

**DETERMINANTS OF CHILD'S ACADEMIC PERFORMANCE IN  
EARLY CHILDHOOD EDUCATION: A CASE OF SOUTH WANGA  
DIVISION, MUMIAS DISTRICT, KENYA**

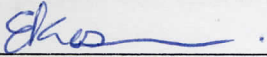
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**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER  
OF ARTS IN PROJECT PLANNING AND MANAGEMENT OF THE  
UNIVERSITY OF NAIROBI**

**2012**

## DECLARATION

This research project is my original work and has not been presented for an award of degree in any other university.



Date: ..1.5/8/2012

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This research project has been submitted for examination with my approval as University supervisor.



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## DEDICATION

I dedicate this research project to my parents Samson Ayuya, Edah Ayuya and my dear children Caroline Vihenda, Josphine Mukhunya, Phaustine Abuti, Margaret Andiah, Bernard Shibwabo, George Ingasia and my husband Mr. Vincent Kasamani for their support, prayers and encouragement towards my success. I thank my typist Mr. Daniel Netia, for typing and editing this piece of work.

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## ABBREVIATIONS AND ACRONYMS

CAT	-	Continuous Assessment Test
DICECE	-	District Centre for Early Childhood Education
ECE	-	Early Childhood Education
ECD	-	Early Childhood Development
ECDE	-	Early Childhood Development Education
EFA	-	Education for All
GoK	-	Government of Kenya
IGA	-	Income Generating Activities
KESSP	-	Kenya School Support Programmes
K.I.E	-	Kenya Institute of Education
MDGs	-	Millennium Development Goals
NACECE	-	National Centre for Early Childhood Education
NGO	-	Non Governmental Organization
UNICEF	-	United Nations Children Education Foundation
U.S.A	-	United States of America

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## ABSTRACT

Over the past decade in African traditional society, a child received maximum care and education not only from their parents but also from the society. This research study sought to identify the determinants of child's academic performance in Early Childhood Education. Despite the government willingness and commitment to improve access and quality education in Early Childhood Centers and all levels, poverty level consumption for resources from other social sectors has been a major hindrance to full commitment. Kenya being strategically located in East Africa and having great potential of development, many schools and Early Childhood Centers are involved in making sure children have a good foundation for their late lives. The collected data was both historical and futuristic this is because the study established the number of centers, trained and untrained teachers. A questionnaire was structured to be sent to various Head teachers and Early Childhood Education teachers to identify key areas and challenges they experienced in Early Childhood centers and how they managed to overcome the challenges. Interview guide was used on getting response from the 39 sponsors. The data collected was analyzed using statistical tools such as correlation analysis and the mode to determine child's performance in Early Child Hood centers. The selection was by use of simple random sampling method in those Early Childhood centers in operation basing on public, private and church sponsorship. The study approach was descriptive survey method for the registered Early Childhood centers that were chosen. The study aimed at attaining objectives on how teaching and learning facilities, professional qualification of teachers, family factors and teacher motivation influence child's academic performance in early childhood education. The study population was 39 sponsors, 78 early childhood teachers and 64 head teachers. Data analysis was analyzed using tables, frequencies and percentages. The validity of the instruments was considered in this study by presenting the developed instruments to the supervisor and research experts to evaluate their application and appropriateness of the content clarity and adequacy of the contraction instruments from research prospective. The findings were majority of primary headteachers and ECDE teachers were of certificate levels. Primary head teachers had not taken early childhood teachers as part of their school because of the little support from parents and guardians which could not maintain early childhood centre activities. The instruments were administered to the same individuals to see if they are reliable. Data analysis of the data collected was by use of qualitative techniques. There should be adequate teaching and learning facilities funded by donors, well wishers. Constituency Development Fund and Kenya School Support Programme. Families should start income generating activities to improve on their income to be able to pay fees for their children at Early Childhood Centres. The findings of the research will be useful to Ministry of Education, training colleges and Kenya Institute of Education in curriculum development.



## ABSTRACT

Over the past decade in African traditional society, a child received maximum care and education not only from their parents but also from the society. This research study sought to identify the determinants of child's academic performance in Early Childhood Education. The collected data was both historical and futuristic this is because the study established the number of centers, trained and untrained teachers. A questionnaire was structured to be sent to various Head teachers and Early Childhood Education teachers to identify key areas and challenges they experienced in Early Childhood centers and how they managed to overcome the challenges. Interview guide was used on getting response from the 39 sponsors. The data collected was analyzed using statistical tools such as correlation analysis and the mode to determine child's performance in Early Child Hood centers. The study approach was descriptive survey method for the registered Early Childhood centers that were chosen. The study aimed at attaining objectives on how teaching and learning facilities, professional qualification of teachers, family factors and teacher motivation influence child's academic performance in early childhood education. The study population was 39 sponsors, 78 early childhood teachers and 64 head teachers. Data analysis was analyzed using tables, frequencies and percentages. The validity of the instruments was considered in this study by presenting the developed instruments to the supervisor and research experts to evaluate their application and appropriateness of the content clarity and adequacy of the contraction instruments from research prospective. The findings were majority of primary headteachers and ECDE teachers were of certificate levels. Primary head teachers had not taken early childhood teachers as part of their school because of the little support from parents and guardians which could not maintain early childhood centre activities. There should be adequate teaching and learning facilities funded by donors, well wishers. Constituency Development Fund and Kenya School Support Programme. Families should start income generating activities to improve on their income to be able to pay fees for their children at Early Childhood Centres. The findings of the research will be useful to Ministry of Education, training colleges and Kenya Institute of Education in curriculum development.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the study

According to Melisa J. Bell (2012), academic performance can be defined as how well a student meets standards set out by local government and the institution itself, importance of students doing well in school catching the attention of parents, legislators and government education departments. In 1948, the United Nations assembly acknowledged that education is a basic need such as food, cloth and shelter. The assembly emphasized education for all. It is perceived of not only raising political and social awareness but also as a means of increasing trained manpower. For instance, between 1960 and 1963 enrolment in Africa educational institutions increased five times to about 63 million. It increased to about 9% in 1970 with a gross enrolment of 75% in 1983 at primary level compared to 36% in 1960. Enrolment at tertiary level increased to 21,000 in 1983 (World Bank 1988).

The quantitative expression in enrolment in educational institutions in developing countries has had an impact on Early Childhood centers set up. In developing countries education accounts for 15% of public recurrent expenditure but this can be also high as 30% (Heyneman and Ferrel, 1987). The strain in resources has been a result of slumping prices of commodities, plagued export markets and big interests rates. A combination of these factors generated a severe crisis consequently the share of National budget going to education has leveled off and in some circumstances declined altogether. In Kenya, the first Early Childhood centers were established to cater for the European and Asian children. It seems that, Europeans were first class citizens, Asians second class citizens while Africans were third class citizens of the colonial government. There were no Early Childhood centers for Africans.

In Kenya, since independence the Early Childhood Education has been given an important place in National development plans. In Kenya, "We want our children to find that life has a welcome for them, that they are loved and the love for others is valued and



tangible needs which have a close bearing upon the emotional, social and intellectual growth of children should be met', (Republic of Kenya 1964).

The Republic of Kenya (GoK) has demonstrated its commitment to the well being of children by signing various global policy frame works such as the 1989 United Nations convention on the Rights of the child (UNCRC). In 1990, there was Jomtrein World conference on Education for All (EFA), the 2000 World Education Forum (Dakar Senegal) and 2000 Millennium Development Goals (MDGs). These forums underscored the importance of early Childhood development and addressed challenges facing Early Childhood subsector. The government of Kenya developed sessional paper 1 of 2005 on policy framework for Education training and Research which recommended the development of a comprehensive Early Childhood Development policy Framework and standard guidelines. The Early Childhood Development Framework and the children Act of 2001 operate at providing specific standard guidelines which will ensure that all Early Childhood development service providers including parents, communities, Non-Governmental organizations (NGOs), Government Ministries, Multi-Lateral and Bi-Lateral patterns, universities and private sectors provide quality accessible and equitable Early Childhood development services for children.

Ayot and Lillis (1986: 12) warn that, "Kenya is possibly the only country in Eastern Africa in which the highest proportion of education cost is born by pupils, parents and community". The Kamunge Commission Report (1988) observes that the feature of Kenya's formal education and training since independence has been a rapid growth in enrolment at all levels. The report attributes this to the increased demand for more educational and training opportunities, government's commitment to making education accessible to all Kenyans, demand for trained man power to meet development needs of the country and participation of community in providing educational facilities and infrastructure through harambee initiative (Republic of Kenya 1988:11)

The Ministry of Education developed a national guideline for Early Childhood Education to be adhered to from time to time (2006). For example the curriculum is designed to help children go through development milestones in all aspects of life. Lack of training is one of the facts that hold the implementations of the curriculum for the majority of teachers were not trained which limits the ability to understand and interpret the guidelines. Lack of resources for buying the guidelines, teaching and learning materials became too high for a majority of teachers and parents to bear.

Over 70% of Early Childhood centers are owned and managed by parents and local communities, the parents are responsible for the provision of land putting up structures, providing furniture, upkeep of teachers and management of centers and sponsorship of teachers for training. A spot check conducted by this researcher during 2011 early childhood admission, showed that most public Early Childhood centers in South Wanga Division in Mumias District had an increased number of untrained teachers. This amounted to lack of basic skills to instill knowledge in children for a stable academic foundation. The National centre for Early Childhood Education (NACECE) has provided Early Childhood Guidelines in which roles of Early Childhood Education teachers are specified, thus the Early Childhood teacher takes the part of parents giving the children love, attention, guidance and assistance, education and comfort.

In Mumias District there 89 public, 196 private, 10 municipal council and 8 faith based Early Childhood centers. South Wanga being a rural division, the poverty level among the parents was real and therefore unable to support teachers to go for training. The Kenya Certificate Primary Examination (KCPE) results since the inception of Mumias District in the year 2007, showed that among the three Divisions namely: central, East Wanga and South Wanga which make up Mumias District. South Wanga Division took last position every year having the highest divisional mean score as 230.67 in the year 2010. There was need for Early Childhood teachers in public centers to be trained in order to give quality services to children and the community.



## 1.2 Statement of the problem

As illustrated in the background, the need for care that will lead to holistic development of the child is appreciated and a corresponding right granted by (UNCRC, 1989, OAU 1990 and REPUBLIC OF KENYA, 1998). To secure this right, the conditions necessary for optimal development of children need to be secured within the child's micro systems among which are Early Childhood Centres (Bronfen Brenenr, 1986/1989 and Puckett 1996). To do this, the communities need to focus on four important aspects of the early childhood education Microsystems namely, Teaching and learning facilities, academic and qualifications of early childhood teachers, family factors and teacher motivation. In particular, the Swiss psychologist Piaget, (1952) believed that through experiences in the environment children create their own intelligence. The academic performance of children is improved when the environment is conducive for learning.

Unfortunately, research findings in Kenyan ECD centres have revealed unfavorable conditions for children which lead to low academic performance. A growing body of research shows that the academic achievement of children is more heavily influenced by teachers' academic records or the school the child attends. Unfortunately, the emphasis is not much in South Wanga Division. The divisional KCPE mean score since inception of Mumias District in 2007 have been low compared to the other two divisions namely: Mumias Division and Mumias East. According to the district education KCPE performance analysis, it was noted that 2009 Mumias division had a mean score of 298.50, East Wanga 292.90 and South Wanga 259.24. In the year 2010 KCPE, South Wanga had a mean score of 269.24, East Wanga 282.59 and Mumias Division 288.35. Last year's KCPE South Wanga had a mean score of 256.25, East Wanga 286.25 and Mumia Division 295.05. Downey, Von Hippel and Brohh 2004 noted that low income children entre kindergarten academically behind their more advantaged peers and these initial cognitive differences increase as children progress through school. This is the gap the study was set to fill on determinants of child's academic performances in early childhood education, South Wanga Division.

### **1.3 Purpose of the study**

The purpose of this study was to examine determinants of child's academic performance in Early Childhood Education.

### **1.4 Objectives of the study**

The study aimed at attaining the following objectives namely;

1. To determine how teaching and learning facilities influence the child's academic performance in Early Childhood Education.
2. To determine how professional qualifications of early childhood teachers influence child's academic performance.
3. To find out how family factors influence the child's academic performance in early childhood education.
4. To establish how teacher motivation influence the child's academic performance in early childhood education.

### **1.5 Research questions**

The study was guided by the following questions:

- a) How does lack of Teaching and learning facilities influence the child's academic performance in Early Childhood Education?
- b) Do teacher's professional qualifications determine proximity to schools?
- c) How do family factors influence the child's academic performance in Early Childhood Education?
- d) How does teacher motivation influence the child's academic performance in Early Childhood Education?

### **1.6 Delimitation of the study**

The study was limited to public private and church organizations in Early Childhood Centres South Wanga Division. The study targeted primary school head teachers distributed among 99 early childhood education centres, 120 ECDE teachers and 39 sponsors in early childhood education across the division.



### **1.7 Limitation of the study**

The study was conducted in South Wanga Division in Mumias District. Other institutions such as secondary, primary and tertiary which also need quality academic standards were excluded. This study was conducted in four locations of South Wanga Division but the results were generalized to the whole of Mumias District, Kakamega County. The study limited the number of respondents due to sampling and stakeholders such as assistant chiefs, chiefs and councilors were excluded. The researcher was working in an office expected to collect data and be on job at same time. This was overcome by using research assistants to collect data.

### **1.8 Significance of the study**

The government of Kenya has endeavored to make Early Childhood Education compulsory as per the new Constitution and accessible to the majority of the children. However, the retention and environment conditions at early Childhood education centers have not been successful because of lack of adequate Teaching and learning facilities and levies charged at this level. The study was important to the Early Childhood trainers through data presentation be able to expand their training methods.

It was important in shading light on the existing situation in rural Early Childhood Centers and open a gap for further study. The study enabled community members to start up Income Generating Activities in Early Childhood Centers on the compound to get funds to buy Teaching and learning materials, sponsor teachers for training and improve on Teaching and learning facilities. The study would help the untrained teachers to go for short or long courses to have skills, knowledge and abilities in handling young children. It was to help curriculum developers to design a uniform curriculum that was to be suitable for all pre-scholars. The study was to help parents choose Early Childhood Centers for their children that have good Teaching and learning facilities and improve on the already existing ones. Finally, it was significant in providing information on how Teaching and learning facilities, teachers professional qualifications, family factors and teacher motivation were to be improved for better academic performance of the learners.



## 1.9 Definition of Significant Terms

- Church** : A group of Christians who own an Early Childhood centre
- Private** : An Early Childhood centre owned by an individual or a group as manager or managers.
- Sponsor** : A body that gives help to Early Childhood centers and also help in planning and developing the centre.
- Teacher** : Somebody who nurtures a child on behalf of the parents or guardians.
- Academic performance** : How well students meet standards set out by local government and the institution itself.
- Early childhood education:** the type of education the child is exposed to formally in a registered institution.

## 1.10 Organization of the study

There are five chapters in this document. Chapter one has given an over view of the study, an outline of the background of the study, the statement of the problem, the purpose of the study, the stated objectives, the research questions, the significance of the study, the documentation and limitation of the study, the assumptions made as well as the definition of the significant terms. Chapter two, constitutes of the literature review and chapter three provides a detailed methodology used in the research. In chapter four the researcher gave detailed description of the results obtained after data analysis. Tables and figures present the findings because they summarized the information. Tables and figures are found to be the best way to present data and a few sentences are usually used to highlight the contents. Tables summarize information easily than words.

The researcher put titles and captions on tables and figures respectively. The tables contained sample size, results obtained after data analysis, statistical tests which were used to test research questions, results of the statistical tests, the results which were significant and their levels of significance. The variables which were used in the analysis were clearly noted in the table. Chapter five discussed a brief summary of the problem, methodology and results, an interpretation of the findings in contest of the previous

research and implications of the findings. The research discussed possible reasons why the result occurred, fitted them into the previous research then suggested field application and made theoretical interpretations. The interpretation was in more depth and a great deal of thought because the study interpretation underwent critical insight interpretation by tying different bits of information together. Possible applications of the findings, recommendations and areas of further study were included. Other aspects in the document were references and appendices.

### 1.1.1 Early Childhood educators and the role of teachers.

Among the early educators who advocated for early childhood education were Jean-Jacques Rousseau (1712-1778), Friedrich Froebel (1782-1852) and Maria Montessori (1870-1952). They had one common goal when they recognized the necessity of providing education to young children suffering severe deprivation due to war and other conditions. The children they were aiming at were deprived socially, psychologically and intellectually, they needed compensatory education for them.

Jean-Jacques Rousseau who was a writer and a philosopher believed in the natural growth of the child. He wrote in his book "Emile" that, "Education should be as free as nature". He believed that the natural growth of our organs is the education of nature. He believed the teachers should understand the nature of children so that whatever they do with children should be according to their nature. During his time children were not treated as children but as miniature adults. He believed God made all things good but man interfered with them and they became evil unlike the modern idea of man having capability for good and evil. Therefore, the child was able to develop into a good adult if only he was accorded the greatest degree of freedom. Education is supposed to guide and protect the child. He believed that teachers should observe on how children grow so that they can provide specific activities at an appropriate time.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter presents a review of the literature related to the purpose of the study. It is organized according to the specific objectives in order to ensure the relevance to research problem. The review is undertaken in order to eliminate duplication of what has been done and provide a clear understanding of existing knowledge based in the area of the problem. The literature review is based on authoritative, recent, historical foundations and original sources such as books, thesis and dissertations. The determinants of child's academic performance in Early Childhood Education are also reviewed.

##### 2.1.1 Early Childhood educators and the role of teachers.

Among the early educators who advocated for early childhood education were Jean Jacques Rousseau (1712 – 1778), Fredrick Froebel (1782 – 1852) and Maria Montessori (1870 – 1952). They had one common goal when they recognized the necessity of providing education to young children suffering severe depression due to war and slum conditions. The children they were aiming at were deprived socially, psychologically and intellectually, they coated compensatory education for them.

Jean Jacques Rousseau who was a writer and a naturalist believed in the natural growth of the child. He wrote in his book "Emile" that, "Education comes to us from nature". The natural growth of our organs is the education of nature. He believed the teachers should understand the nature of children so that whatever they do with children should be according to their nature. During his time children were not treated as children but as miniature adults. He believed God made all things good but man interferes with them and they become evil unlike the modern idea of man having capability for good and evil. Therefore, the child was able to develop into a good adult if only he was accorded the greatest degree of freedom. Education is supposed to guide and protect the child. He believed that teachers should observe on how children grow so that they can provide appropriate activities at an appropriate time.



Fredrick Froebel (1782 – 1852), lived in German in an atmosphere where there was lack of unity. This rose his educational thought yearning for unity and harmony both at national and individual levels. This unity became a measuring nod by which he tested the educational programmes of other philosophers where he looked for unity even in the subjects he taught. Children had to be encouraged to grow in union within their environment. The teacher's role was to observe the children and give them a chance not only to learn but also to play. The child was supposed to be given a chance to discover because, *children develop in stages and each stage should be fully exploited, therefore, should see the things of nature, the hidden objects, plants and flowers for he will be assured that the longing of the heart, out of the depth and in darkness must be brought forth.*

Froebel not only advocated for the importance of learning in Early Childhood Education but also emphasized on the importance of play. During training the teacher was supposed to be a ware of this fact. He developed a curriculum for educating children. The teachers' role was to observe the unfolding in order to provide appropriate learning activities. Maria Montessori (1870 – 1952) dedicated her life to work with children. She had worked with mentally disabled children who were kept together with the insane. She realized that mental deficiency was more of an educational problem than medical problem. She felt the methods she used on these children were appropriate for children in general. She developed methods for teaching children and succeeded in teaching mentally handicapped children. After enrolling them for national examinations, they passed like normal children. She opened her first school in 1907 in Rome in which she opened where she perfected her methods with normal children. During this Endeavour, Montessori came up with ideas on handling children.

The teacher was not supposed to rush the children into activities. He or She was to wait for the child's inner life to organize itself. The teacher was primarily an observer and a student of human behaviour rather than a lecturer or shaper. For children, materials were aids to learning. Thus on objects she wrote, *they do not constitute means of teaching but they are aids for the child who chooses them himself, takes the possession of them, uses*

*them and employs them according to his own tendencies and needs, just as he is interested in them.*

The teacher's main task was therefore to explain the use of learning materials to children and each child taught as an individual. John Comenius (1592 – 1670) born in America believed that schools should be workshops where children work and a place where children should develop their self esteem, therefore teaching learning facilities should be adequate. The teacher should teach children when they were ready to learn and involve all senses in the process of teaching and learning that is seeing, touching, smelling, hearing and tasking. Teaching should move from easy to difficult and teachers should not burden children with many subjects.

Three main points emerged from the views of early educators, namely;

1. Early Childhood Education is important for child's later growth and development.
2. The teacher is to give the child a chance to grow and learn naturally.
3. The importance of play is crucial in Early Childhood Education.

The ideas of the early educators are followed today in Early Childhood education. The instituted for Development of Education activities (IDEA) in England in their study indicated that there was still not much being done in the Early Childhood sector. Although the Early educators believed that Early Childhood was important for every child, but most people in England didn't take it seriously because they thought it should be provided only for working class mothers while children from middle class homes should not be separated from their mothers. In Israel few schools were used by Montessori system to evaluate in local schools.

## **2.2 Traditional African Education**

In Africa, children received maximum care and education not only from their parents but also from the society. Traditional African education was basically practical in nature. It was meant to develop one's character, physical attitudes and actual life experiences to enable one to live a full and productive life in the society. Learning took place at all the time and anywhere. The education of the child begun when the child was born. As



children started to speak, mothers taught them correct manners of speech. When the child was able to speak, used to be asked questions to test how much he had learnt. They learnt by imitating or listening.

Children were taught in age groups. This system controlled the content of the age group training. The older age groups were responsible for demonstrating various tasks for the younger age groups. The system provided both informal and formal education took place anywhere, curriculum was not planned and anybody could teach children. Formal education was imparted in specific places, specific curriculum was used and not anyone could impart the education. The traditional system of education was meant to prepare children for life and to make useful in their families and communities. The education imparted was based on values, skills and actual life experiences. The family and the whole community had corrective responsibilities of educating children. The whole community needed to see children counted as great blessings. For a child to grow up to be a responsible member of the society, the child needed education. Children were regarded as innocent before age of 6 years in African Traditional Society. Among the Acholi people example, children were considered as people who did not know the world. This age was considered by most parents as true foundation years for future adult life. Adults instilled discipline among the children, they were taught personal hygiene, self control, importance of sleep, bladder control and safety precautions. Children grew up well adjusted their environment because of the concern of the family and society. This type of education was basically practical in nature.

Education was designed to develop a child's character, social and physical abilities and techniques to enable to live a full and productive life in the society. Most traditions were carried out orally from one generation to another. They played with toys resembling those used by grownups example pots for carrying water. They made their own toys in addition to the ones they collected from their homesteads. The infant was constantly with the mother up to the age of 2 years communicating with the infant through lullabies. The mother paid great attention to the language and physical abilities of child and later on, the child was entrusted to the older girls and other siblings who played with her or him. The

child was involved in participating in work which taught children to be responsible and persevere. Example, learning the skill was secondary to learning of endurance and diligence. Work done by children was to make them useful members of their families, communities and the society. While labouring beside parents and other adults, children acquired knowledge and skills. Children were to ask questions and experiment individually until they could perform the required tasks properly. Moral development and responsibility to family and community flowed easily from the child's active participation in co-operative work. Children were to learn the importance of co-operation in work and cohesion. Thus, child's work was primarily to teach them moral values and skills. Work provided physical training. It also provided practical work which integrated children closely into their households and communities by enabling them to see and feel the importance of their own contribution.

The society through education viewed the child as their child. As emphasized by early educators the importance of play, this was also presented in traditional education. There is need to find out if Early Childhood Education Centre teachers execute this role in the desired manner which is the task of this study.

### **2.2.1 Methods of teaching in Early Childhood Centers**

The models of early educators such as Froebel, Pestalozzi, Maria Montessori and Comenius are still being used to date. However, the earlier ideas have been revised to accommodate new ones. United States of America methodology is based on "model" adopted by each institution. There are two models namely academic and intellectual model. The academic is geared towards preparation for class activities and intellectual is on discovery methods, children are given a variety of materials to play with (the Montessori methods). Play caters for academic work and total welfare of the child. The results of the study on the programme indicated that there were similarities in teaching methods. The results are important for this research because the teaching methods in different Early Childhood centers are aimed with a view of establishing the similarities and differences. It will enable the researcher to find out if the conclusions of the study will correspond with the results.



Montessori Method which was based on materials for teaching and learning is used in many Early Childhood Centers in the world today. The Montessori philosophy states that:

- i) Each child should respect the work of another child.
- ii) Children enjoy working while playing and repetition of what they already have done.
- iii) Children be given rewards for motivation. She stated that: “he who uses my method teaches little, observes a great deal, directs children in activities and develops their psychological abilities, the teacher is a directress”. The method has been criticized for its high degree in preparation of the environment which hampers the child’s creativity, emotional development, doesn’t promote social abilities and initiative play. An educator Boeyer said, “The method denies children a chance for fun”.

### **2.3 Determinants of child’s academic performance in early childhood**

This study outlined determinants of child’s academic performance which included, teaching and learning facilities, and professional qualifications of early childhood teachers, family factors and teacher motivation. Beeby is among the leading educators who have tried to articulate the problem of quality in terms of educational background and training of teachers. Teachers who have qualified and professionally should not be taken for granted due to the importance of formative years of ages 2 to 5 years. It is said that, apparently we cannot afford to let a patient die in the hands of untrained doctor but we can let the untrained teacher to teach an innocent tender youth without even a murmur.

A year of schooling is not just a year of schooling; it can be a delight or a torment on the child depending on the imagination, devotion or cognitive skills of the teacher. Training of teachers in early Childhood Education is diverse and the field of ECE is also diverse. There are differences in philosophy curriculum styles, ages of children and length of teaching children; therefore, training is an important aspect.



Research done in USA among both trainees and practitioners revealed that there were not satisfied with the training they received because:

- I. The training offered in pre-service was theoretical and idealistic.
- II. It was not sufficiently relevant and useful.

In Iraq, research reported that the teachers attitudes were affected by training and authoritarian pupil control methods were used by the teachers.

In Sierra Leone, training was found related to indirect style of training, better lesson preparation and quality of professional relationships. Teachers were highly qualified at higher levels and were related to positive attitudes towards teachings and professionalism as well as the use of various classroom techniques example using modern teaching aids and inquiry procedures. This study is vital for it shows the importance of training teachers. Professional qualifications of teachers have a bearing on teaching in an effective manner. The study shows the teachers' years in primary and secondary raise their verbal skills and teacher training boosts the teaching skills. The qualified teachers have better verbal skills and teaching effectiveness. The training enables a teacher to achieve more in teaching as a profession. The study examines the teacher's academic and professional qualifications and the impact of the environment on teachers services to the child "Physical facilities in a school may ease or make the teacher's work difficult as Katz says. The environment plays a big role on variety of activities offered, frequency of indoor and outdoor activities and the ease within which the safety of children can be maintained.

The World Bank indicated in its study that text books, writing materials and teachers' quality influence the child's achievement. Due to lack of remuneration of the Early Childhood teachers is of little benefit to them when their pay is still low. In USA a study showed teachers were not earning salaries that would make them live comfortably and had no benefits such as house and travelling allowances. This study will guide the researcher to examine factors such as school facilities, school conditions and terms of service how they influence the teachers' quality in service delivery.

World Bank research on teacher satisfaction and dissatisfaction indicated that the highly paid teachers possessed higher language and instructional skills which raised child's achievement. This study is concerned with the conditions and terms of service of Early Childhood teachers and how they affect their quality.

In 1970, a manual for pre-school education called "The Day Care Centre" was published. The pre-school education was launched at K.I.E in 1971 and the training of Pre-school personnel was given the first priority. Training therefore was one of the components of the project. The training is still to date being co-ordinated by K.I.E.

NACECE also takes part in the training which is theoretical for two years. It is intended to equip the teacher with relevant skills in teaching.

Kenya Headmistress Association (KHA) believes that teachers in Early Childhood Centers should have a sound educational background equal to that of other teachers at any level of education in order to give a firm foundation to children through Early Childhood Education. The teachers training is examined with a view of establishing the effects of training on quality of teacher's work and examine the socio environmental provisions of teachers in different training institutions and the effects of these on teachers' quality.

### **2.3.1 Teaching and learning facilities and child's academic performance.**

Young children require appropriate materials as per their ages to help them achieve their full potential. The National Association for Education of Young Children (NAEYC) recommends adults to provide opportunities to children to choose among a variety of activities, materials, equipment and time to explore through active involvement. Much of young children's learning takes place when they direct their own play activities. Piaget (1952) on children intellectual development was of the opinion that children construct knowledge as they play with materials.

Learning takes place when children touch, manipulate, experiment with materials and interact with people. Children form new knowledge from their actions on objectives through mental processes building up their cognitive abilities.



Children living in substandard conditions are likely to suffer from diseases, are subject to abuse or neglect are injured or die more frequently from accidents. Buildings which have cracks pose danger to both children and the teachers, creating fear in children making them perform low in class. Children who learn in classrooms where they are exposed to lead poisoning due to drinking water from lead pipes or breathing lead paint dust cause diseases to children which absence them from school. Lack of proper latrines cause discomfort to children and de-motivates children to learning they also cause diseases such as diarrhea which cause absenteeism among children lowering their academic performance. Inadequate sitting facilities create fear and discomfort such children are exposed to poor physical growth and academic performance.

The Kamunge commission report (1988) called for the introduction of more effective means of using educational facilities, equipment and personnel to improve on academic standards in the institutions. The early childhood centre consists of parents, the community, the sponsor and the government all of which contribute to the provision of educational facilities. Developmental research states that the most successful programmes for young children are based on the premise that, an active child in an active environment constitutes the optimum conditions for bringing about development changes.

### **2.3.2 Teachers professional qualifications on child's academic performance**

Beeby (1953) noted that trained teachers the quality of a teacher depends on educational background and training many studies demonstrate that perform better than those with teachers who have no certification. Similarly, those who have professional training produce higher children achievement than those who enter the profession and lack his background. Research indicates that teachers with greater academic ability tend to have children who perform better. Teachers should be knowledgeable in the development of young children.

Teachers who have strong early childhood education backgrounds in recreation will be aware of activities that are safe for children. Research indicates that the achievement gap widens each year between children with most effective teachers and those with least



effective teachers. The Kamunge commission report (1988) observes that, the feature of Kenya's formal education and training since independence has been a rapid growth in enrollment at all levels. Maria Montessori (1870-1952) developed methods of teaching children and succeed teaching children with disabilities. A high effective teacher is one whose children show the most gains from one year to the next. Teacher quality depends on four key dimensions namely, content knowledge, teaching experience, professional certification and overall academic ability. Teachers content knowledge influences child's academic performance in that teachers who teach activities that they have previously studied in depth while in college are effective than those who have not.

### **2.3.3 Family factors and child's academic performance**

Compared to more affluent pre scholars, children living in poverty are 25% more likely to miss three or more days of school per month (National centre for education statistic [NCES] 2006). This link between family income and child's school attendances is the product of complex and interconnected relationships. Children born to teenage mothers, a group strongly associated with childhood poverty, are likely to be chronically absent from early childhood centres (Romero and Lee 2008). Adult composition of the home is strongly related to both economic resources and child's cognitive development which in turn are associated with child's mobility (Bumpass and Less 200). Current research seems to favour the intact that two parent headed families provide optimum development of children (Acock and Demo, 1994, 1997 Simons, 1996).

Children who grow up with two loving parents who have nurtured them from birth have fewer problems, do better in school and are likely less to use drugs or get arrested when they are teenagers. The advantages these children enjoy stem from the facts that two adults share rearing tasks. Two parent families often have a financial advantage over other family forms, where they are both wage earners; they provide better housing, health care and good education for their offspring. Where the mother is proud of her work, children have a role model for making better choices in adulthood. All these positives for the intact family guarantee optimum development of children unlike the possibility that other family forms can offer many of the same benefits.

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Single parents often suffer from role overload as they try to nurture their children, stressors increase with more than one child or when illness strikes affecting the cognitive development of the children. Children who are fatherless are deprived of the social kind of child rearing fathers can provide. Kyle Pruet, (2000) says that, whether roughing with a five year old or disciplining a delinquent teen, fathers have a different parenting style. Where single parents resolve some of the problems of caring for children alone by moving in with their own parents, this adds stresses on children affecting their academic performance since the parents brought in, are not their biological parents.

Many adjustments are difficult and vary with ages of children. Younger children suffer more from loss of a close relationship with both parents. Some children continue to have problems of identity and self worth in this type of marriage and school age children may go through a period of lower academic performance. When divorced parents find new spouses, to children the experience can be positive, negative or mixed; this affects their academic performance since they have to adjust to new experiences.

#### **2.3.4 Early childhood development teacher motivation and child's academic performance**

Demonstrating the importance of hygiene factors, research (Howe's, Smith and Clanlinsky 1995, Love Ryrie and Faddish 1992, Essay 2003) has reported that early childhood teacher whose "hygiene" needs are satisfied, become warm, sensitive and nurturing. The teacher in these studies showed that great responsiveness gave encouragement to children and used less negative disciplinary techniques. As a result, children developed positive emotional adjustments and their cognitive language and social skills were enhanced. Additionally, children displayed fewer behavioral problems and became socially competent. Majority of childhood teacher's work in what Herzberger described as an unhealthy psychological work environment including unclear terms of service (Makoti, 2005). Due to Free Primary Education which started in the year 2003, Early Childhood Teachers have heavy work load since most parents would like their children to pass through early childhood education in order to go to the next level for Free Primary Education. This is considered to be a demonstrating factor as Ngome (2002)



found unmanageable pupil enrollment to contribute to the 54.56 percent rate of Early Childhood Education Teacher attrition.

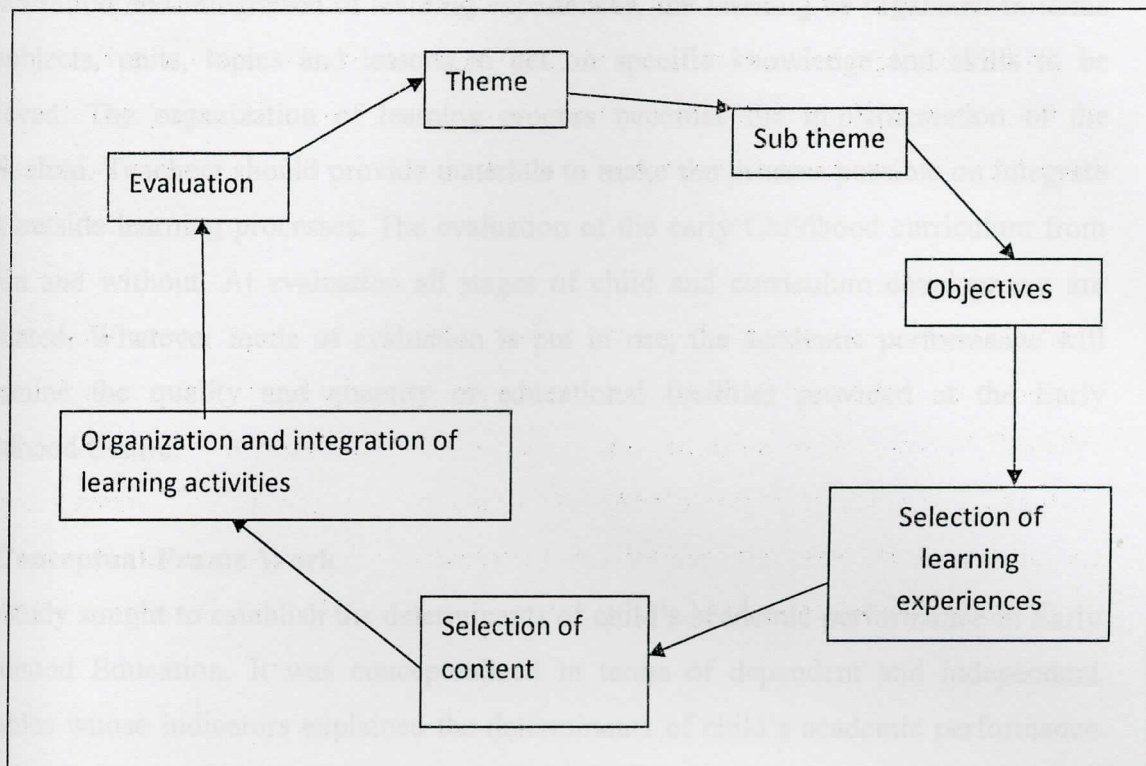
Environmental factors according to Ngome (2002) in most public centres supported unfriendly working conditions characterized by windowless, rough mud walled, unfloored classrooms and others were iron sheet walled and roofed.

In such classrooms temperatures are usually high or very low, ventilation being inadequate, and dust found in the classroom, congested classrooms thus distracting child's attention hence de-motivating teachers to work as required. Findings of the Ministry of Education Science and Technology (MOEST, 1999) had revealed that on average, early childhood centres even within primary school compounds were worse off than their lower primary counterparts in terms of provision and appropriateness of facilities.

#### **2.4 Theoretical Framework**

The study is on Determinants of Child's Academic Performance in Early Childhood Education. It was therefore important to establish the usefulness of adequate teaching and learning facilities, improved qualifications of teachers and improved teaching methods in Early Childhood Programme. The study was based on Kenya institute of education model (2008) whose emphasis is on activities which children must do to make up adult life. Bobbit (1968), believed that those things learners must do and experience in the process of developing ability do well in things that make up adult life principles of child's learning by considering the theme, sub theme, objectives, selection of teaching and learning materials, selection of the content integration of activities and evaluation. The KIE model put emphasis on the thematic learning approach where learning takes place based on a theme. The methods used are child centred and participatory. This theoretical frame links with the study on determinants of child's academic performance in Early Childhood Education.

**Figure 1: Theoretical Framework**



Kenya institute of education (2008).

The elements that make up the model are theme, sub theme, objectives, selection of learning experiences, selection of content, organization and integration of learning activities and evaluation. The theme here refers to a central idea or topic around which learning takes place. The sub theme is taken from the theme. Objectives refer to educational purposes in early childhood education which enable children receive intended skills and knowledge.

Selection of learning experiences refers to both internal and external experiences. Internal are experiences at the centre while external experiences refer to the parents, community, sponsor and the government which contribute to the provision of educational facilities inform of grants. The teachers are supposed to engage children in learning by using their experiences to be able to grasp the content in the curriculum with ease. These experiences should be provided to attain those purposes and they should be relevant both at the Early

Childhood Centers and outside the centre. Selection of content is where the interest of learners should be catered for in order to be motivated in performing the activities. Organization and integration of learning experiences, the learning be organized in terms of subjects, units, topics and lessons to get on specific knowledge and skills to be achieved. The organization of learning process becomes the implementation of the curriculum. Teachers should provide materials to make the process possible on integrate with outside learning processes. The evaluation of the early Childhood curriculum from within and without. At evaluation all stages of child and curriculum development are evaluated. Whatever mode of evaluation is put in use, the academic performance will determine the quality and quantity of educational facilities provided at the Early Childhood Centre.

## **2.5 Conceptual Frame Work**

The study sought to establish the determinants of child's academic performance in Early Childhood Education. It was conceptualized in terms of dependent and independent variables whose indicators explained the determinants of child's academic performance in Early Childhood Education. The independent factors such as Teaching and learning facilities, professional level of Early Childhood Teachers, family factors and teacher motivation played the role of driving forces not forgetting the moderating and intervening variables.



## Conceptual frame work

### Determinants of child's academic performance in early childhood education

#### INDEPENDENT VARIABLES

##### DETERMINANTS

###### TEACHING AND LEARNING FACILITIES

- Textbooks
- Charts
- Syllabus

###### PROFESSIONAL QUALIFICATION OF EARLY CHILD HOOD TEACHERS

- Level of training
- Academic achievement

###### FAMILY FACTORS

- Economic status
- Social status

###### EARLY CHILDHOOD TEACHER MOTIVATION

- Salary
- Working environment

##### MODERATING VARIABLES

- Government Policy
- Attitude

##### DEPENDENT VARIABLES

###### ACADEMIC PERFORMANCE

- Continuous assessment tests
- Progress record
- Final examination

##### INTERVENING VARIABLES

- Culture
- Teaching experience

Figure 2 Conceptual framework

Figure 2 on determinants of child's academic performance in early childhood education shows the perceived conceptual model which encompasses the major variables and their possible patterns of influence on each other and eventually on child's academic performance in early childhood education.

The conceptual framework applied in figure 2 identified the dependent variable as academic performance which were continuous assessment test, progress record and final examination. It also identified the independent variables as teaching and learning facilities thus text books, charts, and syllabus, academics and qualifications of early childhood teachers as level of training and academic achievement family factors such as economic and social status and early childhood teacher motivation as salary and working environment.

Family factors were to be improved to meet Child's demand at early childhood centre and at home. Working environment was to be conducive for learning to motivate the teachers in giving services to the learners. There was need for appropriate payment of teachers' salary to motivate the teacher to give quality service. Therefore, Child's academic performance would be improved if there are adequate teaching and learning facilities, trained teachers, stable family economic and social status and self motivated working environment for the teachers. The government needs to do a lot on education to reduce decline in academic performance thus dealing with moderating variables which were acting negatively on the dependent and intervening variables. In this case, the government was to look for viable, sustainable policies and strategies at various levels that would support the development as well improve child's academic performance in early childhood centres.

## **2.6 Gaps identified at literature review**

According to UNESCO report (2003), there had been an increase on students' number yet an acute shortage of teachers, lack of clear guidelines on admission, lack of consultation with stake holders who included teachers and parents, in adequate facilities and infrastructure.



Improvement of child's academic performance in early childhood education involves teachers and children having enough Teaching and learning and facilities such as text books, charts and the syllabus.

There was need for an appropriate level of input by early childhood teachers going for training to equip themselves with knowledge and skills in early childhood education and further to see the need to improve child's academic performance. Family factors such as economic and social status were told be improved by families engaging themselves in income generating activities to meet child's demands at early childhood centres. Families should not move from one place to another since this deteriorates child's motivation to school leading to low academic performance.

According to total quality management (TQM) Guru Edward Deming quality was satisfying customers not merely meeting their expectation but to exceed by starting and ending with the customer in this case the teacher. The salaries for teachers were to be paid promptly to motivate them to give quality services to children. The environment was to be conducive for learning.

## **2.7 Summary of literature review**

This chapter examined literature related to determinants of child's academic performance in early childhood education. It expounded on the variables thus the teaching and learning facilities, professional qualifications of early childhood education teachers, the family factors and teacher motivation in early childhood education centres. It reviewed the importance of Teaching and learning facilities, professional qualification of ECD teachers, family factors and the gaps that exist in enhancing teacher motivation in early childhood centres. This chapter was further supported by the conceptual analysis of two variables, dependent (academic performance), independent (Teaching and learning facilities, professional qualification of early childhood teachers, family factors and teacher motivation factors) and intervening and moderating variables which affected the relationship between the two mentioned variables.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter entailed the methodology of the study subsequently covered research design, target population, sample size selection and sampling procedure, methods of data collection, piloting testing of the instruments, validity and reliability of research instruments, operationalization of variables, data analysis and ethical considerations involved.

#### 3.2 Research design

The study adopted descriptive survey which describes the state of affairs as it exists. Kerlinger (1969) points out that descriptive studies are not only restricted to fact finding, but may often result in the formation of important principles of knowledge and solutions to significant problems. They involved measurement, classification, analysis comparison and interpretation of data. The design was appropriate because according to Kombo and Delno (2006) descriptive design involved collecting information by interviewing or administering a questionnaire to a sample of individuals. Descriptive data is usually collected through questionnaires, interviews or observing.

Sekaran 2004 defines descriptive research as a study undertaken to ascertain the characteristics of the variables of interest in a situation. The goal of descriptive study is to offer the researcher a profile or to describe aspect of the point of interest from an individual, organization industry or other perspective [Kothari, 2003]. Quantitative research is about asking people for their opinions in a structured way so that the researcher can produce hard facts and statistics for guidance. To get reliable statistical results, it was important to survey people in fairly large numbers and to make sure they are a representative sample of the target market. The process of measurement is central to quantitative research because it provides fundamental connection between empirical observation and mathematical expression and quantitative relationships (Hunter et al, 2008). This study used research questions and measurement scales like nominal, ordinal and interval. This method was ideal for gathering data on determinants of child's



academic performance in Early Childhood Centres in South Wanga Division, Mumias District.

### 3.3 Target population

In South Wanga Division, there are 99 early childhood education centres distributed across the division. This study targeted primary school head teachers distributed among 99 early childhood education centres, 120 ECDE teachers and 39 sponsors in early childhood education centres across the division.

### 3.4 Sample size selection and sampling procedures

The study discussed how the sample size would be selected and the sampling procedure to be adopted.

#### 3.4.1 Sample size selection

The study purposively selected all the 39 sponsored early childhood education centres. For a combined population of 219 early childhood education teachers and 99 head teachers the study adopted the formulae of Yomane Taro (1967) to complete the sample size as follows:

$$n = \frac{N}{1 + NE^2} = \frac{219}{1 + 219(0.05)^2} = 142$$

Using proportional allocation, this therefore will be:

$$\text{Early childhood teachers} = \frac{120 \times 142}{219} = 78$$

$$\text{Primary school Head teachers} = \frac{99 \times 142}{219} = 64$$

#### 3.4.2 Sampling procedure

South Wanga Division is divided into three locations namely, Musanda, Buchifi and Bukaya stratified sampling method was used to classify the early childhood centers into stratus as those in Musanda, Buchifi and Bukaya. The study adopted simple random to get the 39 sponsors, 78 early childhood teachers and 64 head teachers.

### **3.5 Methods of data collection**

The study used the following instruments to collect information and interview guides.

#### **3.5.1 Questionnaires for head teachers and Early Childhood teachers**

A questionnaire is a research instrument consisting of a series of purpose of gathering information from respondents. It is easy to administer and economical to use in terms of time and money since it has standardized answers that make it simple to complete the data and analyze it.

Structured (closed –ended) and unstructured (open ended) questions were used to obtain responses from respondents. They were used to collect data on the variables of the study. Such information was best collected through questionnaire (Touliatos and Compton 1988). There were two sets of questionnaires; one for the early childhood teacher in charge of the centre and for the primary school head teacher as per the early childhood centres.

#### **3.5.2 Interview guide for sponsors**

The interview schedule targeted the church sponsors which contained clear and concise questions on the Teaching and learning facilities, professional qualification of early childhood teachers, family factors and early childhood teacher motivation in South Wanga Division. The interview schedule was administered personally by the researcher to obtain first hand information on key areas of this study highlighted in the objectives.

### **3.6 Piloting Testing of the instruments**

The study was on a group of eight early childhood teachers, six primary head teachers, and four sponsors of early childhood centres in South Wanga Division.

#### **3.6.1 Validity of the instruments**

According to Best and Khahn (1989), validity of an instrument is asking a relevant question frame, in this study validity content of the instruments was established in three stages.



The researcher critically considered each item to see if it contained a real representation of the desired content and if it will measure after considering the constructs to be measured.

The developed instruments were represented to the supervisor of the project and research experts to evaluate their application and appropriateness of the contents clarity and adequacy of the construction of the instrument from research prospective.

A field test was conducted with a pilot of 64 centers randomly selected in South Wanga Division to ensure content clarity of each research instruments. The head teachers and early childhood teachers were requested to carefully complete the instrument, critique the format and instruments upon completion of the pilot study the data was reviewed and items that were not clear modified accordingly. The pilot study was not conducted in early childhood centers that were selected for final actual sample.

Content validity was determined to establish representation of items with respect to teaching or learning facilities, professional qualifications of early childhood teachers, family factors and early childhood teacher motivation.

### **3.6.2 Reliability of the instruments**

Reliability refers to the extent to which research instruments yield measurements that are consistent each time they are administered to same individuals. The researcher employed a test retest method in order to test reliability of the research instruments; Research instrument may be pre-tested on a sample of at least ten respondents who do not have to be representative's (Mulusa 1990).

In this study, ten centers were requested to respond to the questionnaires .A second time being after two weeks and the correlation between the two set of scores were computed. Pearson Moment formulae was administered and a correlation. Co-efficient of 0.84 was obtained. In this study, a minimum, correlation of 0.5 was taken as a good measure of the reliability of the instrument.

Pearson product moment formulae is

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{(n\sum x^2) - (\sum x)^2} \sqrt{(n\sum y^2) - (\sum y)^2}}$$

### 3.7 Data analysis

The analysis of data collected was done using qualitative and quantitative techniques. As defined by Watson (1994), qualitative data analysis is a systematic procedure followed in order to identify essential feature, themes and categories. Means, frequency and percentages were used to analyze the data collected. Information in tables was analyzed through qualitative description of the tables. Findings were presented using simple tables, frequencies and percentages. Words were used to describe and explain the meaning of the data.

### 3.8 The ethical considerations

The study involved seeking the respondents' views by the researcher so as to administer the questionnaire. The researcher informed the respondents the expected time of participation in the study and the procedure to be followed. The respondents were ensured of the confidentiality of the information to be given during the study and that their names were not appear anywhere on the questionnaires.

### 3.9 Summary

This chapter discusses in detail the research design to be used, target population, sample size and sampling procedure, methods of data collection to be used and some of the methods highlighted included the questionnaire and interview guide. Validity and reliability were deliberated upon with a brief explanation on methods of data analysis followed by operationalization of variables and lastly the ethical considerations.



### 3.10 Operationalization of variables

The study linked the objectives with their indicators, data collection instruments, the type of measuring scale that was used and the data analysis techniques. This was shown in a table.

**Operationalization of Variables**

Objective/Research questions	Source	Type of information	Data collection instrument	Measuring scale	Analysis technique
<p><b>B:</b> To determine how Teaching and learning facilities influence the child's performance in early childhood education.</p> <p><b>Q:</b> How does teaching and learning influence the child's performance in early childhood education?</p>	<p>- The head teacher</p> <p>- ECDE teachers</p>	<p>Teaching and learning facilities</p> <p>Textbooks</p> <p>Charts</p> <p>Syllabus</p>	<p>Questionnaire</p> <p>Interview schedule</p>	<p>Ordinal, nominal</p>	<p>Quantitative and qualitative</p> <p>Frequency and percentages</p>
<p><b>B:</b> To determine how professional qualification of early childhood teachers influence child's academic performance in early childhood education.</p>	<p>The head teacher,</p> <p>ECDE teachers</p>	<p>Teachers academic professional qualifications</p> <p>Level of training</p> <p>Academic achievement</p>	<p>Questionnaires</p> <p>Interview schedule</p>	<p>Ordinal, nominal</p>	<p>Quantitative and qualitative</p> <p>Frequency and percentages</p>
<p><b>B:</b> To determine to what extent family factors influence the child's academic performance in early childhood education.</p> <p><b>Q:</b> to what extent do family factors influence the child's</p>	<p>- The head teacher</p> <p>- ECDE teachers</p> <p>The sponsor</p>	<p>Family factors</p> <p>Economic factors</p> <p>Social factors</p>	<p>Questionnaires and Interview schedules</p>	<p>Ordinal, nominal</p>	<p>Quantitative and qualitative</p> <p>-Frequency and percentages</p>

academic performance in early childhood education?					
<b>OB:</b> To determine how teacher motivation influence the child's academic performance in early childhood education. <b>Q:</b> how does teacher motivation influence the child's academic performance in early childhood education?	<ul style="list-style-type: none"> <li>- The head teacher</li> <li>- ECDE teachers</li> <li>- The sponsor</li> </ul>	Teacher motivation Salary working enrollment	Questionnaire and interview schedule	Ordinal, nominal	Quantitative and qualitative -Frequency and percentages

4.2. Questionnaires return rate

To ensure that the respondents responded to all the questions on the 121 questionnaires, the researcher undertook a number of measures. This included allowing the respondents ample time within which they should respond to the questions on the questionnaires. The researcher emphasized to the respondents on the importance of their participation and answered 80% of the questionnaires were returned. Data collected was analyzed using statistical packages of social sciences. Findings were then presented in form of graphs, tables, frequency and percentages.

4.3. Demographic characteristics of respondents

The demographic characteristics of the respondents were sought in the study to see if they affected their performance. The characteristics of the respondents included gender, teaching experience, educational background and professional qualifications.

4.3.1. Distribution of respondents by gender

A total of 121 respondents were identified with a male or female gender. The gender analysis essentially means examining gender as a category and examining a given dependent variable to see if results are different for male and female, which illustrates that gender analysis is not a check for looking at a situation but rather an exercise that looks at



## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION AND INTERPRETATION**

#### **4.1 Introduction**

This chapter presents findings of a research survey conducted on determinants of child's academic performance in Early Childhood Education in South Wanga, Division, Mumias District. The chapter presents data analysis, presentation and interpretation of data collected from respondents based on research objectives, conclusions and recommendations. 142 questionnaires were distributed to two categories of respondents, one per primary head teacher and one per ECDE teacher per early childhood centre in targeted centers.

#### **4.2. Questionnaire return date**

To ensure that the respondents responded to all the questions on the 142 questionnaires, the researcher undertook a number of measures. This included allowing the respondents ample time within which they should respond to the questions on the questionnaires. The researcher endeavored to emphasize to the respondents on the importance of their co-operation and assistance. 80% of the questionnaires were returned. Data collected was analyzed using statistical packages of social sciences. Findings were then presented in form of simple tables, frequency and percentages.

#### **4.3 Demographic characteristics of respondents**

The demographic characteristics of the respondents were sought in the study to see if they affected their performance. The characteristics of the respondents included gender, teaching experience educational background and professional qualifications.

##### **4.3.1. Distribution of respondents by gender**

A total of 181 respondents were identified with a male or female gender. The gender analysis essentially means separating gender as a category and examining a given phenomena to see if results are different for men and women, results illustrate that gender analysis is not a code for looking at a situation but rather an exercise that looks at

differential impact for both men and women. This study investigated gender distribution and the results were as follows:

**Table 4:1 Gender distribution of primary school head teachers, ECDE teachers and sponsors.**

Gender	Primary Head teachers		ECDE teachers		sponsors		Total	
	F	%	F	%	F	%	F	%
Male	61	95.31	3	3.84	3	7.69	67	100.00
Female	3	4.68	75	96.15	36	92.30	114	100.00

The study findings in Table 4.1 on gender distribution of primary school head teachers, ECDE teachers and sponsors, indicated that there were many male primary head teachers 61 (95.3%) as compared to 3 females (4.68%). The primary school male head teachers were many this could have been because they withstand working for long hours which is a teaching culture in Mumias District for realization of better academic performance and believed that male head teachers were able to compete with other schools unlike the female head teachers who had multiple roles at school and home therefore could leave school early. It was realized that most ECDE teachers were female 75 (96.15%). It was believed that it is a female career thus looking after children therefore suitable for them and not males. Only 3 (9.84%) ECDE teachers were male. This implied that there were many female ECDE teachers who had also other roles in their homes to carry out which had an impact on academic performance of children in early childhood centers. There were three male sponsors (7.69%) and 36 female (92.30%) which also meant that supervision of most ECDE was done by the female sponsors who had other multiple roles in their homes affecting academic performance of ECDE children.

#### **4.3.2 Teaching experience of respondents.**

The study sought to find out the teaching experience of primary school head teachers and ECDE teachers in the selected centres. The findings were as presented in table 4.2



**Table 4.2 Teaching experience of primary school head teachers and early childhood teachers.**

Teaching experience (years)	Primary school head teachers		ECDE teachers		Total	
	F	%	F	%	F	%
Below 5	0	0	49	62.82	99	100
5 - 10	4	6.25	23	29.49	99	100
Above 10	60	93.75	6	7.69	99	100

The results Table 4.2 on Teaching experience of primary school head teachers and early childhood teachers revealed that the majority of ECDE teachers 49(62.82%) had the experience of below 5 years while above ten years 6(7.69%) had the least numbers. This meant the majority had little experience in teaching as a career. This was an indication that most of them could not understand how to handle ECDE curriculum and its implementation but only taught the content in the syllabus with little knowledge and skills of its interpretation in activity form.

The results show that there were no head teachers with teaching experience below five years, those with between 5 to 10 years were 4 (6.25%) and the majority had an experience of above 10 years thus 60(93.75%) as part of ECDE implementers, they had very little or no knowledge and skills in ECDE activities but had higher experience in primary activities.

### 4.3.3. Professional qualification of primary school

The study sought to know the qualifications of the head teachers and the results were as shown on table 4.3

**Table 4.3 Professional qualification of primary head teachers .**

Qualification	Frequency	Percentage
Certificate	59	92.7%
Diploma	4	6.25%
Degree	1	1.56%
Masters	0	0
Total	64	100%

The study in the Table 4.3 on Professional qualification of primary head teachers findings showed that most primary school head teachers 59 (92.19%) had minimum qualification of certificate level. This implied that their qualifications based on their low qualifications affected the academic performance of children for they were not able to interpret the ECDE syllabus content and give appropriate advise to ECDE teachers and sponsors. The 4 (6.25%) Diploma holders were too few to improve the child's academic performance in the existing early childhood centres.

#### 4.3.4 Respondents Academic qualifications.

The study sought to establish the academic qualification of the ECDE sponsors .The findings below show their level.

**Table: 4.4 Academic qualifications of the sponsors.**

Qualification	Frequency	Percentage
Certificate	38	97.44
Diploma	10	2.56
Degree	0	0
Masters	0	0
Total	39	100

According the results in Table 4.4 on academic qualifications of the sponsors, the majority sponsors of ECDE Centres 38(97.44%) were of low level. This hinders them with little knowledge in ECDE in Supervision and running of the centres. The 1(2.56%) sponsors, cannot be effective in advising the community and stakeholders on importance of ECDE Education. This implied that the sponsors were was put to oversee the ECDE management yet without skills.

#### 4.4 Adequacy of teaching and learning facilities.

The researcher wanted to establish the adequacy of teaching and learning facilities in enhancement of child's academic performance. The teaching and learning facilities were categorized as textbooks, charts and the syllabus.



**Table 4.5 Adequacy of teaching and learning facilities**

Facility	Adequacy level					
	Adequate		Inadequate		Total	
	F	%	F	%	F	%
Textbooks	10	1.28	61	78.20	71	100
Charts	20	25.64	58	74.36	78	100
Syllabus	15	19.23	63	86.76	78	100

The results in Table 4.5 on adequacy of teaching and learning facilities showed that there is a serious shortage of text books, the ECDE syllabus, 61(78.20%) and 63(80.76%) in many early childhood centres . The ECDE centres which had few text books were of the old syllabus and not the revised one of 2008. The centres that had the syllabus lacked the teachers manual hand book making it difficult for ECDE teachers to interpret the content as required. Most ECDE centers lacked charts 58(74.36%) displayed in their classrooms or used in content delivery ; this was due to lack of funds to buy teaching and learning facilities for there was provision of the same in primary section due to Government provision of funds for stationery thus primary head teachers had very little to do with ECDE centres. The findings showed primary head teachers had not fully taken ECDE as part of their school for they felt ECDE were too demanding and got little or no income form the parents and guardians . Shortage of charts made children overcrowd on the existing ones during lesson presentation hampering good Learning and creation of their own intelligence during learning session.

#### **4.5 Professional qualifications of early childhood teachers.**

They also sought to examine the professional qualifications of early Childhood teachers influence on child's academic performance.

**Table 4.6: Professional qualifications of early childhood teachers.**

Qualification	Duration	Frequency	percentage
Short course	5weeks	33	42.31%
Certificate	2years	30	38.46
Diploma	2 years	14	17.95
Degree	4 years	1	1.28
Masters	2 years	0	0
Total		78	100

They study in Table 4.6 on Professional qualifications of early childhood teachers showed that majority of the teachers had short course training 33 (42.31%) which implied that the qualifications based on their academic performance. This in turn affected child's academic performance because their teachers had attended a short training to equip them with basic skills but not to fully interpret the ECDE Syllabus content as in long courses. The diploma teachers 14 (17.95%) degree 1(1.28%) were too few to interpret the syllabus and improve the academic performance of children.

#### **4.6 Family factors and their influence on child's academic performance.**

The research wanted to find out the influence of family factors on child's academic Performance. The family factors were economic and social status.

The results in Table 4.8 on Family factors on child's academic performance (91.72%) indicate that there was serious negligence of parents and guardians in regard of fees for their ECDE children, which made ECDE teachers not to deliver as required to the syllabus. It was noted that most of them grew vegetables but had no other business making them be paid low prices getting very little profit. This affected the children for they lacked essential necessities like uniforms, pens and books. The social status between the teachers and the families 34 (32.04%) was not very good due to their responses to ECDE payments which would enable the teachers have trust in them and their children. Those with neutral response 14(7.72%) did not know anything about their relationship with the teachers.



**Table 4.7 Family factors on child's academic performance.**

	Strongly disagree		Neutral		Agree		Strongly agree	
	F	%	F	%	F	%	F	%
Parents and guardians pay fees promptly	170	93.92	8	4.41	3	1.66	0	0
Majority of community members have a monthly income of between 2000-10000.	0	0	4	2.21	0	0	17	9.39
The teacher gets support from parents and guardians on spiritual guidance of their children	0	0	148	81.77	7	3.87	0	0
There are very good relationship between the head teachers, ECDE teachers, the parents , guardians and children	31	17.12	39	21.55	14	7.73	58	32.04
							39	21.56

*N=181*

The results in Table 4.6 on Family factors on child's academic performance 170(93.92%) indicate that there was serious negligence of parents and guidance in payment of fees for their ECDE children, which made ECDE teachers not to deliver services as required to the children. It was noted that most of them grew sugarcane but leased to other farmers making them be paid low hence getting very little profit. This affected the children for they lacked essential necessities like uniforms, pencils and exercise books. The social status between the teachers and the families 58 (32.04%) was good but not very good due to their response to ECDE payments which would enable the teachers have trust in them and their children. Those with neutral response 14(7.7355%) said they knew nothing about their relationship with the teachers.

#### 4.7 Early childhood teachers motivation and the influence on children`s academic performance.

The study sought to establish the ECDE teachers satisfaction levels and their influence on children`s academic performance in early childhood centres. The motivation satisfaction were categorized as salary and working environment as shown in tables 4.8.1 and 4.8.2

The research study sought information on ECDE teachers` salary as tabulated below.

**Table 4.8 Early childhood teacher motivation in form of salary**

Salary range ksh.	Frequency	percentage
Below 1,000	24	30.77
1000-3000	50	64.10
4,000-10,000	4	5.13
Above 10000	0	0
Total	78	100

The results in Table 4.8 on early childhood teacher motivation in form of salary show that the majority of the teachers earn between 1000-3,000 50(64.10%) which is quite low for one to deliver services for the recommended hours in the day. This de-motivates ECDE teachers who look elsewhere for green pasture leaving children un attended do. The ECDE teachers who get 4(5.13%) salary are too few to improve academic performance of children

#### 4.8 Early childhood teacher motivation in farm of working environment

The study sought to find the early childhood teachers environment. The findings are as represented in the Table 4.9.



**Table 4.9 Early childhood teacher motivation in the form of working environment.**

Motivation	Dissatisfied		Neutral		Fairly		Satisfied	
	F	%	F	%	F	%	F	%
Good working condition	62	79.49	3	3.84	13	16.67	0	0
Work load	59	75.64	0	0	10	12.82	9	11.54
Physical facilities in good condition	73	93.59	0	0	5	6.41	0	0

N=78

In Table 4.9 on early childhood teacher motivation in the form of working environment led to dissatisfaction 73(93.59%) on physical facilities. Although work load (11.54%) led to satisfaction no much had motivated the teachers in the other areas. The primary sectors had improved by the government on physical facilities yet some ECDE children were still learning under trees. This implied that many children were absent from school at least some days in a week during bad weather conditions affecting their academic performance and teacher motivation.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introductions

This chapter is presented in three sections highlighting a summary of the study findings based on the research objectives, conclusions and recommendations of the study.

#### 5.2 Summary of research findings

The research findings were based on the stated objectives and the type of analysis which produced the following results.

OBJECTIVES	TYPE OF ANALYSIS	FINDINGS
To determine how teaching and learning facilities influence the child's academic performance in early childhood education	Descriptive	10(1.28%) of text books were adequate. Many of the text books 61(78.20%) were in adequate and were not of revised syllabus(2008). The charts 20(25.64%) were in adequate. 15(19.23%) of the centres had revised syllabus while 63(80.76%) used text books. Head teachers had detached themselves from ECDE centres.
To determine how professional qualifications of early childhood teachers influence child's academic performance	Descriptive	Many teachers 33(42.31%) had a short course training while 1(1.28%) was of degree level. The teachers were not advancing their studies and head teachers remained a loof with them.
To find out to what extend the family factors influence the child's academic performance in early childhood education	Descriptive	Majority of parents and guardians 148 (81.77%) did not provide spiritual guidance to children which led to child rearing difficult affecting academic performance. 170 (93.92%) parents and guardians were not paying fees promptly due to low income which affected the child to be sent out of school lowering academic performance.
To establish how teacher motivation influence the child's academic performance in early childhood education	Descriptive	Results indicated that many ECDE teachers 50(64.10%) were poorly paid, this affected their performance, only 4 (5.13%) of the teachers got salary over Kshs. 4000 which lead to absenteeism for teachers looking for other alternatives.



### **5.3 Discussions of the Study findings**

The study sought to find out the determinants on child's academic performance in early childhood centres. Based on the study findings, most head teachers 60(93.75%) had a higher teaching experience of above 10 years; but had little experience in ECDE area and found it difficult to identify key areas of emphasis in ECDE centres.

It was noted that the majority of the head teachers 59(92.79%), ECDE teachers 30(38.46%) and sponsors 38(97.44%) were of certificate level. This brings doubt on part of primary head teachers and ECDE teachers lacked the syllabus raising eyebrows on how children could construct their own knowledge without a guided content from ECDE teachers. Teaching and learning materials were inadequate leading to low academic levels among ECDE children 61(78.20%) text books were inadequate.

The study findings revealed that majority of ECDE teachers 33 (42.31%) had short course training of five weeks which was not comprehensive enough to equip a teacher with knowledge and skills in Early Childhood Development. This showed that majority of ECDE teachers were not conversant with new trends in education affecting the child's academic performance.

The research study aimed at finding out how family factors influenced child's academic performance in early childhood education. From the findings, it was realized that majority of families income was 160 (88.39%) between kshs. 2,000 and kshs. 10,000 resulting to low payment of fees, children sent home often for balances leading to low academic performance among ECDE children.

Finally on Early Childhood teacher motivation the findings were that majority of ECDE teachers' 50 (64.10%) got salary between kshs. 1000 and above kshs. 10,000. It was revealed that 24(30.77%) ECDE teachers earn salaries below kshs. 1,000. This compromised their teaching in a way and affected the academic performance of early childhood children.

## 5.4 Conclusions

Based on the results of this study, it can be concluded that many head teachers, parents, guardians and sponsors are less concerned with what is carried out in early childhood Education centres on improvement of child's academic performance. The head teachers who are responsible of ensuring proper implementation of the curriculum are held responsible for the poor academic performance in ECDE centres in South Wanga Division, Mumias district.

Most of the teaching and learning materials in early childhood centres are unsafe for use by children. They are inadequate torn and polluted with dust due to long usage. Funds should be harnessed from fees collected, CDF and KESSP to buy teaching and learning facilities.

Many ECDE teachers are not well trained making them deliver their services poorly thus affecting child's academic performance. Teachers should further their studies in ECDE to improve on curriculum implementation. The Ministry of education should provide grants in ECDE centres to train teachers who qualify but have no enough income of going for training. Schools should have income generating activities to get funds to support teachers for training. Early childhood sponsors should have knowledge and skills in Early childhood education to enable them manage and supervise the activities carried out. Most of the early childhood centres had parents and guardians with low income; they should take government loans to start income generating activities to sustain ECDE activities and their families' welfare. Induction of ECDE teachers be carried out by district centre for early childhood education (DICECE) officers more oftenly.

Teachers' salary was low and this made most of them be absent most of the time in efforts to look for other ways of increasing their income resulting to un taught activities. Parents and guardians should pay fees promptly in order for teachers to get their salaries. The Teacher's Service Commission should employ the teachers when funds will be available.



Teachers' de-motivators include working environment which brought dissatisfaction among teachers making them accept lower salaries in exchange for better working conditions. This in turn affects child's academic performance, quality of teacher's life and educational outcomes.

## **5.5 Recommendations**

1. Early Childhood Centres be funded in provision of adequate teaching and learning facilities by donors, well wishers, CDF and KESSP.
2. There should be quality training of ECDE teachers and the Ministry of Education to assess the type of curriculum used in ECDE training colleges and work coverage to ensure proper syllabus coverage by trainers. Induction courses be carried out in District centres of Early Childhood Education (DICECE) to update teachers on changes in the curriculum and child development.
3. Fees in all ECDE be harmonized so that families can start income generating activities to improve their income for improved child's academic performance.
4. Given the mandate by the government for the Ministry of Education in Kenya, this study recommends that the Ministry should harmonize the terms and conditions of all ECD teachers in the country. Some of the required interventions may be in the form of intensified community participation, since they are the communities that shape the job contexts. The relationship between the level of community participation and that of the ECDE working environment and teacher's salary need to be established before recommending it as a remedy.

## **5.6 Suggested areas for further research include:**

1. A replication of the same phenomenon under study involving the whole country should be carried out. This should help establish if the results of the study hold in other areas.
2. Transition from ECDE to primary school.
3. Factors influencing the utilization of funds in early childhood education centres.

## 5.7 Contribution to knowledge

1. The research has revealed what can be done to improve child's academic performance in early Childhood centres so that children can gain knowledge and skills which will determine their later lives.
2. It has brought out the roles of head teachers, ECDE teachers, sponsors, parents and guardians in effective implementation of ECDE activities.



## REFERENCES

- Allen M.J. and Yen, M.W. (1979), *Introduction to measurement Theory* Brooks Cole Publishing Co. Monterey California.
- Anderson, R.C. (1983). *Reflection on the role of peer review in competitions for federal research*. Educational researcher, 12, 3-5
- Anderson, R.C., Soptick, J.M., Rogers, W.T., & Worthen, B.R (1971). *An analysis and interpretation of tasks and competencies required of personnel conducting exemplary research and research related activities in education*. (TECH PAPER NO. 52) Washington D.C. AERA Task Force on research training.
- Austin, A.W. (1971). *Predicting Academic Achievement in college*. New York: Free Press.
- Ayot, H. and Lillis, K. (1986) *Education in Kenya; issues and policy implication in less developed countries*. Pegamon Book Ltd, London.
- Birdie, D. & Anderson J. (1974). *Questionnaires*. Metuchen, N.J. Scarecrow press.
- Best W.J. and Kahn J.V. (2001) *Research in Education*. New Delhi. Prentice
- Campbell D.T. and Fiske S.W. (1959). Convergent and Discriminate Validation by Multi method matrix Psychological Bulletin. 56, 81-105.
- Bogdan, R.C. & Biken S.K. (1975). *Qualitative research for education*. Boston Allyn & Bacon.
- Bogdan, R.C. & Taylor S.J. (1975). *Introduction to qualitative research methods; a phenomenological approach to the social sciences*. New York: Wiley.
- Borg, W.R. & Gall M.D. (1983). *Educational research; an introduction* (4<sup>th</sup> Ed) New York Longman.

- Braithwaite, R.L & Thomson R.L.(1981). *Application of the judicial evaluation model within an employment and training program*. Centre on evaluation, development, and research (CEDR) Quarterly, 14 (2) – 13-16
- Bray, M. (1986). *Community financing of education. Issues and policy implications of schools in less developed countries*, commonwealth secretariat, London.
- Brown R.D. & Newmann, D.L. (1979). *A schematic approach to studying evaluation utilization. Paper presented at the annual meeting of the American educational research association*, Minneapolis, M.N.
- Campbell, D.T. & Stanley J.C. (1963). *Experimental and quasi-experimental designs for research of teaching*. In N.L. Gage (Ed), Handbook of research on teaching. Chicago. Rand McNally.
- Campbell D.T. & Stanley J.C. (1966). *Experimental and quasi-experimental designs for research* . Chicago. Rand McNally.
- Caro,F.G. (1971). *Reading in evaluation research*. New York. Russell sage foundation
- carter, L.R. (1982) .the standards for program evaluation and the large for profit social science research and evaluation companies. In P.H. Rossi (Ed) . standards for evaluation practice. New directions for program evaluation , No. 15 san Francisco; Jossey-bass.
- Case, C.M. (1969). *The application of pert to large scale educational research and evaluation studies*. Educational technology, 9, 79-83
- Clifford G.J. (1973). *A history of the impact of research on teaching*. In M.W. Travers (Ed). *Second handbook of research on teaching*. Chicago. Rand McNally.
- Cohen D.K. (1970). *Politics and research. Evaluation of social action programs in education*. Review of educational research, 40,213-238
- Colombus E. Merrill publishing Kenlinger F.N. (1983). *Foundations of behavioural Research*. Delhi; Subjet Publications.

- Cook, T.D. & Campbell D.T. (1979). *Quasi experimentation. Design and analysis issues for field settings*. Chicago. Rand McNally.
- Cook, T.D. & Reichardt, C.S. (Eds) (1979). *Qualitative and quantitative methods in evaluation research*. Beverly hills, C.A. Sage.
- Covert R.W. (1977). *Guidelines and criteria for constructing questionnaires*. Unpublished manuscript, University of Virginia, evaluation research centre.
- Cronbach L.J & Suppes P (1969). *Research for tomorrow's school. Disciplined inquiry for education*. New York Macmillan.
- Denzin, N.K. (1978). *The research act*. Chicago. Aldine.
- Douglas J.D. (1976). *Investigative social research*. Beverly Hills, C.A. Sage.
- Dr. Nyonje (2010). *Research methods notes*. University of Nairobi, Kenya.
- Fetterman, D.M. (1983). *Guilty knowledge, dirty hands and other ethical dilemmas*. The hazards of contract research. *Human organization*, 42(3), 214-224.
- Gagne, R.M. (1975). *Qualification of professional in educational R. & D*. *Educational researcher*, 4(2), 7-11.
- Glass, G.V. (1975). *A paradox about the excellence of schools and the people in them*. *Educational researcher*, 4, 9-13
- Goetz, J.P. & Lecompte, M.D. (1981). *Ethnographic research and the problem of data reduction*. *Anthropology and education quarterly*, 12, 51-70
- Guba E.G. & Clark D.L. (1976). (undated mimeo). *Types of educational research*. Columbus. Ohio state university.
- Guba E.G. & Clark D.L. (1976). *Contemporary scenarios of knowledge production and utilization in schools, colleges and departments of education*. Bloomington. In *research on instructions of teacher education*. (ERIC Document reproduction service No. Ed 139-809)



- Halpern , E.S. (1983, APRIL ). *Auditing naturalistic inquiries*. Some preliminary applications.
- Part 1: development of the process. Part 2: case study application. Paper presented at the annual meeting of the American Educational research association, Montreal, Quebec, Canada.
- Heyneman, S.P. and Farrel, J.P. (1989) *Text books in developing countries, Economic and educational choices*, World Bank, Washington.
- Hoaglin, D.C. , LIGHT RJ McPEEK, B. Mosterller, F. & Stoto M.A. (1982). *Data for decisions*. Cambridge, M.A, Abt.
- Hodgkinson, H. (1957). *Action research*. A critique. *Journal of education sociology* 31(4), 137-153.
- Howe, K.R. (1985). *Two dogmas of education research*. *Educational researcher*, 14(8). 10-18.
- Jaeger R.M. (1984). *Sampling in education and the social sciences*. New York. Longman
- Kamunge Commission Report (1988). *Presidential working party on education for the next decade and beyond*, government printer Nairobi.
- Kirkwood, R. (1982). *Accreditation*. In H.E. Mitxel (Ed). *Encyclopedia of educational research* (Vol 1 , 5<sup>th</sup> Ed). New York. Macmillan and the free press.
- Kornhauser A, &Sheatsley P. (1959). *Questionnaires construction and interview procedure*.
- C.Selitz, L. Wrightsman & S. Cook (Eds), *Research methods in social relations*. New York. Holt Rinehart & Winson.
- Krejcie R.V. & Morgan D.W. (1970). *Determining sample size for research activities*. *Educational and psychological measures*, 30, 607-610.
- Makau, B. (1997), *the concept of quality education and its evaluation in Kenya Institute of development studies* university of Nairobi.

- Mugenda O.M. and Mugenda A.G. (1999) *Research methods Quantitative and qualitative Approaches* Nairobi; ct Press.
- Orodho, J.A. (2004). *Techniques of writing research proposals and reports in education and social sciences*. Masola publishers , Nairobi.
- Republic of Kenya (1989). *National development plan (1989-1993)*. Government printer, Nairobi.
- Ridings J.M. (1982). Standard setting. *The crucial issues*. Kalamazoo. M.L. Western Michigan University, Evaluation Centre.
- The East Africa Standard (2003). *Saitoti releases free primary education guidelines*. (Wednesday, January 8<sup>th</sup> 2003)
- Williams D. (1986) "Non-government resources for education with special reference to community financing" prospects, Vol. 16 No.2.

Yours faithfully,

Erica P.M. Ayaya

## **APPENDICES**

### **APPENDIX I**

#### **LETTER OF TRANSMITTAL**

**ERITAP.M. AYUYA**

**P.O BOX 260**

**MUMIAS**

Dear Sir/Madam,

#### **RE: RESEARCH STUDY**

I am Erita P.M. Ayuya, a master's student at the University of Nairobi in project planning and Management, Registration Number, L50/65016/2010. I am conducting a research to examine determinants of child's academic performance in early childhood centres in South Wanga Division, Mumias District.

To facilitate this study, kindly participate in answering the questionnaires. Be rest assured that the information obtained will be held in strict confidence and will be used for the purpose of the study in the South Wanga Division, Mumias District Early Childhood centers.

Thank you in advance for your co-operation.

Yours faithfully,

**Erita P.M. Ayuya**



## APPENDIX II

### QUESTIONNAIRE FOR THE PRIMARY SCHOOL HEAD TEACHER

I am a post graduate student in the Department of Extra-Mural studies, University of Nairobi pursuing a Degree in Masters of Arts Project Planning and Management.

I wish to carry out research on determinants of child's academic performance of early Childhood teachers in South Wanga Division, Mumias District. Do please, answer the following questions. Any information given will be kept confidential and be used for the purpose of the study.

#### Section A: Background Information

1. Name of the ECD .....

2. Please answer by putting a tick ( $\checkmark$ ) in the appropriate box

i) Gender: Male ( )

Female ( )

ii) What is your designation?

Head-teacher ( )

Deputy ( )

1. i) What is your education level?

Masters ( )

Degree ( )

Diploma ( )

Certificate ( )

Others specify .....

ii) Are you a trained teacher? Yes ( )

No ( )

2. What is your current experience in the above position?

Below one year ( )

1 – 5 years ( )

5 – 10 years ( )

10 – 15 years ( )

15 – 20 years ( )

Above 20 years ( )

3. Category of the Early Childhood Centre

- i) Boarding ( )
- ii) Day/Boarding ( )
- iii) Day ( )

Section C: Professional Qualification of Early Childhood teachers

**Section B: Teaching and learning Materials**

Tick where applicable the Teaching and learning facilities in early childhood centre

2.1 How would you describe the early childhood centre?

- Quite adequate ( )
- Adequate ( )
- Inadequate ( )

2.2 Who contributes money for buying the Teaching and learning facilities in early childhood centre?

- Parents ( )
- Community ( )
- Well wishers ( )
- Early childhood teachers ( )
- The head teacher ( )
- Government ( )

2.3 Do ECD teachers use charts during lesson presentation

- Yes ( )
- No ( )

2.4 How many times have district centre for early childhood centre officers visited your centre to advice you on Teaching and learning facilities usage in early childhood centre in the last two years

- Once ( )
- Several times ( )
- Yearly ( )
- Never ( )

2.5 In your own opinion, why do you think Teaching and learning facilities are important in child's academic performance?

Yes ( )

No ( )

**Section C: Professional Qualification of Early Childhood teachers**

3.1 What is the academic qualification of the early childhood teachers?

Tick in the appropriate box indicating the number.

Masters ( )

Degree ( )

Diploma ( )

Certificate ( )

Others specify .....

3.2 What is your staff establishment and professional qualification of ECDE teachers?

	Male	Female	Total
Trained	( )	( )	( )
In training	( )	( )	( )
Untrained	( )	( )	( )
Grand total	( )	( )	( )

3.3 Why do you think early childhood teacher need refresher courses?

.....

3.4 Do your ECD teachers further their academic levels when schools close?

Yes ( )

No ( )

Few never ( )



## Section D: Family Factors

4.1 In your own opinion of what class are your parents in early childhood education

High class ( )

Middle class ( )

Low class ( )

4.2 Do parents/guardians pay promptly ECD levies?

Yes ( )

No ( )

4.3 Are children provided with their necessities as expected in early childhood?

Yes ( )

No ( )

Never ( )

4.4 Do children have meals at school? Name the meals that children are given at early child hood centre.

Yes ( )

No ( )

If yes, which types?

Snack ( )

Midday meal ( )

Snack and midday meal ( )

4.5 What is the school attendance rate?

High ( )

Low ( )

If low, what do you think is the cause?

## Section E: Early Childhood teacher motivation

5.1 Do you ever give incentives to ECD teachers for good performance?

Yes ( )

No ( )

5.2 Are the teachers paid salary promptly? Yes ( ) No ( )

5.3 Do ECD teachers, children and parents hold graduation days when children move from ECD level to primary level?

5.4 In your own opinion is the classroom provided for children and the teacher adequate as per the enrollment?

Yes ( )

No ( )

5.5 Does the school/parent aid teachers by paying fees for training or courses undertaken?

Yes ( )

No ( )

Sometimes ( )

In what ways can the head teacher help the early childhood education centre in terms of teaching and leaning facilities?

How can both the parents and head teacher overcome challenges level?

## APPENDIX III

### QUESTIONNAIRE FOR EARLY CHILDHOOD EDUCATION TEACHER

I am a post graduate student in the Department of Extra Mural Studies, University of Nairobi pursuing a degree in Masters of Arts project planning and management. I wish to carry out research on determinants of child's academic performance in early childhood education in South Wanga Division, Mumias District.

Do please answer the following questions. Any information given will be treated with confidentiality and be used for the purpose of the study.

#### Section A: Background Information

1.1 Name of the Early childhood Centre

\_\_\_\_\_

1.2 Please, answer by putting a tick  in the appropriate box.

i) Gender Male

Female

ii) Are you the teacher in charge of the ECD section? Yes  No

iii) Indicate numbers of years of teaching experience

iv) What is the current enrolment in the Early Childhood Centre? Indicate in the box the number.

	Boys	Girls	Total
a) 2 – 3 years	<input type="text"/>	<input type="text"/>	<input type="text"/>
b) 3 – 4 years	<input type="text"/>	<input type="text"/>	<input type="text"/>
c) 4 – 5 years	<input type="text"/>	<input type="text"/>	<input type="text"/>
d) 5 – 6 years	<input type="text"/>	<input type="text"/>	<input type="text"/>
e) Total	<input type="text"/>	<input type="text"/>	<input type="text"/>
f) Grand Total	<input type="text"/>	<input type="text"/>	<input type="text"/>



**Section B: Teaching and Learning Facilities**

2.1 Below is a list of Teaching and learning facilities tick where you think is applicable in your early childhood centre

Facility	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
There are enough textbooks in the early childhood centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The charts displayed and used during lesson presentation are adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The ECD has the revised recommended syllabus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.2 Teaching and learning facilities motivate children during learning and contribute to cognitive development of children as they interact with the materials.

Strongly agree

Agree

Don't agree

2.3 How would you rate the community in helping in collection of locally available Teaching and learning facilities?

Very good

Good

Not good

2.4 How often do you assess children?

Weekly

Monthly

Termly

**Section C: Teacher's Academic and Professional Qualifications**

3.1 Indicate in boxes educational level of teachers at ECD Centre.

KCPE / CPE

KCSE / EACE

Certificate

Diploma

Degree

Masters

Others, specify

.....

3.2 Write the professional qualification of ECD teachers.

	Male	Female	Total
Short course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Long course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.3 How can ECD teachers seek additional finances to improve on their academic / professional qualifications?

a) Increase ECD fees

b) Organize for fundraising

c) Improve ECD management system

**Section D: Family Factors**

4.1 Do parents pay their child's fees promptly? Yes  No

If No, name any two reasons that make them not to pay.

i) .....

ii) .....

4.2 a) How do you rate the economic status of the parents and guardians at your early childhood centre?

i) High status

ii) Middle status

iii) Low status

b) Please give a reason for your choice in 3.2 a)

.....  
.....

4.3 Name any two challenges that ECD teachers undergo when handling children from different families.

i) .....

ii) .....

4.4 Do parents help children in working out their homework? Yes  No

If No, what might be the reason?

.....

...

4.5 In your own opinion, how do you rate the academic level of the parents/guardians you handle in your early childhood centre?

Above average

Average

Below average

**Section E : Early Childhood teacher motivation**

5.1 Indicate the highest salary paid per month to Early Childhood teachers in your centres. Tick in the appropriate box.

Above ksh. 5,000.00

Ksh. 2,000.00

Ksh. 1,000.00

Below ksh. 1,000.00

5.2 Staff establishment

Females

Males

Total



5.3 Do you ever have educational trips sponsored by parents for their children?

Yes  No

5.4 Who provides the physical facilities of children in your early childhood centre?

The head teacher

Parents/guardians

Community

5.5 Do parents/guardians assist you in paying fees for your courses in early childhood education? Yes  No

5.6 In your own opinion, in what ways can parents and teachers improve the learning environment?

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

5.7 What are the common evaluation in the early childhood education centre?

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

**SECTION II: Teaching Learning facilities in the early childhood education centre**

6.1 Who provides the teaching and learning facilities?

.....

6.2 What roles does the supervisor play in ensuring there are adequate teaching and learning facilities in the early childhood education centre?

.....

6.3 Are charts used in ECD Centre, if not list of total materials? Yes  No

If yes, who provides the local materials?

.....

6.4 Do teachers in ECD use the instructional material? Yes  No

If No, why is it that it has never been brought?

**APPENDIX IV**  
**INTERVIEW SCHEDULE**

**Interview schedule for church sponsors on determinants of child's academic performance in early childhood education**

**Section A: Background information**

- 1.1 What is the name of your early childhood education centre?  
.....  
...
- 1.2 The early childhood education centre is sponsored by which church?  
.....  
...
- 1.3 When was the early childhood centre started?  
.....  
...
- 1.4 What is the current enrolment in the early childhood education centre?  
Boys -----  
Girls -----  
Total -----

**SECTION B: Teaching / Learning facilities in the early childhood education centre**

- 2.1 Who provides the Teaching and learning facilities?  
.....
- 2.2 What roles does the sponsor take in ensuring there are adequate Teaching and learning facilities in the early childhood education centre?  
.....  
.....
- 2.3 Are charts used in ECD Centres made out of local materials? Yes  No   
If yes, who provides the local materials?  
.....
- 2.4 Do teachers in ECD use the recommended syllabus? Yes  No   
If No, why is it that it has never been bought?

.....

**Section C: Academic and Professional qualifications of early childhood teachers**

3.3 a) Do you ever sponsor teachers for training? Yes  No

If No, what might be the reason?

.....

3.4 Before you employ the early childhood education teachers, do ever scrutinize their academic and professional certificates to ensure they have the right qualifications?

Yes  No

3.5 In your own opinion, why should a teacher handling children be trained?

.....

3.6 What challenges do you undergo when recruiting teachers for your ECD?.....

**Section D: Family Factors**

4.1 How many parents/guardians in number are in early childhood centre?

4.2 Do parents pay fees promptly? Yes  No

If No, what might be the reason?

.....

4.3 In your own opinion, what are some of the challenges that hinder children from performing well in class?

.....

4.4 a) Are there any cultural practices carried out during learning sessions?

Yes  No

b) If yes, how are children involved?

.....



4.5 a) Is absenteeism among children an issue in the early childhood centre?

Yes  No

b) If yes, what might be the cause?

.....

..

**Section E: Early Childhood teacher motivation**

5.1 How do you rate the payment of early childhood teachers' salary in your centre?

Very good

Good

Fair

Not fair

5.2 a) Do teachers have to be motivated so as to deliver the services as expected?

Yes  No  Not sure

b) If yes, in what ways can the sponsor motivate the teachers?

.....

5.3 a) Does working environment have an impact on child's academic performance?

Yes  No

b) If yes, in what ways can the sponsor ensure that the learning is conducive for both the teacher and the children?

.....

.....

Suggest two ways in which parents and guardians can motivate Early Childhood teachers

I. ....

II. ....

**APPENDIX V**

**PERMISSION LETTER**

**ERITAP.M. AYUYA  
P.O BOX 260  
MUMIAS**

**2/1/2012**

**THE DISTRICT EDUCATION OFFICER  
P.O BOX 352  
MUMIAS**

**Dear Sir/Madam,**

**RE: PERMISSION TO CARRY OUT RESEARCH IN SOUTH WANGA  
DIVISION, MUMIAS DISTRICT.**

I hereby, request to carry out research in South Wanga Division, Mumias District in Early Childhood centers namely; public, private and church sponsored. I am a master's student at the University of Nairobi, Reg. No. L50/65016/2010.

I am conducting research on determinants on child's academic performance in Early Childhood centres.

The research will take a period of ten months.

I hope you will grant me the permission.

Thanking you in advance for your co-operation.

Yours faithfully,

**Erita P.M. Ayuya**




**MINISTRY OF EDUCATION**

MUMIAS DISTRICT  
EDUCATION OFFICE  
P.O. BOX 352  
MUMIAS

31/1/2012

**RE: RESEARCH ERITA P.M AYUYA REG NO. L50/65016/2010**

I hereby grant you permission to carry out Early Childhood Research in South Wanga Division, Mumias District. We hope you will give us a copy of your findings to enable us make follow ups for better foundation of the young children.

  
E.M Kamaya  
District Education Officer  
Mumias

... DISTRICT EDUCATION OFFICER  
MUMIAS DISTRICT  
DATE: 31/1/2012  
...  
... DISTRICT EDUCATION OFFICER  
MUMIAS DISTRICT

C.C. PDE

Kakamega County