study:

1.6.1 Theoretical Framework

This study was guided by Dales (1954) theory of instruction. The theory is based upon the principle that all teaching and learning can greatly be improved through acquisition and use of instructional materials because they make teaching memorable and when used intelligently promote the most effective kind of
learning. Dale posits that learning is a process in which the concrete and the abstract interact. He therefore found that visual materials which include books, pictures, photographs, flashcards, maps, posters, chalkboards, drawings, and cartoons ought to be used in teaching.

In addition, audio materials which include radio, tape, and disc recording, telephones, and sound distribution systems and finally audio visual materials which are films, television, video-tapes, printed materials with recorded sound, and demonstrators supply concrete basis for conceptual thinking and hence reduce meaningless words or responses of learners. Dale (1969) further states that a school will become an interesting place if it proves to be a place where learners have interesting experiences—where they see, hear, touch, taste, plan, make, do, and try. He adds that when a school provides many of these rich experiences, it will promote effective learning. He further explains that this will carry on the kind of education that fosters “permanent” learning.

Moreover, Dale states that acquisition and use of instructional materials in teaching and learning can accomplish the following: They add a high degree of interest and involvement among the learners; They develop a continuity of thought especially true of motion pictures; and they offer a reality of experience which stimulates self-creativity on the part of the learners. In addition, Dale further explains that these materials should be well prepared and used in order to give the best outcome.
The theory is therefore important to this study because it recognizes the great role played by instructional materials in the process of teaching and learning. The learners might be taking so long to conceptualize concepts due to the fact that some teachers hardly use teaching and learning materials in teaching process. It could also be due to use of hurriedly prepared teaching and learning materials.

1.6.2 Conceptual Framework

This study was anchored on the conceptual framework illustrated below.

**Figure 1.1: Conceptual Framework**

The conceptual framework in Figure 1.1 shows the relationships between independent and dependent variables as well as intervening variable. The independent variables include: acquisition of materials; and usage of the
materials. The dependent variable is teaching and learning. The intervening variable is curriculum and instruction of pre-primary school. The cause-effect relationship between the independent and dependent variables indicates that teacher challenges in the acquisition and usage of the materials limits teaching and learning. It also shows that countering the teacher challenges in the acquisition and usage of the materials improves teaching and learning. The requirements of the curriculum and instruction of pre-primary intervene in the extent to which acquisition and use of visual teaching-learning materials can limit or improve the teaching and learning process.

In this context, there is likelihood that more teacher challenges on acquisition and usage of the materials limit teaching and learning process. Also, there is likelihood that few teacher challenges on acquisition and usage of the materials promote the teaching and learning process. Moreover, the relationship can show that reduced content in the curriculum and instruction may reduce the challenges while increased content may increase the challenges on acquisition and usage of the materials.
1.7 Operational Definition of Terms

Acquisition: The process of obtaining the teaching-learning materials through exchange, borrowing or as gifts.

Challenges: These are hindrances facing various schools in the process of acquiring and using visual teaching and learning materials.

Instruction: The way teachers present lesson content. Instruction may be teacher-directed, inquiry based, full-group, and small-group, individualized or provide through print media, technology or other means.

Instructional Resources: Teaching aids used to facilitate the teaching learning process. These include music instruments, audio-visual materials, printed materials and non-projected materials.

Private pre-primary schools: These are schools managed by private organizations, individuals and churches for profit.

Public pre-primary schools: Schools managed by Nairobi City County.

Usage: This is the act of putting into use a resource for the purpose of teaching and learning.

Visual resources: These are the teaching-learning materials which facilitate learning by using the sense of sight such as wall maps, posters, photographs, charts, pictures among others.
Teaching: Is the process of imparting knowledge and skills to the children in a structured manner.

Learning: Is the process of acquiring knowledge, skills, behaviour and attitude.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter is a review of related literature on teacher challenges on acquisition and use of visual teaching-learning materials. The chapter is structured under the following sub-headings: challenges of teachers acquiring visual teaching-learning materials; challenges of teachers using visual teaching-learning materials; strategies used to overcome the challenges; and chapter summary.

2.2 Challenges Experienced by Teachers while Acquiring Visual Teaching Learning Materials in Pre-Primary Schools

According to Gravoso, et. al., (2008), acquisition of visual teaching-learning materials involves the process of teachers obtaining picture, model, object or device which provide visual experiences to the learner purposely for introducing, building and enriching ideas. Kadzera et., al. (2006) explain that acquiring visual teaching-learning materials can either be through making requisitions or orders to relevant authorities to make supplies to the teacher. Also, Onasanya (2008) explains that teachers can improvise the materials under inadequate conditions.

In acquiring the visual teaching-learning materials, teachers consider many factors that include number of learners, teaching method, time of the lesson, availability of the materials and objectives of the lesson. Ngure, Begi, Kimani & Mweru (2014), argue that not all teachers consider these factors. This is attributed to
pedagogical skills as well as attitude towards acquisition of the materials. In pursuit of quality education for pre-primary learners, Sifuna and Sawamura (2010) argue that teachers should facilitate learner-centred methods. The learner centered methods require adequate and variety of basic materials that promote learner activities and exercises (Sifuna & Sawamura, 2010).

Sifuna and Sawamura (2010), further argue that the quality implementation of the curriculum depends on available teaching and learning materials, pedagogical skills of teachers and instruction time. This seems to indicate that it becomes a challenge for teachers to acquire visuals materials when the materials are not available. It also implies that teachers find it challenging to acquire visual materials due to inadequate pedagogical skills. The argument also shows that teachers find it challenging to acquire adequate visual materials due to the time of instruction required for the lessons.

The study done by Sifuna and Sawamura (2010) in Sub-Sahara was focusing on the challenges of quality education and the findings do not link sufficiently to challenges of teachers to acquisition of visual materials in pre-primary schools. Furthermore, the study by Sifuna and Sawamura (2010) did not include Kasarani Sub-County in the sample yet the area is in Kenya that falls within the Sub-Saharan region. This indicates that the extent to which teacher challenges of acquiring visual materials in Kasarani is not well articulated. This study therefore explored the teacher challenges of acquiring visual materials in Kasarani.
In the United States of America, Moore, Morales and Carel (2004) found that teachers with experience of less than two years had difficulties in acquiring visual instructional media. Out of the 228 teachers surveyed, 50% in the category of 0-2 years obtained high scores while 50% obtained low scores in implementation of instructional media. This indicates that half of the teachers found it difficult to acquire visual teaching and learning materials. In the United Kingdom, Barnard (2007) found that one of the challenges that limit acquisition of visual teaching and learning materials is teacher experiences. Increased exposure to use of visual instruction media by teachers increased teachers’ chances of acquiring such media (Barnard, 2007).

In Nigeria, Onasanya (2008) found that teachers’ bad attitude towards visual instructional media was a challenge to acquisition of visual teaching and learning materials. Onasanya (2008) argues that teachers who are innovative spend more time to develop the visual materials while those who had bad attitude do not spend time to develop the materials. In Zambia, lack of storage facilities for visual teaching and learning materials limited the acquisition of the materials by teachers (Akakandelwa & Musanje, 2011).

In Kenya, the level of training of teachers is a challenge to acquisition and use visual teaching and learning materials (Ngure, Begi, Kimani, et. al., 2014). Ngure et. al. (2014) argue that pre-primary teachers in Nairobi County with inadequate
pedagogical skills on visual teaching and learning materials have difficulties in planning to acquire visual teaching and learning materials.

A study done by Omariba (2012) on challenges faced by teachers and learners in use of instructional technologies in secondary schools in Kisii County in Kenya found that teachers found it difficult to acquire teaching materials. This was attributed to inaccessibility of technological materials in Kisii County. From the study, there is knowledge gap on teacher challenges in pre-primary schools which this study sought to investigate in Kasarani Sub-County.

2.3 Challenges Experienced by Teachers while Using Visual Teaching Learning Materials in Pre-Primary Schools

In the United States of America, Moore, Morales and Carel (2004) found that teachers with experience of less than two years had difficulties in using visual instructional media. Out of the 228 teachers surveyed, 50% in the category of 0-2 years obtained high scores while 50% obtained low scores in implementation of instructional media. This indicates that half of the teachers found it difficult to use visual teaching and learning materials.

In the United Kingdom, Barnard (2007) found that one of the challenges that limit use of visual teaching and learning materials is teacher experiences. According to Barnard, increased exposure to use of visual instruction media by teachers increased teachers’ chances of acquiring such media. In Malaysia, challenges to
use of visual instructional materials include teachers’ manipulative and non-manipulative factors (Afshari, Bakar & Luan, 2009). According to Afshari, Bakar & Luan (2009), manipulative factors include attitude, knowledge and skills commitment of teachers as well as commitment of the school in use of modern teaching and learning materials. Non-manipulative factors cannot be influenced by the teacher and include age and teaching experience of teachers as well as government policies (Afshari, Bakar & Luan, 2009).

In Nigeria, Onasanya (2008) found that teachers’ bad attitude towards visual instructional media was a challenge to the use of visual teaching and learning materials. Onasanya (2008) argues that teachers who are innovative spend more time to develop the visual materials while those who had bad attitude do not spend time to develop the materials. In Malawi, Kadzera (2006) found that unavailability of visual instructional materials during teacher training made teachers not to include visual materials in planning of preschool lessons. In the survey done in Malawi’s teacher training colleges, Kadzera (2006) found that classrooms without power connection points limited the use of instructional materials such as projectors by the tutors. This condition limited trained teachers from improvising available resources for visual teaching and learning materials (Kadzera, 2006; Onasanya, 2008).

Use of visual teaching-learning materials involves the application and utilization of the materials during teaching or learning. Omariba (2012) opines that the
expected outcome of lessons and functions of teaching-learning materials significantly determine the use of the materials. In a study done by Omariba (2012) on challenges faced by teachers and learners in use of instructional technologies in secondary schools in Kisii County in Kenya, he found that teachers found it difficult to use the teaching materials. The findings of the study revealed that availability, knowledge and skills of teachers, syllabus requirements and administration issues were significant challenges to the use of the materials.

However, the study focused on secondary schools in Kisii County. It should be noted that while the teachers whether in secondary or pre-primary use teaching materials, the choice of the materials is different. Pre-primary learners require more stimulating materials than learners in secondary school. Thus, this study focused on pre-primary teachers in Kasarani Sub-County.

A study done by Muriithi (2005) in Kenya’s secondary schools on a framework for integrating Information and Communication Technology (ICT) found that teachers were taught about computers during training in ICT with less emphasis on using computers. Based on the findings, it is highly likely that pre-primary teachers are also taught about computers and lack basic skills on using the computers during teaching. However, the study does not focus on pre-primary teachers which this present study sought to determine the challenges in using the visual materials.
A study done by Omwenga (2001) on use of media resources during teaching practice in Kamagambo and St. Paul shows that lack of instructional materials was a challenge in the use of the materials. Critical analysis by Omwenga (2001) shows that while teachers complained of the lack of the materials, the teachers were guilty of not using what was available.

Also, in Kibwezi Sub-County of Makueni County, a survey by Mwololo (2009) showed that minimal knowledge of teachers in instructional materials was a challenge to use of visual teaching and learning materials. Low exposure to instructional materials also poses challenge to use of visual teaching and learning materials in Asego (Aila, 2005) and in Nairobi (Begi, 2007). Whether this situation is present in Kasarani or not is not documented hence the need for this study.

2.4 Strategies used by Teachers to Overcome the Challenges on Acquisition and Use of Visual Teaching–Learning Materials in Pre Primary Schools

Depending on the situation of either acquiring or using the materials, teachers have attempted to overcome challenges they encounter in the acquisition and use of the materials. In pursuit of quality education for pre-primary learners, Sifuna and Sawamura (2010) argue that teachers should facilitate learner-centred methods. The learner centered methods require adequate and variety of basic materials that promote learner activities and exercises (Sifuna & Sawamura, 2010). The emerging issue is that while teachers apply learner centered methods,
the method is not fully utilised as it demands for promoting learning through putting into considerations learner interests.

Sifuna and Sawamura (2010), further argue that the quality implementation of the curriculum depends on available teaching and learning materials, pedagogical skills of teachers and instruction time. This seems to indicate that it becomes a challenge for teachers to acquire visual materials when the materials are not available. It also implies that teachers find it challenging to acquire visual materials due to inadequate pedagogical skills. The argument also shows that teachers find it challenging to acquire adequate visual materials due to the time of instruction required for the lessons. The controversy here is that is the problem emanating from teachers or the school management.

In a study done by Mingaine (2013), it was found that information technology resources were few for each learner to adequately utilise the resources. In this situation, Mingaine (2013) observed that the teachers encouraged the learners to share the information technology resources. The strategy of sharing seemed to work although learners did not effectively utilise the materials.

While this study acknowledges the findings by Mingaine (2013), it is worth noting that this study was done in public secondary schools. There exists knowledge gap on whether teachers use sharing as a strategy in the course of using visual teaching and learning materials in pre-schools. Thus, this study
investigated the strategies applied by teachers to overcome the challenges of acquiring and using the visual materials.

In Wareng District of Kenya, Jeptanui (2011) found that teachers applied the strategy of sharing books so as to address the challenge of inadequate books. This was observed in 90% of the primary school pupils. Another strategy observed by Jeptanui (2011) is the substitution and diversification strategy whereby teachers did not rely only on one or specific materials but rather utilised many materials to address the same objective. For example, while textbooks were few yet they contained same image as one on the chart, the teachers gave some learners the textbooks while others were given charts.

In addition, Jeptanui (2011) found that 10% of teachers lobbied for old pupils and friends to bring the materials, 50% regularly checked and replaced the worn out materials, 15% improvised, 60% made regular orders and 10% informed parents. While these strategies seemed to be effective, it was applied to primary school pupils and not preschools. This study therefore intended to close this gap by investigating the suitable strategies applied by teachers facing challenges in acquiring and using the materials in Kasarani.

In another study done in Migori County, Omayio (2013) found that teachers resorted to organizing instructional resources so as to maximize the usage of the materials. This was intended to address the challenge of disorder and inadequate
materials in respect to the number of the preschool learners. This strategy seemed to work with more than 50% of the teachers interviewed. However, the study done by Omayio (2013) focused on instructional materials for number work. Thus, while it is known that organizing teaching and learning materials improves usage in number work, it is not yet established whether this applies across all activity areas for Pre-Primary learners. This study therefore sought to investigate the strategies applied by teachers to overcome the challenges of acquiring and using the visual materials in Kasarani, Nairobi.

2.5 Summary of Literature Reviewed

In acquiring the visual teaching-learning materials, teachers consider many factors that include number of learners, teaching method, time of the lesson, availability of the materials and objectives of the lesson. However, not all factors are considered due to teacher’s level of pedagogical skills and experience. The concern here is that teachers undergo training to equip them with knowledge on acquisition and use of visual-teaching materials yet the knowledge acquired is not applied in the acquisition of the materials. This indicates that there were challenges that required investigation.

On use of the materials, most studies reviewed show the scope is in primary schools and secondary schools. From the study, there is knowledge gap on teacher challenges in pre-primary schools which this study sought to investigate in Kasarani Sub-County. It should be noted that while the teachers whether in
secondary or pre-primary use teaching materials, the choice of the materials is different. Pre-primary learners require more stimulating materials than learners in secondary school. Thus, this study focused on pre-primary teachers in Kasarani Sub-County.

On strategies used by teachers in overcoming challenges encountered in the acquisition and use of the materials, most reviewed studies have been done in primary and secondary schools. It is worth determining whether pre-primary teachers apply different strategies to overcome the challenges encountered in the acquisition and use of the materials. Thus, this study focused on investigating strategies applied by teachers to overcome the challenges of acquiring and using the visual materials in Kasarani, Nairobi.
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter describes the methodology of this study. The chapter outlines research design, variables, location of the study, target population, sampling techniques and sample size, data collections instruments, data collection procedures, pilot study, data analysis plan, logistical and ethical considerations and summary.

3.2 Research Design

This study employed descriptive research design. Descriptive design facilitates collection of both qualitative and quantitative data from large area by use of questionnaires to determine characteristics within the population (Kothari, 2004; Kerlinger, 2000; Creswell, 2003). Under this design, interviews and questionnaires were used in collecting data. This design was suitable in investigating challenges on acquisition and use of visual teaching-learning materials. To obtain comprehensive data, both qualitative and quantitative data were used. Qualitative approach was used to obtain major themes from unstructured responses. In using quantitative approach, the researcher applied descriptive statistics from the structured questions.
3.2.1 Variables

This study has the following independent and dependent variables:

1. The independent variables:
   a) Challenges of acquisition of materials measured from practices on requisition and improvisation.
   b) Challenges of usage of materials measured from practices on selection, distribution and application of the materials.

2. The dependent variable:
   a) Acquisition of Visual Teaching-learning materials measured from the ease of acquiring and using the materials.

3.2.2 Research Methodology

The overall methodology is mixed method that helped in collecting both qualitative and quantitative data. Under this method, it facilitates compatibility of quantitative or qualitative research approaches in one study. Numerical values from quantitative approaches add meaning while outcomes from qualitative approaches verify from quantitative approaches.

3.3 Location of the Study

The study was done in Kasarani Sub-County. Kasarani Sub-County is located in Nairobi County in Kenya. Kasarani Sub-County is a cosmopolitan area with both private and public pre-primary schools. The location was also chosen because it is urban area where teachers have access to visual teaching-learning materials. Reviewed literature has shown that there is no documented evidence showing
challenges the teacher encounter in the course of acquiring and using visual teaching-learning materials. Thus, to document the challenges this study was sought.

3.4 Target Population

This study targeted teachers of pre-primary schools in public pre-primary schools in Kasarani Sub-County. Kasarani Sub-County has 18 public preschools with an average of three teachers per school. Based on these statistics, the researcher targeted 54 teachers in all 18 pre-primary schools.

3.5 Sampling Techniques and Sample Size

The following are sampling techniques and sample size description:

3.5.1 Sampling Techniques

In this study, the researcher used simple random sampling technique to obtain a suitable sample. Simple random sampling technique helps in probabilistic sampling where all members are given equal chance (Kothari, 2004; Kerlinger, 2000; Creswell, 2003). The researcher used simple random sampling technique to obtain pre-primary schools and teachers for this study.

3.5.2 Sample Size

According to Mugenda and Mugenda (2008), in a descriptive research design a sample of between 10% and 30% of the target population is recommended. The
researcher sampled 30% of the target population by use of simple random sampling technique to obtain five pre-primary schools. From each pre-primary school, one teacher was selected by use of simple random sampling techniques to obtain 15 teachers in five pre-primary schools. Therefore the researcher used a sample size of 15 teachers out of 54 teachers who were targeted.

3.6 Research Instruments
The researcher used questionnaire (Appendix I) to obtain data from the sampled teachers. Questionnaires are convenient to administer as they are left with respondents to respond at their convenient time. Both structured and unstructured questionnaires were used to obtain qualitative and quantitative data. The questionnaire contained structured and unstructured questions to help in identifying teacher challenges of acquiring and using visual teaching–learning materials in pre-primary schools in Kasarani Sub-County in Nairobi. Also, the questionnaire contained questions to help in identifying strategies used by teachers to overcome the challenges on acquisition and use of visual teaching–learning materials in pre-primary schools in Kasarani Sub-County in Nairobi.

3.7 Pilot Study
The researcher carried out a pilot study to test validity and reliability of the research instrument. This was done in two public pre-primary schools in Kasarani Sub-County. The two schools were not among the schools selected for the study.
The researcher ensured that the schools identified for piloting had teachers with access to visual teaching-learning materials.

3.7.1 Validity

Validity of research instruments involves the ability of an instrument to test or measure what is intended to measure (Kombo and Tromp, 2006). To verify instruments, opinion of experts was sought from lecturers in the field of curriculum development and teaching. Comparisons of the questions with objectives of the study were done by the lecturers to determine validity. Items in the questionnaire that were not clear were rephrased to improve clarity and remove ambiguity.

3.7.2 Reliability

The consistency of the instruments was established by checking the test-retest reliability. In this case, the same questionnaire was administered to respondents twice with the second administration after two weeks of the first. Two schools from Kasarani Sub-County which were not part of the main study were purposively selected for testing of the instruments. Spearman Rank Correlation Coefficient was used to correlate findings between the first and second sets of questionnaires administered. According to Mugenda and Mugenda (2008), a reliability coefficient of above 0.7 is suitable for the study. The findings from the schools yielded a reliability coefficient of 0.78 and this was considered reliable and adopted for data collection.
3.8 Data Collection Techniques

The researcher obtained introduction letters from graduate school at Kenyatta University (Appendix II) and research permit from National Commission for Science, Technology and Innovation (Appendix III and IV). A visit to the area was done to get a better understanding of the Sub-County both demographically and geographically. Simple random sampling of the pre-primary schools was done from which teachers were selected. In each school, simple random sampling of teachers was done to identify teachers who were then administered with questionnaires. The researcher introduced himself to the teachers and sought their consent for data collection. Selected teachers who were not interested in the study were replaced by those interested without altering the sample size of 15 teachers. The researcher then administered questionnaires and allowed teachers to respond to the questions for a week before collecting them for analysis.

3.9 Data Analysis

Since the instruments yielded both qualitative and quantitative data, analysis of each objective was done quantitatively from structured questions and qualitatively from unstructured questions. Quantitative data from each objective was entered into a secure database for analysis by use of Statistical Packages for Social Sciences (SPSS) Version 21 to yield descriptive information in form of means and percentages. The quantitative data was presented in frequency tables. Moreover, content of the qualitative data for each objective was analysed and presented thematically.
3.10 Logistical and Ethical Considerations

The researcher considered logistical and ethical issues in the whole study as follows:

3.10.1 Logistical Considerations

The researcher ensured that procedures in data collection were adhered to. For example, the researcher first prepared questionnaires enough for the teachers. The researcher also obtained permission letters to collect data from Graduate School, Kenyatta University and National Commission for Science, Technology and Innovation. Moreover, the researcher also ensured that materials used in data collection were prepared and made available during data collection. Finally, the researcher planned and allocated finances for transport and other personal emoluments during data collection.

3.10.2 Ethical Considerations

The researcher ensured that ethical issues were adhered to. First, the researcher ensured that the information acquired will be strictly used for academic purposes. In this case, approval for this research was obtained from relevant bodies such as the Kenyatta University and Department of Education at the County Government of Nairobi. During data collection, participants were informed of the right to either participate or not and consent was obtained from the participants. Lastly, information acquired was treated with confidentiality by the researcher.
CHAPTER FOUR

PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

This chapter presents findings, interpretation and discussion according to the objectives and research questions. The chapter presents findings on: identified challenges experienced by teachers while acquiring visual teaching–learning materials in pre-primary schools in Kasarani Sub-County in Nairobi; challenges experienced by teachers while using visual teaching–learning materials in pre-primary schools in Kasarani Sub-County in Nairobi; and strategies used by teachers to overcome the challenges on acquisition and use of visual teaching–learning materials in pre-primary schools in Kasarani Sub-County in Nairobi. Interpretation of the findings and discussion based on literature review is also provided in this chapter.

4.2 Return Rate and Demographic Information

This section contains return rate and demographic information. Return rate is the actual number of questionnaires that were completely filled and returned relative to the questionnaires that were administered. Demographic information provides background characteristics (gender, age, professional qualifications) of the teachers who participated in the study.
4.2.1 Response Rate

All questionnaires administered were fully filled and returned because the respondents were willing to participate in the study. This indicates that all teachers identified for the study participated in filling the questionnaires.

4.2.2 Demographic Information

The demographic information of the respondents was determined and results presented in Table 4.1.

Table 4.1: Demographic Information of the Respondents

<table>
<thead>
<tr>
<th>Demographic indicators</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>93.3</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100.0</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29 years</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>30-39 years</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>40-49 years</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>Above 50 years</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100.0</td>
</tr>
<tr>
<td>Highest education level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>7</td>
<td>46.7</td>
</tr>
<tr>
<td>Diploma</td>
<td>7</td>
<td>46.7</td>
</tr>
<tr>
<td>Bachelor</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100.0</td>
</tr>
<tr>
<td>Teaching experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-4 years</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>5-9 years</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>10-14 years</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>15-19 years</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>Above 20 years</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>100.0</td>
</tr>
<tr>
<td>Years of service in the school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3 years</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>4-6 years</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>7-9 years</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Above 10 years</td>
<td>6</td>
<td>40.0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Findings in Table 4.1 show the demographic information of teachers in terms of gender, age, highest education level, teaching experience and years of service in the school. From Table 4.1, majority of the teachers are female. The findings also
reveal that majority of teachers were aged between 40 and 49 years followed by those aged above 50 years. Teachers aged between 20 and 29 years as well as those aged between 30 and 39 years had equal proportions. On highest level of education, the findings show that teachers with diploma and certificate are equal in proportion and form majority of the teachers while those with degree are very few.

On teaching experience, the findings in Table 4.1 indicate that majority of teachers have experience of below 9 years followed by those with experience of between 15 and 19 years while those with experience of above 20 years are few. In terms of number of years the teachers have been at school, the findings show that majority of teachers have been at school for more than 10 years followed by those with service at school not exceeding 6 years.

4.3 Findings and Interpretation

The following are findings of the study and their interpretations:

4.3.1 Source the Visual Instructional Materials

Table 4.2 shows the sources of visual instructional materials.

<table>
<thead>
<tr>
<th>Materials</th>
<th>Main source</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real objects, pencils, crayons, plastacine, text books, manila</td>
<td>Bought from market</td>
<td>5</td>
<td>33.3</td>
</tr>
</tbody>
</table>
Table 4.2 shows majority of the teachers improvised instructional materials while few teachers observe that materials were bought from the market. The materials improvised included reading materials, experimental materials, display materials while the materials bought from the market include real objects, writing and experimental materials. None of the teachers reported that materials were donated. These findings imply that most materials used for reading, mastering, experiments and display were improvised from the local environment.

**4.3.2 Person Responsible for Acquiring the Instructional Materials**

The person responsible for acquiring instructional materials was determined and Table 4.3 presents the results.

**Table 4.3: Person Responsible for Acquiring the Instructional Materials**

<table>
<thead>
<tr>
<th>Person(s)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headteacher</td>
<td>3</td>
<td>21.4</td>
</tr>
<tr>
<td>Teachers</td>
<td>7</td>
<td>50.0</td>
</tr>
<tr>
<td>Parents</td>
<td>5</td>
<td>28.6</td>
</tr>
<tr>
<td>County Government</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Central government</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Donors /sponsors</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.3 shows that half of the teachers sampled indicated that they bear main responsibility of acquiring visual teaching and learning materials. Parents and head teachers also have the responsibility of acquiring the materials as observed
by nearly a third of the teachers. Donors or sponsors also have the responsibility of acquiring the materials although this is considered as not a major responsibility by teachers. The results also indicate that none of the teachers considered County and Central governments to have any form of responsibility in acquisition of the materials. The time when instructional materials were acquired was determined and Table 4.4 presents the results.

4.3.3 Period of Acquisition

Table 4.4 shows the period of acquiring the materials.

Table 4.4: Period of Acquisition

<table>
<thead>
<tr>
<th>Acquisition period and frequency</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials acquired in same period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>No</td>
<td>12</td>
<td>80.0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100.0</td>
</tr>
<tr>
<td>Frequency of acquisition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Weekly</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>Monthly</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>Quarterly</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>Bi-annually</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Don’t know</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From Table 4.4 it is clear that majority of teachers reported that the materials were acquired on quarterly basis and were as equal in proportion as teachers did not know about the frequency of acquiring the materials. A few teachers observed that the materials were acquired monthly followed by those who believed that the materials were acquired weekly. The least number of teachers noted that the materials were acquired daily and bi-annually.

4.3.4 Guiding Factors when Acquiring the Materials

Table 4.5 presents the guiding factors when acquiring the materials.
Table 4.5: Guiding Factors when Acquiring the Instructional Materials

<table>
<thead>
<tr>
<th>Person(s)</th>
<th>Guiding factors</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headteachers, parents and donors</td>
<td>Curriculum</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td></td>
<td>Number of children</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>Available materials</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>Duration of use</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Available money</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
<td><strong>100.0</strong></td>
</tr>
<tr>
<td>Teachers</td>
<td>Lesson plan</td>
<td>13</td>
<td>86.7</td>
</tr>
<tr>
<td></td>
<td>Number of children</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Skills of teachers</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

As shown in Table 4.5 majority of headteachers, parents and donors consider the curriculum followed by number of children, availability of materials, available money and duration of use. Asked on the whether the materials were acquired based on the needs of the learners, majority of teachers (14 teachers, 93.3%) agreed that needs of the learners were considered. Also, 73.3% of teachers observed that persons engaged in acquisition of the materials do not have adequate knowledge about the needs of the learners.

### 4.3.5 Intended Teaching Methods before Acquisition of Materials

Table 4.6 shows the responses of teachers on intended teaching method before acquisition of materials.

Table 4.6: Intended Teaching Method before Acquisition of Materials

<table>
<thead>
<tr>
<th>Teaching method</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher centred</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Learner centred</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>Thematic</td>
<td>10</td>
<td>66.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
The results in Table 4.6 show that majority of teachers (66.7%) mostly considered thematic teaching method followed by learner centred method. None of the teachers considers teacher centred method.

### 4.3.6 Person Initiating the Process of Acquiring Materials

Table 4.7 shows the persons initiating the process of acquiring materials.

**Table 4.7: Person Initiating the Process of Acquiring Materials**

<table>
<thead>
<tr>
<th>Person(s)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headteacher</td>
<td>1</td>
<td>7.1</td>
</tr>
<tr>
<td>Teachers</td>
<td>13</td>
<td>85.7</td>
</tr>
<tr>
<td>Parents</td>
<td>1</td>
<td>7.1</td>
</tr>
<tr>
<td>County Government</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Central government</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Donors /sponsors</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The results in Table 4.7 show that teachers mostly initiate the process followed by headteachers and parents. Key stakeholders such as County government, Central government and donor or sponsors do not play any role in initiating the process of acquiring the materials.

### 4.3.7 Period Taken for Delivery of Ordered Materials

Table 4.3 shows period taken for delivery ordered materials.

**Table 4.8: Period Taken for Delivery of Ordered Materials**

<table>
<thead>
<tr>
<th>Period taken</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several days</td>
<td>7</td>
<td>46.7</td>
</tr>
<tr>
<td>Several weeks</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>Several months</td>
<td>6</td>
<td>40.0</td>
</tr>
<tr>
<td>Several years</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
As shown in Table 4.8 the period taken to order materials was several days before the materials were delivered followed by those who reported that it took several months although the difference is not large. A few teachers reported that it took several weeks while none of the teachers reported that it takes a year or more.

4.4 Challenges Experienced by Teachers while Acquiring Visual Teaching–Learning Materials

The findings in this section address the first objective on challenges experienced by teachers while acquiring visual teaching-learning materials. Table 4.9 shows the challenges experienced by teachers in acquisition of visual materials.

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>High cost of materials</td>
<td>1</td>
<td>6.7</td>
<td>3</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Table 4.9: Challenges Experienced by Teachers in Acquisition of Visual Materials
Table 4.9 shows that majority of teachers agree that high costs, lack of storage space, low knowledge among persons concerned with acquisition of the materials, unexpected changes in the curriculum and low teaching experience limit acquisition of visual materials in teaching and learning. The findings further indicate that majority of teachers do not consider lack of electricity as a limitation as the schools in Kasarani are connected with electricity.

4.5 Challenges Experienced by Teachers in Using Visual Teaching-Learning Materials

Findings in this section address second objective on challenges experienced by teachers in using visual teaching-learning materials as presented in Tables 4.10 to 4.12.

4.5.1 Inadequacy of Visual Teaching–Learning Materials

Table 4.10 shows inadequacy of visual teaching-learning materials.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>Sometimes</td>
<td>11</td>
<td>73.3</td>
</tr>
<tr>
<td>Never</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
As it can be seen from Table 4.10, majority of teachers observed that they sometimes encounter the inadequacy of materials while a few always encountered or never encountered the inadequacy.

### 4.5.2 Challenges Experienced by Teachers in Improvising Materials

Table 4.11 shows the challenges experienced by teachers in improvising materials.

**Table 4.11: Challenges Experienced by Teachers in Improvising Materials**

<table>
<thead>
<tr>
<th>Challenges experienced by teachers while improvising materials</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban characteristics</td>
<td>3</td>
<td>21.4</td>
<td>4</td>
<td>28.6</td>
</tr>
<tr>
<td>Low knowledge, attitude and skills of teachers</td>
<td>2</td>
<td>13.3</td>
<td>2</td>
<td>13.3</td>
</tr>
</tbody>
</table>

Findings in Table 4.11 show that majority of teachers contend that urban characteristics limit improvisation of materials. Also, low knowledge, attitude and skills of the teachers are major limitations to improvising the materials.

### 4.5.3 Challenges in Use of Materials

Table 4.12 shows the challenges in use of materials.

**Table 4.12: Challenges in Use of Materials**

<table>
<thead>
<tr>
<th>Challenges experienced by teachers in use of materials</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low teaching experience limits proper use of visual teaching-learning materials</td>
<td>4</td>
<td>26.7</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>Low knowledge and skills on visual teaching-learning materials among teachers limits proper use of visual teaching-learning materials</td>
<td>2</td>
<td>13.3</td>
<td>6</td>
<td>40.0</td>
</tr>
<tr>
<td>High pupil population than available</td>
<td>2</td>
<td>13.3</td>
<td>6</td>
<td>40.0</td>
</tr>
</tbody>
</table>
materials limits proper use of visual teaching-learning materials
Low quality of available materials limits proper use of visual teaching-learning materials

Findings in Table 4.12 show that majority of teachers contend that low teaching experience and low quality of available materials are major limitations to use of the materials. However, some of the teachers also do not consider low knowledge and skills as well as high pupil population limits use of the materials.

4.6 Strategies of Overcoming Challenges in Acquisition and Use of Materials

Findings in this section address third objective about strategies of overcoming challenges in the acquisition and use of materials. In this section, teachers were asked open ended questions on what should be done to improve acquisition of visual teaching-learning materials. Teachers were also asked open ended question on what should be done to improve the use of visual teaching-learning materials. The teachers offered varied responses as presented in Table 4.13 and 4.14.

4.6.1 Actions Taken whenever Materials are Inadequate

Table 4.13 shows actions taken whenever materials are inadequate

Table 4.13: Actions Taken whenever Materials are Inadequate

<table>
<thead>
<tr>
<th>Actions taken</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make orders</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Improvise</td>
<td>14</td>
<td>93.3</td>
</tr>
<tr>
<td>Skip the lesson</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Nothing</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
Table 4.13 indicates that majority of the teachers’ improvised materials while a few make orders. None of the teachers skips the lesson or do nothing. Asked on whether they are happy when improvising, all the teachers agreed that they are comfortable in the course of improvising the materials. Also, all teachers observed that the materials improvised meet the needs of the learners.

4.6.2 Strategies to Overcome the Challenges in Acquisition and Use of Materials

Table 4.14 shows the strategies used to overcome the challenges in acquiring and using materials.

Table 4.14: Strategies to Overcome the Challenges in Acquisition and Use of Materials

<table>
<thead>
<tr>
<th>Improving acquisition of visual teaching-learning materials</th>
<th>Improving use of visual teaching-learning materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing enough funds; Holding seminars and workshops;</td>
<td>Empowering teachers on importance of the materials;</td>
</tr>
<tr>
<td>Proving enough materials based on number of children;</td>
<td>Providing short courses and training of teachers;</td>
</tr>
<tr>
<td>Acquiring high quality of materials; Giving children lessons</td>
<td>Having regular parents and teachers meetings;</td>
</tr>
<tr>
<td>on handling the materials; Stakeholder commitment; county</td>
<td>Teachers to be practical and child focused;</td>
</tr>
<tr>
<td>government to provide materials; Involving parents in</td>
<td>Having inventories;</td>
</tr>
<tr>
<td>making the materials; Persons acquiring the materials to</td>
<td>Pre-primary to be autonomous, not under</td>
</tr>
<tr>
<td>have adequate knowledge</td>
<td>management of primary schools;</td>
</tr>
<tr>
<td></td>
<td>Acquiring storage facilities;</td>
</tr>
<tr>
<td></td>
<td>Stakeholder commitment to help in purchasing</td>
</tr>
<tr>
<td></td>
<td>of materials;</td>
</tr>
<tr>
<td></td>
<td>Increasing budgets;</td>
</tr>
<tr>
<td></td>
<td>Employing more teachers;</td>
</tr>
<tr>
<td></td>
<td>Engaging donors</td>
</tr>
</tbody>
</table>

Findings in Table 4.14 show opinion of teachers on improving the acquisition and use of the materials. From Table 4.14, the findings indicate that proper budgeting, training, involvement of all stakeholders, capacity building and improvement of
pedagogy are possible processes that will help in limiting the challenges encountered by teachers.

4.7 Discussion

This section provides discussion to the findings of the study.

4.7.1 Challenges experienced by teachers while acquiring visual teaching–learning materials

Findings in Table 4.3 have revealed that as the teachers have the largest responsibility for acquiring the materials, it therefore indicates that the teachers encounter many challenges than parents and headteachers. The challenges of acquisition of the materials include those encountered at the needs assessment stage, the planning stage, processing stage and delivery stages. In the course of assessment of the needs, the teachers have the largest responsibility of determining the needs of the children. Also, there are challenges when teachers make decisions on the type, quantity and intended time of usage. If not properly done, the teachers are likely to fail in acquiring the materials.

In Table 4.4, the period of acquisition of the materials is important in the planning process of acquiring the materials. Known periods provide teachers with knowledge or trends for predicting when materials are exhausted for new orders to be made. Irregular acquisition of the materials as per the findings shows that teachers face the challenge of predicting when the materials should be ordered and made available. This situation implies that there are chances that learners can
have lessons without the materials to support their learning. Also, the inability to have regular periods for acquisition of materials implies that there are chances of delays in which learners and teachers also delay in using the materials.

The results in Table 4.5 also indicate that lesson plan was most considered by teachers than number of children and skills of the teachers. These results further indicate that acquisition of the materials is guided by many factors that require careful consideration by persons involved. Putting these factors into consideration implies that there are chances of delays in decision making. This is a challenge to many teachers who are not prepared especially teachers who did not predict the depletion of the materials. The need to acquire the materials in the shortest time possible is likely to make some teachers not to consider all factors.

Supporting these findings are the results by Ngure et. al., (2014), Sifuna and Sawamura (2010) and Jeptanui (2011) who argue that not all teachers consider factors such as number of learners, teaching method, time of the lesson, availability of the materials and objectives of the lesson when acquiring the materials. This is attributed to pedagogical skills as well as attitude towards acquisition of the materials. This becomes a challenge as teachers strike a balance of keeping the lessons running while engaging in activities of acquiring the materials.
Findings on factors considered by teachers in the acquisition of materials indicate that while needs of the learners formed point of concern by many teachers, the aspect of knowledge about the needs is a limitation to acquisition of quality materials. This brings in the difference between understanding of the teachers and practical application of the knowledge. These findings imply that majority of teachers have understanding that needs of the learners should be considered yet practically it becomes difficult. This is a challenge to acquisition of the materials as materials acquired are likely to be misused.

Findings in Table 4.6 on intended methods of teaching before acquisition of materials imply that themes in the subject matter or learning content become the driving force for the acquisition of the materials. These findings differ from findings by Sifuna and Sawamura (2010) who argue that teachers should facilitate learner-centred methods. The learner centered methods require adequate and variety of basic materials that promote learner centred activities and exercises.

Based on Sifuna and Sawamura’s (2010) argument, teachers should have adequate materials to administer learner-centred method. In Kasarani the teachers use more of thematic method and this is an indicator to inadequacy in materials that do not promote use of learner-centred method. It can be argued that the teachers face the challenge of acquiring many materials that would promote use of learner-centred method.
Findings in Table 4.7 indicate that initiating the process of acquiring materials is an important activity in the planning stage of the process of acquiring materials. Persons involved in this process should have a clear understanding of the materials needed. As the teachers are the majority, lack of understanding is likely to be a challenge to those engaging in acquisition of the materials.

In addition, teachers encounter the challenge on acquisition of the materials in form of delays. Findings in Table 4.8 imply that delay in the delivery of the materials is a likely challenge towards implementing the curriculum or lesson plans in time. This also implies that teachers are likely to skip some lessons as they wait for the delivery of the materials. In other cases, the teachers use materials which do not help learners to achieve the intended objectives of the lesson. Under these situations, the learners do not benefit from the use of intended materials hence inability to understand some phenomena.

These findings support Sifuna and Sawamura (2010) who argue that the quality of implementation of the curriculum depends on available teaching and learning materials, pedagogical skills of teachers and instruction time. This seems to indicate that it becomes a challenge for teachers to acquire visuals materials when the materials are not available. It also implies that teachers find it challenging to acquire visual materials due to inadequate pedagogical skills. The argument also shows that teachers find it challenging to acquire adequate visual materials due to the time of instruction required for the lessons.
In addition, Moore, Morales and Carel (2004) found that teachers with experience of less than two years had difficulties in acquiring visual instructional media. This study also supports findings by Barnard (2007) who found that one of the challenges that limit acquisition of visual teaching and learning materials is teacher experiences. Increased exposure to use of visual instruction media by teachers increased teachers’ chances of acquiring such media (Barnard, 2007). These findings imply that out of the 26.7% of teachers in Kasarani pre-primary schools have less than 4 years teachers experience, those with experience of less than two years encounter the challenge of acquiring the materials. This is because the teachers have not acquired experience in terms of planning and obtaining the materials.

Lack of storage facilities as seen in Table 4.9 is a significant challenge encountered by teachers in the course of acquiring the materials. These findings are supported by Akakandelwa and Musanje (2011) who found that lack of storage facilities for visual teaching and learning materials limits the acquisition of the materials by teachers. As the materials whether bought or improvised require storage, it implies that lack of the storage facilities limits the acquisition as teachers find it difficult to store the materials before use and after use. This further implies that the teachers are likely to avoid use of the materials that have no storage space.
The other challenge identified is lack of knowledge and skills in the acquisition of the materials. As illustrated in Table 4.9, the findings are in agreement with the findings by Ngure et. al., (2014), who found that the level of training of teachers is a challenge in acquiring of visual teaching and learning materials. In their argument, Ngure et. al., observed that teachers with higher level of training (Bachelor Degree and Master Degree) planned and obtained the materials better than the teachers with low level of training (certificate and diploma). These findings imply that pre-primary teachers in Kasarani with inadequate pedagogical skills on visual teaching and learning materials have difficulties in planning to acquire visual teaching and learning materials.

4.7.2 Challenges Hindering the Use of Visual Teaching–Learning Materials

Challenges related to the use of visual teaching–learning materials have been identified in Kasarani. The first challenge is inadequacy of the materials as illustrated in Table 4.10. Inadequacy of materials means that not all learners have access to the materials which limits their ability to achieve the intended goals in the curriculum.

In addition, the inadequacy of the materials implies that teachers find it difficult to manage the class as the available materials were shared. This also increases the time taken for the teachers to teach some concepts that would have taken a short period of time thereby affecting the lesson plan. This is an indicator to delays of completing syllabus whereby teachers were likely not to teach some concepts and
the learners would proceed to following classes without understanding some concepts.

Findings in Table 4.11 have revealed that it is also a challenge for teachers to improvise the materials during the usage period. These findings indicate that while the teachers consider being comfortable to improvise the materials compared to doing nothing or skipping the lessons, they still face some challenges. As Kasarani area is in Nairobi, the urban characteristics such as finding natural environment are difficult. This is possible in situations of acquisition and use of materials such as real objects like animals. Finding live animals or even fresh plants in Nairobi is not as easy as one would find in rural areas. Thus, urban characteristics make the improvisation and or the use of the materials difficult.

Another instance is that the teachers have low knowledge and skills in use of the visual materials as illustrated in Table 4.12. The use of materials such as display units requires adequate training in use of computers and other electronic based materials. In their demographic information, in Table 4.2 many teachers have certificate as highest level of education. This level of education is not adequate in terms of teachers having adequate knowledge on use of different materials for teaching and learning. Kadzera (2006) found that classrooms without power connection points limited the use of instructional materials such as projectors by the tutors. This condition limited majority of the trained teachers from
improvising available resources for visual teaching and learning materials (Kadzera, 2006; Onasanya, 2008).

The findings in Table 4.12 are in support of the study by Ngure et. al., (2014) that the level of training of teachers is a challenge in the use of visual teaching and learning materials. Ngure et. al., (2014) argue that teachers without knowledge in pedagogy used the materials that do not help in achieving the objectives. The teachers used complex materials or materials that required a lot of explanation for the learners to understand.

Mwololo (2009) found that minimal knowledge of teachers in instructional materials was a challenge to use of visual teaching and learning materials. According to Mwololo (2009), teachers with certificate level of training had limited understanding of the use of the materials compared to teachers with Diploma or Degree qualifications. This situation is worsened by low exposure to instructional materials as observed by Aila, (2005) and Begi (2007).

In addition, the teachers would have the skills but attitude limits the use of the materials. In this regard, this study supports the findings by Onasanya (2008) who found that teachers’ bad attitude towards visual instructional media was a challenge to acquisition of visual teaching and learning materials. Onasanya (2008) argues that teachers who are innovative spend more time to develop the
visual materials while those who had bad attitude do not spend time to develop the materials.

### 4.7.3 Strategies of Overcoming Challenges in Acquisition and Use of Materials

Despite the challenges faced by teachers in the course of acquiring and using the materials, strategies have been devised by the teachers to address these challenges. The strategies include those related to pursuing effective measures, alternative measures and improving pedagogy as illustrated in Tables 4.13 and 4.14, these findings imply that by putting these observations into consideration, the teachers are likely to have few challenges in acquiring and use of the materials.

As the materials are inadequate, one of the options teachers are left with is improvising. These findings in Table 4.13 imply that improvising the materials was a better option due to the prevailing conditions such as delays in acquiring the materials. This explains the reason as to why teachers considered being comfortable whenever they improvise the materials. The teachers who made orders are very few and as Kadzera et., al. (2006) explains that acquiring visual teaching-learning materials can either be through making requisitions or orders to relevant authorities to make supplies to the teacher, this condition also increases the delays due to the processes involved. As such, Onasanya (2008) explains that teachers can improvise the materials under inadequate conditions of the materials.
These findings are in support of Osakwe (2009) who observed that governments should provide pre-primary instructional materials for teaching and learning and that parents should help in provision of the required materials. Omariba (2012), Ngureet. al., (2014) and Omayio (2013) also reported that Ministry of Education should offer regular trainings and in-service courses to teachers to improve their pedagogy as a measure of minimising the challenges they face. Omariba also reported that the Ministry of Education to have regular visits to schools for quality assessments of the use of the instructional materials. It is from such inspection that challenges in use of the materials observed will be reported and possible actions done.

Omariba (2012) also reported that persons involved in acquisition of the materials should be offered with skills in budgeting, problem identification and resolutions. This implies that in the course of implementing the recommendations, headteachers and teachers as well as parents and other stakeholders involved in acquisition and use of the materials will consider the needs of the learners before acquiring the materials. In support of this recommendation, Omariba (2012) explains that parents should be sensitised on importance of providing instructional materials in the learning process.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the findings of the study through answering the research questions. The chapter also provides conclusion drawn from the findings of the study. The chapter also presents recommendations for further actions to address emerging issues in the study.

5.2 Summary of Findings

This study sought to provide answers to three research questions. The first research question was on the challenges experienced by teachers while acquiring visual teaching–learning materials in pre-primary schools in Kasarani Sub-County in Nairobi. This study had found that indeed teachers faced many challenges in acquisition of visual teaching-learning materials for pre-primary children in Kasarani Sub-County. The challenges identified by majority of teachers mainly include: High cost of materials; lack of electricity; lack of storage space; low knowledge in early childhood education of persons acquiring the visual teaching-learning materials; untimely changes in curriculum; and low teaching experience of pre-primary teachers. The implication is that teaching and learning process is compromised.
Concerning the second research question on challenges experienced by teachers while using visual teaching and learning materials, this study has found that materials used were inadequate and teachers always had to strive to supplement the use by improvising the materials. The quest for improvising was complicated by difficulty in obtaining the materials from the locality which is an urban area characterised by absence of natural environment where most natural materials had to be acquired. Low knowledge, bad attitude and low skills of teachers also reduced the chances of improvising the materials. This study has further found that low teaching experience and low quality of available materials were major limitations to use of the materials more than low knowledge and skills as well as high pupil population. The implication is that teaching and learning is made difficult.

Concerning the third research question on countering the challenges encountered by the teachers in the course of acquiring and using the materials, this study has found that teachers considered proper budgeting, training, involvement of all stakeholders, capacity building and improvement of pedagogy as possible processes that will help in limiting the challenges encountered by teachers. Thus, challenges related to both manipulative and non-manipulative should be countered as a means of improving learning for the children and teaching for teachers.
5.3 Conclusion

Based on the findings of the three objectives, this study has resulted into three main conclusions as follows. On challenges encountered in the course of acquiring the materials, teachers use most of their time improvising for the materials. This time could have been used in planning for other activities that would improve the learning outcomes such as paying attention to slow learners. In addition, teachers are overburdened. Considering the teachers need to be paying attention to children, adding them responsibility of planning and obtaining the materials in terms of making decision on type, quantity and intended time of usage is too much. In this case, teachers are likely not to be motivated to help the learners.

Moreover, there is no proper plan for acquiring materials in the schools. In this regard, an action plan for the acquisition of the materials would provide guideline on total amount of materials required in a year in respect to the number of children and expected usage. Lack of this action plan places teachers into a difficult situation of procuring materials when the need arises yet the syllabus has already predetermined the materials needed.

Furthermore, teachers only focus only on themes and not needs of the learners. In most cases, focusing on themes is an indicator that not all aspects of the syllabus will be covered as teachers are overwhelmed with finding materials. In cases where the materials are not available or inadequate and the teacher does not meet
the needs of the learners, the learner centred method is abandoned for thematic approach. This approach seems to favour the teachers who use few materials as long as the theme is taught. This is not suitable for pre-primary learners who require many materials to understand many aspects surrounding them. As challenges on acquiring the materials are many, teachers are likely to engage in teaching without using visual materials. This limits acquisition of knowledge and skills among pre-primary learners in Kasarani Sub-County.

On challenges encountered by teachers in the course of acquiring the materials, this study concludes that teachers struggle to use the materials that are available. Therefore, achieving of the objectives of a lesson is difficult. The teachers are thus not utilising the available materials or do not meet the needs of the syllabus by using the recommended materials. Under these conditions, the teachers do not deliver the content as recommended by providing the right materials enough for every learner.

In addition, with highly experienced teachers and quality materials, the problem of inadequacy can be reduced. In this regard, teachers who are experienced are likely to use their skills in ensuring that all children have access to materials that are of high quality even in conditions where children are many. Thus, with proper budgeting, training, involvement of all stakeholders, capacity building and improvement of pedagogy as possible processes that will help in limiting the challenges encountered by teachers, it can be concluded that countering the
challenges faced by teachers is a multifaceted approach. In this regard, countering of both manipulative and non-manipulative challenges of acquisition and use of the materials is necessary.

5.4 Recommendations

This study recommends the following:

5.4.1 Policy Recommendations

i. As many teachers require training to improve their pedagogy, the Ministry of Education should organise more trainings and capacity building programmes for the pre-primary teachers. This will support their skills in acquisition and use of teaching and learning materials.

ii. The Ministry of Education Science and Technology should improve its policy on Quality Assurance especially by focusing on pre-primary level. Regular inspection of the pre-primary schools will help in identifying problems associated with acquisition and use of materials at classroom level. It is from the identification of the problems that possible solutions will be proposed and adopted.

iii. The Ministry of Education and school management boards should promote stakeholder participation in the processes related to acquisition and use of the teaching and learning materials. This will ensure that all stakeholders provide their input at the planning, implementation and monitoring as well as evaluation in the use of the materials.
iv. Teachers should ensure that they implement the syllabus by focusing on the needs of the learners. Teaching strategies used should promote use and acquisition of the materials.

5.4.2 Capacity Building Recommendations

i. As BOM have the mandate to acquire the materials and ensure proper use, there is need for the BOM to seek effective and efficient solutions to the existing problems encountered by the teachers. Meetings should be done with other stakeholders to help in defining the problem better out of which suitable strategies aimed at addressing the challenges will be found.

ii. As responsibility for provision of the materials is partly shared by the parents, there is need for parents to exercise on their roles of providing teaching and learning materials. Parents should be proactive in finding out whether their children are accessing the teaching and learning materials or not.

5.4.3 Recommendations for Further Research

This study recommends that more studies are required to determine the effect of the challenges encountered by teachers in the acquisition and use of materials on teaching and learning.
REFERENCES


Omayio, J. (2013). *Effect of Instructional Resources on Children’s Number Work Performance in Pre-Schools in Isibania Zone, Migori County*, A Research Project submitted in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Education in Early Childhood Education to the
Department of Educational Communication and Technology, University of Nairobi.


APPENDICES

Appendix I: Questionnaires for Teachers

Dear Respondent,

I Burugu John Mariga, a Master student at Kenyatta University taking Master of Education in Early Childhood Education. I am carrying out an academic research to investigate challenges on acquisition and use of visual teaching – learning materials in public pre-primary schools in Kasarani Sub-County, Nairobi. Kindly, you have been selected to participate in this study by filling in this questionnaire. Your consent confirms participation in the study.

Instruction:

Kindly provide your responses in the brackets and spaces provided by giving tick [✓] or writing respectively. As your responses shall be treated confidential, please DO NOT write your name or contacts anywhere on this questionnaire.

Section A: Background Information of Teachers

1. Gender: Male [ ] Female [ ]

2. Age:

   20-29 years [ ] 30-39 years [ ] 40-49 years [ ] Above 50 years [ ]

3. Highest academic qualification in Early Childhood Education:

   Master [ ] Bachelor [ ] Diploma [ ] Certificate [ ]

4. Teaching experience in Early Childhood Education:

   0-4 years [ ] 5-9 years [ ] 10-14 years [ ] 15-19 years [ ]

   Above 20 years [ ]

5. How long have you been in this school?
Section B: Information on acquisition and use of visual teaching–learning materials

6. Give examples of visual teaching – learning materials used in this school?
   a) ........................................................................................................
   b) ........................................................................................................

7. What is the main source of the materials you have listed in question 7 above?
   Bought from the market [ ]  Improvised [ ]  Donated [ ]
   Others (please specify) [ ]  .......................  Don’t know [ ]

8. In this school, who has the main responsibility of acquiring visual teaching – learning materials?
   School management committee [ ]  Headteacher [ ]  Teachers [ ]
   Parents [ ]  County Government [ ]  Central Government [ ]
   Donors [ ]  Sponsors [ ]  Others (please specify) ...............  Others (please specify) ...............  Others (please specify) ...............  Don’t know [ ]

9. Are all materials acquired in the same period?
   Yes [ ]  No [ ]  don’t know [ ]

10. How often are visual teaching – learning materials acquired?
    Daily [ ]  Weekly [ ]  Monthly [ ]  Quarterly [ ]  Bi-annually [ ]
    Annually [ ]  Others [ ] (please specify) .............  Don’t know [ ]

11. What MOSTLY guides persons acquiring the materials?
    Curriculum[ ]  Number of children [ ]  Available materials [ ]

1-3 years [ ]  4-6 years [ ]  7-9 years [ ]  Above 10 years [ ]
Duration of use [   ] Quality of the materials [   ] Available money [   ]
Amenities (storage room and electricity) [   ] Policies [   ]
Others (please specify) .................................................................

12. What MOSTLY guides teachers in using the acquired materials?
Lesson Plan [   ] Number of children [   ] Available materials [   ]
Duration of use [   ] Quality of the materials [   ] Skills of teachers [   ]
Others (please specify) .................................................................

13. As a teacher, are the materials acquired based on the needs of learners?
Yes [   ] No [   ] Don’t Know [   ]

14. As a teacher, do you use the materials to meet the needs of the learners?
Yes [   ] No [   ] Don’t Know [   ]

15. What teaching method do you apply in teaching the pre-primary learners?
Teacher centred[   ] Learner Centred [   ] Thematic [   ]
Others (please specify) ..............

Section C: Information on challenges on acquisition of visual teaching–learning materials

16. Who initiates the process of acquiring visual teaching-learning materials?
Teachers [   ] Parents [   ] Headteacher [   ] Management [   ]
Committee [   ] County Government [   ] Donors [   ] Sponsors [   ]

17. How long does it take for the ordered materials to be delivered?
Several days [   ] Several Weeks [   ] Several Months [   ] Year(s) [   ]

18. Are persons engaged in acquisition of the materials with adequate knowledge on needs of the pre-primary children?
19. How often do you encounter inadequacy of materials?

Always [ ] Sometimes [ ] Never [ ]

20. What do you do when the materials are inadequate?

Make order [ ] Improvise [ ] Skip the lesson [ ] Nothing [ ]

Others [ ] (please specify) ……………………………………………………

21. If you improvise the materials, are you happy?

Yes [ ] No [ ]

22. For how long have you been improvising the materials?

…………………………

23. Do the materials you have improvised meet the needs of the learners?

Yes [ ] No [ ] Not Sure [ ]

Give reason(s) ………………………………………………………………………

24. Please what is your opinion on the following statements?

a) High cost of materials limits acquisition of visual teaching-learning materials. Strongly Disagree [ ] Disagree [ ] Agree [ ]

Strongly Agree [ ]

b) Lack of electricity limits acquisition of visual teaching-learning materials. Strongly Disagree [ ] Disagree [ ] Agree [ ]

Strongly Agree [ ]
c) Lack of storage space limits acquisition of visual teaching-learning materials. Strongly Disagree [ ] Disagree [ ] Agree [ ]
   Strongly Agree [ ]

d) Low knowledge in early childhood education of persons acquiring the visual teaching-learning materials limits acquisition of the materials.
   Strongly Disagree [ ] Disagree [ ] Agree [ ]
   Strongly Agree [ ]

e) Untimely changes in curriculum limit acquisition of visual teaching-learning materials.
   Strongly Disagree [ ] Disagree [ ] Agree [ ]
   Strongly Agree [ ]

f) Low teaching experience of pre-primary teachers limits acquisition of visual teaching-learning materials.
   Strongly Disagree [ ] Disagree [ ] Agree [ ]
   Strongly Agree [ ]

g) Urban characteristics limit improvisation of some visual teaching-learning materials.
   Strongly Disagree [ ] Disagree [ ] Agree [ ]
   Strongly Agree [ ]

h) Low knowledge and skills of pre-primary teachers limit improvisation of visual teaching-learning materials.
   Strongly Disagree [ ] Disagree [ ] Agree [ ]
   Strongly Agree [ ]
Section D: Information on challenges of use of visual teaching–learning materials

25. What is your opinion on the following statements in relation to this school?

a) Low teaching experience limits proper use of visual teaching–learning materials.
   Strongly Disagree [  ]  Disagree [  ]  Agree [  ]
   Strongly Agree [  ]

b) Low knowledge and skills on visual teaching–learning materials among teachers limits proper use of visual teaching–learning materials.
   Strongly Disagree [  ]  Disagree [  ]  Agree [  ]
   Strongly Agree [  ]

c) High pupil population than available materials limits proper use of visual teaching–learning materials.
   Strongly Disagree [  ]  Disagree [  ]  Agree [  ]
   Strongly Agree [  ]

d) Low quality of available materials limits proper use of visual teaching–learning materials.
   Strongly Disagree [  ]  Disagree [  ]  Agree [  ]
   Strongly Agree [  ]
Section E: Information on appropriate ways of countering challenges on acquisition and use of visual teaching–learning materials

26. What should be done to improve acquisition of visual teaching–learning materials?
   a) ..............................................................................................
   b) ..............................................................................................

27. What should be done to improve the use of visual teaching–learning materials?
   c) ..............................................................................................
   d) ..............................................................................................

THANK YOU
Appendix II: Letter of Introduction from University

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

Our Ref: E55/OL/22317/2011

DATE: 18th April, 2016

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,


I write to introduce Mr. Burugu John Mariga who is a Postgraduate Student of this University. He is registered for M.Ed degree programme in the Department of Early Childhood Studies.

Mr. Mariga intends to conduct research for a M.Ed Project Proposal entitled, “Teachers’ Acquisition and use of Visual Teaching – Learning Materials in Public Pre-Primary Schools in Kaaarani, Nairobi.”

Any assistance given will be highly appreciated.

Yours faithfully,

MRS. LUCY N. MBAABU
FOR: DEAN, GRADUATE SCHOOL

EO/wm
Appendix III: Letter of Authorization from NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241449, 3310591, 2219420
Fax: +254-20-318241, 3182859
Email: dg@nacost.go.ke
Website: www.nacost.go.ke
when replying please quote

Ref: No.
NACOSTI/P/16/76269/12213

27th June, 2016

John Mariga Burugu
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Teachers’ acquisition and use of visual teaching-learning materials in public pre-primary schools in Kasarani, Nairobi,” I am pleased to inform you that you have been authorized to undertake research in Nairobi County for the period ending 27th June, 2017.

You are advised to report to the County Commissioner and the County Director of Education, Nairobi County 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.

Boniface Wanyama
FOR: DIRECTOR-GENERAL/CEO

Copy to:
The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.
Appendix IV: Research Permit

THIS IS TO CERTIFY THAT:  
MR. JOHN MARIGA BURUGU  
of KENYATTA UNIVERSITY, 0-1030  
Gatundu, has been permitted to conduct research in Nairobi County  
on the topic:  
TEACHERS’ ACQUISITION  
AND USE OF VISUAL  
TEACHING-LEARNING MATERIALS IN  
PUBLIC PRE-PRIMARY SCHOOLS IN  
KASARANI, NAIROBI.  

for the period ending:  
27th June, 2017  

Permit No.: NACOSTU/P/16/76269/12211  
Date Of Issue: 27th June, 2016  
Fee Received: Ksh 1000

Applicant’s Signature

Director General  
National Commission for Science, Technology & Innovation