INTEGRATION OF THE NATIONAL GOALS OF EDUCATION
IN EARLY CHILDHOOD DEVELOPMENT AND
EDUCATION IN KENYA A CASE STUDY OF
KALUNDU ZONE KITUI COUNTY

BY
TIBERIOUS MURITHI
E56/KIT/20404/2013

A Research Project Submitted to the Department of Educational Psychology in
Partial Fulfillment for the Requirements of the Award of Master of
Education in Early Childhood Development and Education

SOUTH EASTERN KENYA UNIVERSITY

FEBRUARY, 2016
DECLARATION

I hereby declare that this research project report is my original work and has not been submitted for an award of a degree in any other university.

Signature……………………………….. Date……………………

Tiberious Murithi

E56/KIT/20404/2013

RECOMMENDATION

This research project report is submitted for examination with our approval as University supervisors.

Signature: …………………………….. Date …………………

Dr. Jonathan M. Mwania,

Department of Educational Psychology,

South Eastern Kenya University

Signature: …………………………….. Date …………………

Dr. Joseph Mwinzi,

Department of Educational Foundations,

University of Nairobi
DEDICATION

My project report is dedicated to my beloved wife Sylvia Karimi for her moral support and profound encouragement all through the period of my study, as well as my dear son Emmanuel Mutugi and dear daughter Grace Betty Wanjiku for their restraint and perseverance. They had to endure a lot while class work and research writing took their precious time slotted for parenting during my time of study.

May God bless them abundantly.
ACKNOWLEDGEMENT

I would like to thank the following people for their role in making this study possible. First my supervisors, Dr. Jonathan M. Mwania, and Dr. Joseph Mwinzi, for providing me with valuable guidance and pieces of advice. I feel greatly indebted to my friends and my classmates. Their valuable comments, corrections, and suggestions, their reassurances and encouragement at various times in the course of my study are highly appreciated.

I would also like to thank my colleagues in South Eastern Kenya University (SEKU) for providing the information that I required for this project.

To each of the above, I extend my deepest appreciation. May the Almighty God bless you.
ABSTRACT

The purpose of the research was to investigate the integration of the national goals of education in early childhood education in Kenya. The study was guided by the following specific objectives; to examine the influence of financial resources, to establish the significance of the teaching and learning resources, to identify the influence of socio-economic factors and to investigate the influence of teacher-child ratio on the integration of the national goals of education in early childhood education in Kalundu Zone, Kitui County. This study employed a descriptive survey research design. The target population was 158 respondents comprising of 28 head teachers, and 130 pre-school teachers. Simple random sampling and Purposive sampling were used to select the respondents. The sample size was 66 respondents comprising of 14 head teachers, and 52 pre-school teachers. The researcher used both the quantitative and the qualitative analysis of the data obtained. The researcher also used the Spearman’s correlation coefficient to test objective number four. This study established that financial resources, teaching and learning resources, socio-economic factors and teacher-child ratio influence effective implementation of ECDE education programs in preschools in Kalundu Zone, Kitui County, Kenya. The findings of the study revealed that holding independent variables constant (financial resources, teaching and learning resources, socio-economic factors and teacher-pupil ratio) to a constant zero, effective early childhood development and education in Kalundu Zone, Kitui County, Kenya would be at 47.5%. A unit increase in the financial resources would lead to an increase in effective early childhood development and education in Kalundu Zone, Kitui County, Kenya by a factor of 0.683. A unit increase in the teaching and learning resources would lead to an increase in effective early childhood development and education in Kalundu Zone, Kitui County, Kenya by a factor of 0.702. A unit increase in the socio-economic factors would lead to an increase in effective early childhood development and education in Kalundu Zone, Kitui County, Kenya by a factor of 0.793. A unit increase in teacher-child ratio would lead to an increase in effective early childhood development and education in Kalundu Zone, Kitui County, Kenya by a factor of 0.699. This study recommends that, ECDE programs centers should receive adequate funding, hire and retain qualified teachers, and provide other supports that are crucial for meeting their community’s needs. Policymakers should also recognize that choosing increases in available slots over this goal will jeopardize the economic benefits of preschool programs. ECDE centers should be provided with adequate teaching and learning resources and facilities suitable for ECDE in their learning environment. Families and community leaders should join together to determine how effective preschools are in teaching early literacy and develop advocacy efforts to ensure that parents and community leaders have a voice in improving early learning.
ABBREVIATIONS AND ACRONYMS

ASALs                          Arid and Semi Arid Lands
ECDE                          Early childhood Development and Education
ECE                           Early Childhood Education
EFA                           Education for All
GOK                           Government of Kenya
KICD                          Kenya Institute of Curriculum Development
MDGs                          Millennium Development Goals
NARC                          National Rainbow Coalition
NGOs                          Non-governmental Organizations
UNESCO                       United Nations Educational, Scientific and Cultural Organization
KEMI                          Kenya Education Management Institute
ST&I                          Science, Technology and Innovation
MOEST                         Ministry of Education Science and Technology
ITN                           Insecticide Treated Net
IMCI                          Integrated Management of Childhood Illnesses
LDCs                          Least Developed Countries
UNDP                          United Nations Development Program
SDSN                          Sustainable Development Solutions Network
OWG                           Open Working Group
# TABLE OF CONTENTS

DECLARATION.................................................................................................................. i
DEDICATION....................................................................................................................... iii
ACKNOWLEDGEMENT........................................................................................................ iv
ABSTRACT........................................................................................................................ v
ABBREVIATIONS AND ACRONYMS................................................................................ vi
LIST OF TABLES.................................................................................................................. x
LIST OF FIGURES................................................................................................................ xi

CHAPTER ONE: INTRODUCTION...................................................................................... 1
1.1 Background to the Study.......................................................................................... 1
1.2 Statement of the Problem...................................................................................... 10
1.3 Purpose of the Study............................................................................................. 11
1.3.1 Specific Objectives .......................................................................................... 11
1.4 Research Questions............................................................................................... 11
1.5 Significance of the Study....................................................................................... 12
1.6 Delimitations the Study........................................................................................ 13
1.7 Limitations of the Study....................................................................................... 13
1.8 Assumptions of the Study...................................................................................... 13
1.9 Operational Definition of Terms........................................................................... 15

CHAPTER TWO: LITERATURE REVIEW .................................................................... 16
2.1 Introduction............................................................................................................. 16
2.2 Empirical Review.................................................................................................. 16
2.2.1 Financial Resources......................................................................................... 16
2.2.2 Teaching and Learning Resources................................................................. 17
2.2.3 Socio-Economic Factors................................................................................ 19
2.2.4 Teacher-Child Ratio...................................................................................... 22
2.3 Theoretical Framework........................................................................................ 23
2.3.1 Constructivist Theory.................................................................................... 23
2.3.2 Systems Approach Theory............................................................................ 23
2.4 Conceptual Framework......................................................................................... 25
2.5 Summary and Gaps in the Literature Review...................................................... 27

CHAPTER THREE: RESEARCH METHODOLOGY .................................................. 30
3.1 Introduction............................................................................................................. 30
3.2 Research Design ........................................................................................................................................30
3.3 Target Population ......................................................................................................................................30
3.4 Sampling Procedure and Sample Size ......................................................................................................31
3.5 Research Instruments ...............................................................................................................................31
3.5.1 Questionnaires .....................................................................................................................................32
3.5.2 Interviews ...........................................................................................................................................32
3.6 Pilot Study ................................................................................................................................................32
3.6.1 Instruments of Validity .........................................................................................................................33
3.6.2 Reliability of the Research Instruments ...............................................................................................33
3.7 Data Collection Procedure ......................................................................................................................34
3.8 Data Analysis ..........................................................................................................................................34
3.9 Ethical Issues ...........................................................................................................................................35
3.9.1 Informed Consent .................................................................................................................................35
3.9.2 Anonymity ..........................................................................................................................................35
3.9.3 Confidentiality ..................................................................................................................................36
3.9.4 Data Protection ..................................................................................................................................36

CHAPTER FOUR ...........................................................................................................................................37
DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION ........................................37
4.1 Introduction ...............................................................................................................................................37
4.2 Questionnaire Return Rate ....................................................................................................................37
4.3 Respondents’ Demographic Information ...............................................................................................38
4.3.1 Distribution of Respondents by Gender .............................................................................................38
4.3.2 Age Distribution of Respondents .......................................................................................................38
4.3.4 Working Experience of the Respondents ..........................................................................................39
4.3.4 Academic Qualification of Respondents ..........................................................................................40
4.4 Financial Resource and Integration of the National Goals of Education ..............................................40
4.5 Teaching/ Learning Resource and Integration of the National Goals of Education ..........................42
4.6 Social Economic Factors and Integration of the National Goals of Education ..................................44
4.7 Teacher-Child Ratio and the Integration of the National Goals of Education in Early Childhood Education ..........................................................................................................................46
4.8 Regression Analysis ................................................................................................................................48
CHAPTER FIVE ..........................................................................................................................52
SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS...52
5.1 Introduction .........................................................................................................................52
5.2 Summary of Findings ..........................................................................................................52
5.2.1 Financial Resources ......................................................................................................52
5.2.2 Teaching and Learning Resources ................................................................................52
5.2.3 Socio-Economic Factors ...............................................................................................53
5.2.4 Teacher-Child Ratio ......................................................................................................54
5.3 Conclusion ..........................................................................................................................54
5.4 Recommendations .............................................................................................................55
5.5 Suggestion for Further Studies ..........................................................................................57
REFERENCES ..........................................................................................................................58
APPENDICES ..........................................................................................................................64
Appendix I: Letter of Introduction ..........................................................................................64
Appendix II: Questionnaires for the Pre-school Teachers ......................................................65
Appendix III: Interviews for the Head Teachers ......................................................................70
LIST OF TABLES

Table 3.1: Representation of the Sampling Matrix ................................................................. 31
Table 4.1: Respondents’ Gender .......................................................................................... 38
Table 4.2 Age Distribution of Respondents ........................................................................ 39
Table 4.3 Respondents’ Working Experience ..................................................................... 39
Table 4.4 Respondents’ Academic Level .......................................................................... 40
Table 4.5: Financial Resources .......................................................................................... 41
Table 4.6 Relationship Between Teaching/ Learning Resources and the Integration of the National Goals of Education ................................................................................ 43
Table 4.7: Socio- Economic Factors .................................................................................. 45
Table 4.8 Teacher-Child Ratio ......................................................................................... 47
Table 4.9: Model Summary ............................................................................................... 48
Table 4.10: Analysis of Variance ...................................................................................... 49
Table 4.11: Regression Coefficients .................................................................................. 50
LIST OF FIGURES

Figure 2.1: Poverty Effects Model ................................................................. 21
Figure 2.2: Institutional Evaluation Model ................................................. 24
Figure 2.3 Conceptual Framework ................................................................. 25
CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

Early childhood Development Education refers to the education catering for children aged 3-6yrs. Early childhood is a critical period to lay the foundation for success in education and beyond and thus early childhood care and education should be at the center of Education for All and broader development goals, EFA Global Monitoring Report, (2012). The experiences during this period are known to enhance or inhibit realization of one’s potentials in life (Mutinda, 2010). The way a child is nurtured spiritually, morally, socially, emotionally, intellectually and physically creates a long life learning process (United Nations Educational Scientific and Cultural Organization, 2004). Therefore children who are nurtured well can live and create better societies for all.

According to the National Early Childhood Development Policy Framework (2006), the world conference on Education for All, that took place in Jomtien, Thailand in March 1990, the significance of the early years as the foundation for the life of an individual was stressed. Heywood (2009) affirms this by stating that the first five years of a child’s life are of immense importance to his or her subsequent development. It is also the period when children are able to learn and acquire certain skills, concepts, knowledge and attitudes very quickly with minimal effort and it is the fastest period of growth and development in all aspects.

Recent years have seen a global endeavour to prioritize early childhood care and education as a foundation for later learning and development as evidenced by Global Guidelines for Early Childhood Education and Care in the 21st Century (Association for Children/World Organization for Early Childhood, 1999). Such efforts are a response to a variety of complex social and economic trends. These forces, which are referred to here as “Complex family stressors,” include but are not limited to, societal changes due to industrial revolution, the
increased number of women with young children entering the labour force with the two parents working, a rise in the number of single parents, the dysfunctional traditional system of child care and extended family support systems.

United Nations Educational, Science and Cultural Organization (2010c) reports that Africa’s diverse countries vary dramatically in size, economic structure, level of development and the type of education system. However, the continent faces similar challenges while trying to address the problems of providing basic education. More than 46 million children are not in school in Africa. This represents more than 40% of the world’s out of school children. In 2009, it was estimated that children make up 38% of South Africa’s population. Due to labour migration and care arrangements involving extended families, it is often the case that children live separately from their parents (Plessis & Conley, 2011).

Wylie and Thompson (2008) note that the development of Early Childhood Education policies in New Zealand has been underpinned by the government’s vision that all children have the opportunity to participate in high-quality ECE. Funding and regulatory policies seek to balance a range of ECE-related goals and other government goals, while facilitating diversity in the ECE sector to allow them to continue to meet needs of parents. A new ECE funding system was implemented in April 2005. The overall goal of the funding system is to make high-quality ECE more accessible and affordable to families by funding on the basis of costs and supporting improvements in quality. The structure of funding rates is based on the structure of various ECE services (Monford, 2011).

The Government of Namibia has realized the critical importance of Early Childhood Development and its impact on subsequent performance of children in the basic education programmes (Penn, 2008). In the long and medium term goals, Vision 2030 and the Education and Training Sector Improvement Programme (2005-2011) Early Childhood Development in Namibia has been identified as a fundamental area to be addressed and
developed. Early Childhood Development Programmes involve a wide variety of strategies and services directed at assisting families and communities to meet the needs of children 0-6 years old. Many young children are at risk because their health, nurture and educational needs cannot be provided for adequately from resources available within the community. In the absence of effective State intervention, the provision of Early Childhood Development and Education services to communities has been left to non-governmental agencies, efforts of parents and church based organization (Aidoo, 2008).

The Kenyan government has come up with the Sessional Paper No. 1 (2005) of the Ministry of Education which acknowledges the attainment of EFA goals by 2015 as a major commitment of the National Rainbow Coalition government in line with the right to education for all Kenyans. This is also in tandem with the government’s commitment to international declaration protocols and conventions arrived at in the World Conference of EFA at Jomtien Thailand (1990) and the follow up in Dakar, Senegal (2000) and by the Millennium Development Goals during the Millennium Summit (2000). The objective of ECDE is to provide education geared towards development of the child’s exploration skills, creativity, discovery and self expression (KICD, 2008). For this objective to be achieved, the learning environment must be suitable and conducive with the necessary learning materials.

After independence in 1963, the Kenya government set up the Ominde Commission to look into matters concerning education in Kenya (Republic of Kenya, 1964). The Ominde Commission urged the government to reform the system towards national development, which they viewed as the most important role that education could play in an independent country. From the Ominde Commission recommendations, the Government set out six clear broad goals of education. These goals of education were later revised and expanded to eight as hereunder discussed (KICD, 2008).
The first goal aims at fostering nationalism, patriotism and promoting unity among Kenya’s people who belong to different ethnic groups, races and religious inclinations. Learners are taught to learn and trained to live and interact with each other freely as Kenyans.

The second goal addresses the promotion of social, economic, technological and industrial needs for national development. This imparts knowledge to learners to be part of positive development in the changing global trends. Pupils are also expected to be able to adapt to such social revolution, economic growth and technological skills changes in the face of rapid modernization.

Thirdly is the promotion of individual development and self-fulfillment. Education should provide opportunities for learners to develop talents, abilities and interests as individuals. There is therefore need to provide an enabling environment to identify each learner’s abilities and handicaps so as to develop relevant strategies to tap and develop such gifts and talents as well as scaffolding the development of those who are less talented. It is also to guide pupils to use their talents positively, efficiently and effectively for the benefit of self and all.

The fourth goal seeks to promote sound, moral and religious values. Learners are provided with knowledge, concepts, skills and attitudes that enhance acquisition of acceptable moral values which should help them to develop self discipline, self reliance and respect for self and other people’s faith and beliefs.

The fifth goal is about promotion of social equality and responsibility. This elaborates on an education system which provides equal educational and social services for all children regardless of gender, ethnic, race, religious or political inclination. Educational activities and programmes should be free of bias of any nature for learners to feel equal and responsible.

The sixth goal concerns the respect for and development of Kenya’s rich and varied cultures so as to instill an understanding of the past, present and varied rich cultures, beliefs and
values of our society. Education should enable children to blend the best traditional values and discard the obscene ones to build a stable modern society, without viewing others as backward, uncivilized or addressing them with suspicion or esteeming themselves better.

The promotion of international consciousness and fostering positive attitudes towards other nations comes seventh. Kenya is part of the international community with all the obligations and responsibilities, rights and benefits. Education should therefore lead the children to accept the membership and interdependence among peoples and nations around the globe, with which Kenya needs to relate positively, honorably and diplomatically.

The final goal is about promotion of positive attitudes towards good health and environmental protection, which seeks to cultivate in the learners the value of good health, in order to avoid engaging in activities that will lead to physical or mental poor health. The pupils should learn to develop and conserve the environment both at school and at home through various activities to ensure a clean, safe and disease free environment.

These goals, being the basis of all education curricula, should be well interpreted and appropriately integrated in the various curriculum activity areas. All the teaching and learning activities in ECDE should be organized using appropriate methods, relevant resources and investing fully to effectively deliver the ECDE curriculum that fosters the national education policy. This is also supported by the Millennium Development Goals as here outlined.

The first goal is set to eradicate extreme poverty and hunger. The goal has three targets which are to reduce by half between 1990 and 2015 people living on less than 1.25 US dollars, achieve decent employment for men, women and young people and to reduce by half between 1990 and 2015 the proportion of people suffering from hunger, (United Nations Development Program, 2005).
Goal number two addresses the achievement of Universal Primary Education. This goal’s target is to have all children, boys and girls alike to complete the full course of primary education by 2015. Children should not be discriminated against in terms of gender, color, religion or race in the provision of education.

The third goal seeks to promote gender equality and empower women. This goal targets to eliminate gender disparity in primary and secondary education by 2005 and at all levels - preschool, primary, secondary, tertiary, college and university - of education by 2015. This also encompasses the young children, the youth and adult learners.

The fourth goal addresses the reduction of the mortality rate. Its target is to reduce by two-thirds the deaths of infants and young children between 1990 and 2015 by ensuring safe delivery, preferably in a good health facility, proper feeding of expectant mothers, adequate breast feeding, attending of pre-natal and post-natal clinics and immunization against childhood diseases like measles, whooping cough and tetanus.

Goal number five seeks to improve maternal health. This goal has two targets. The first is to reduce by three-quarters the maternal mortality rate between 1990 and 2015. This is by ensuring that all deliveries are done in a medical facility and handled by qualified medical personnel. The second is to achieve universal access to reproductive health by 2015. The accessibility can be in terms of taking the services near the public as well as making maternal services affordable, especially among the poor population.

The sixth goal has to do with combating HIV/AIDS, malaria and other diseases. This goal has three targets. First is to have halted by 2015 and begun to reverse the spread of HIV/AIDS and its prevalence among population aged 15 to 24 years. Secondly, to achieve by 2010 universal access to treatment of HIV/AIDS for all those who need it. Achieve by 2010 universal access to treatment of HIV/AIDS for all those who need it. The third target is to
have halted by 2015 and begun to reverse the incidence of malaria and other major childhood diseases. This is through immunization, adequate breast feeding and provision of free Insecticide Treated Nets to needy mothers with young children.

Goal number seven addresses environmental sustainability. Its four targets are to integrate the principles of sustainable development in the country policies and programmes so as to reverse the loss of environmental resources, to reduce biodiversity loss by 2010 by increasing the proportion of land covered by forest, to reduce by half the proportion of people without access to clean, safe drinking water, decent housing and basic sanitation by 2015 and to have achieved by 2020 a significant improvement in the lives of at least one hundred million slum dwellers.

Goal number eight seeks to develop a global partnership for development. The five targets of this goal are to develop an open, rule-based, predictable and non-discriminatory trading financial system, to address the special needs of the Least Developed Countries, to address the special needs of landlocked developing countries and small island developing governments, to deal comprehensively with development problems of developing countries through national and international measures in order to make debt sustainable and to make available the benefits of new technologies, especially information and communications, in co-operation with the private sector. These MDGs are to a great extent in tandem with the national goals of education discussed earlier on, as they address the plight of young children.

The MDGs are further reinforced in the Sixth Session of the Open Working Group on Sustainable Development Goals Side Event Post-2015 Global Policy Agenda: Early Childhood Development as a Foundation for Sustainable Development. The Sustainable Development Solutions Network, (2014) formulated ten goals to be achieved by the year 2030, dubbed Proposing and Implementing a Post-2015 Global Early Childhood Development Goal with Quality at Scale. These goals are to end extreme poverty including
hunger; to achieve development within planetary boundaries; to ensure effective learning for all children and youth for live and livelihood; to achieve gender equality, social inclusion and human rights for all; to achieve health and well being at all ages; to improve agriculture systems and raise rural prosperity; to empower inclusive, productive and resilient cities; to curb human-induced climate change and ensure sustainable energy; to secure ecosystem services and biodiversity and ensure good management of water and other natural resources and to transform governance for sustainable development.

The panelists strongly agreed that sustainable development rests upon strong foundations, beginning in early childhood (World Bank, 2012). Children are a common basis for all dimensions of development. No advances in sustainable development will occur in coming decades without multiple generations contributing to social improvement (SDSN, 2014). Thus the entire range of sustainable development goals are disaggregated by age (early childhood; primary school age; secondary school age; the transition to adulthood; child-bearing and beyond). Children aged 0-8 should be facilitated to have the best start in life so as to develop their potential through appropriate and viable ECD policies and programs. The SDSN notes that failure to invest in and pursue an early childhood development will not only compromise the achievement of all the Sustainable Development Goals, but also alleviate the right of every child to develop to his or her full potential (Black, 2014). It is for this reason that children must be at the very centre of these Sustainable Development Goals. This will help alleviate the broad risks that these children face notably poverty; poor health; family and environmental stress; exposure to violence, abuse, neglect, exploitation and inadequate levels of care and learning opportunities.

The group also deliberated on the importance to invest in the early childhood years especially the critical and unique periods of brain development. This will help to mitigate risks and ill experiences that children face by strengthening the environments in which children grow
including parent support; early detection and intervention for developmental delays and disabilities; early childhood programs of care, support and learning; targeted health, nutrition, sanitation and social protection services; good quality preschools and primary school experiences. This according to Heckman (2012) will result in greater cost savings than investment later in education and life cycle.

The Post-2015 Agenda also presented a measurable and actionable ECD goal- All children should get the best start in life for growth, development and learning (SDSN & Chavan, 2014). There should be policies in place that contain and promote rights-based frameworks that ensure equitable and sustainable development. These will help to advance important development goals. In particular, improving child-birth conditions like the glamorous Beyond Zero Campaign by H. E. the First Lady Margaret Kenyatta, and achieving key health outcomes, improving access to quality basic education and learning outcomes, promoting social justice, advancing child-rights and gender equality and ultimately reducing inequality and poverty. These are key issues in ECDE that will facilitate integration of education policy.

The researcher therefore intends to check the level of achievement of these MDGs as outlined in Sessional Paper no. 14 of 2012. This contains a framework to provide compulsory pre-primary education for all 4 to 5 year old children in Kenya and provide health and nutrition support for 0 to 5 year old children attending day care centers and schools. This policy according to (KEMI, 2014), is supposed to realign education and training sector to vision 2030 and the Constitution of Kenya 2010, (MOEST, 2013). The researcher will also highlight the level of achievement of the ECDE in the light of the basic education act of 2013. This act is the culmination of the efforts to align the education sector to the Constitution. The act is guided by several values including access, child protection, national values, collaborative management and resource management, all which are relevant to ECDE (KEMI, 2014).
1.2 Statement of the Problem

The Government of the Republic of Kenya recognizes the importance of Early Childhood Development, as one of the most important levers for accelerating the attainment of Education for All and the Millennium Development Goals. The EFA goal number one obligated states’ Governments to expand and enhance comprehensive early childhood development programmes which are essential to the achievement of the basic education goals. Similarly, the World Fit for Children Conference in 2002 called for every child to have a good start to life through promoting quality nurturing, care and safe environment. There have been tremendous efforts by the Government of Kenya and collaborating partners to improve the welfare of the Kenyan child. However, these efforts have been fragmented and with little impact.

Early childhood development education is the first formal socialization agent that a child will encounter. It is a crucial phase in a child’s social, psychological, spiritual, intellectual, and mental development process. Because of this lack of investment by the government, ECDE is faced with issues to deal with access, equity, quality and relevance of the programmes. Specifically, the programmes face challenges in funding and hence cannot run smoothly, low participation rates as a result of affordability, poor policy formulation which results in a poor uncoordinated system. There is also a lack of proper curriculum content and thus providers are forced to improvise thus resulting in disparities. The general goal of education is to prepare and equip citizens to function effectively in their environment and to be useful members of society. This cannot be achieved if the national goals of education are not properly integrated. Although the ECDE syllabus adopts the thematic integrated learning approach there is a prevalent poor integration of the national goals of education and the Early Childhood Development and Education as presented by the stated objectives of Early Childhood Development. This is further influenced by the financial resources, teaching and learning resources, socio-economic factors and teacher-child ratios. The researcher intended
to find out the existing gaps between the national educational policy and the ECDE curriculum delivery and get the ways of bridging these gaps.

1.3 Purpose of the Study

The general objective of this study was to investigate the integration of the national goals of education in early childhood education in Kenya: A case study of Kalundu Zone, Kitui County.

1.3.1 Specific Objectives

This study was guided by the following specific objectives:

i. To examine the influence of financial resources on the integration of the national goals of education in early childhood education in Kalundu Zone, Kitui County.

ii. To establish whether there is a significant statistical relationship between the teaching and learning resources and the integration of the national goals of education in early childhood education Kalundu Zone, Kitui County.

iii. To identify the effects of socio-economic factors on the integration of the national goals of education in early childhood education in Kalundu Zone, Kitui County.

iv. To investigate the influence of teacher-child ratio on the integration of the national goals of education in early childhood education in Kalundu Zone, Kitui County.

1.4 Research Questions

This study was based on the following research questions:

i. What is the influence of financial resources on the integration of the national goals of education in early childhood education in Kalundu Zone, Kitui County?

ii. Is there a statistically significant relationship between the teaching and learning resources and the integration of the national goals of education in early childhood education in Kalundu Zone, Kitui County?
iii. What is the effect of the socio-economic factors on the integration of the national goals of education in early childhood education in Kalundu Zone, Kitui County?

iv. What is influence of teacher-child ratio on the integration of the national goals of education in early childhood education in Kalundu Zone, Kitui County?

1.5 Significance of the Study

It is hoped that this study may shed light to the schools management and teachers on how to improve the integration of the national goals of education in early childhood development education. The curricula in all the institutions of learning are based on and guided by the national goals of education. It is therefore important to have the same policy implemented in the ECDE centers, so that teaching/learning becomes relevant and runs in tandem with the education policy. This enhances smooth transition and progression from one level of the academic ladder to the next. There is therefore need for a good foundation in ECDE so that learners will be able to go through their school with ease and confidence. The skills knowledge and attitudes emanating from education and training institutions influence the ability to develop quality human resources within employment. To ensure that relevant and adequate skills are available, important Science, Technology and Innovation related disciplines are integrated to all levels of education and training, ECDE inclusive. In addition, research is essential for purposes of generating new knowledge and for putting into perspective the already developed knowledge in pursuit of the Kenyan goals of education. The findings will be used by curriculum planners and implementers in designing curriculum that properly addresses the need for education and that equips the children to become proper citizens. Policy makers will also benefit as the findings of the study may guide them in formulating policies that will improve the teaching and learning in ECDE centres. The study will also open a gap for further studies on the integration of the national goals of education on ECDE.
1.6 Delimitations the Study

This study was carried out in pre-schools in Kalundu Zone, Kitui County, Kenya. The study focused on the influence of financial resources, teaching and learning resources, socio-economic factors and teacher-child ratio on the integration of the national goals of education in ECDE. Head teachers and pre-school teachers in both public as well as private ECDE centres participated in the study.

1.7 Limitations of the Study

The study was limited by fear from the respondents who treated the study with suspicion of being held responsible for the outcome of the research, if known. To overcome these limitations, the researcher assured the respondents that information disclosed would be treated with a lot of confidentiality and their identity would remain anonymous. The data collection instruments did not bear the names of the respondents and the researcher also sampled schools in the Kalundu Zone to minimize the cost of carrying out the study.

1.8 Assumptions of the Study

The researcher assumed that the respondents gave genuine responses as they filled in the questionnaires and answered questions during the interview. This was facilitated by the assurance the researcher gave the respondents that all the information would be confidential, and that it would be used only for enhancing the teaching/learning in the ECDE centers. The researcher assumed that the study’s location, which comprised an urban set up as well as a rural population provided results that could be inferred appropriately to other regions of the sub-county, county and the nation. The cosmopolitan population richly provided expanse views from different ethnic and socio-economic backgrounds. These also presented a representation of the varied Kenyan regions by the respondents in the location of the study. The researcher also assumed that the involvement of both public and private pre-school institutions provided valuable checks and balances between public and private schools. This
is because they both employed and used the same ECDE syllabuses and the KICD policy guides. It was also valuable because of the staff establishment variances, infrastructure development and the provision of instructional materials, in both public and private pre-schools.

Finally the researcher assumed that the research instruments validly and adequately measured the desired constructs. This made the study useful not only to the location of the study but also to other regions of the sub-county, county and the country. The researcher also assumed that this study was concluded within the time frame scheduled.
1.9 Operational Definition of Terms

**Integration:** Refers to the act of bringing together smaller components of national goals of education into a single system that functions as one.

**National Goals of Education** Refers to fostering national unity, promoting national development, promoting individual development and self fulfillment, promoting social equality and responsibility, promoting respect for and development of cultural heritage and promoting international consciousness.

**Financial Resource** Refers to the money available to a school for spending in the form of cash.

**Teaching Resource** Refers to the materials that the classroom teacher uses to help children understand the concepts he/she introduces during his/her lesson.

**Learning Resource** Refers to the materials that teachers use to assist children to meet the expectations for learning defined by the ECDE curricula.

**Teacher-Child Ratio** Refers to the total number of children assigned to an individual teacher.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction
This chapter shows the literature review on the integration of national goals of education in early childhood development education. The chapter is divided into the following sections; theoretical review, empirical review, conceptual framework and summary of the literature.

2.2 Empirical Review
This is a presentation of scientific discussions which are based on practical experiences. This means that if the study is carried out again using the same instruments and with similar tools as well as congruent environment and respondents, the results should be relatively the same.

2.2.1 Financial Resources
Financial constraints can lead to ineffective integration of the national goals of education in early childhood education (Mbiti, 2007). At macro level, Kenya has suffered from the heavy debt burden following its pursuit on the World Bank and International Monetary Fund fiscal policies such as the Structural Adjustment Programs. It is reported that these debt-servicing programs are partly responsible for significant reduction in government funding for subsidized education, health care and school related expenses. The result has been that families bear more responsibilities in implementation of early childhood education programmes (Kilbride & Kilbride, 2010).

Bruce (2007), notes that financial resources are very important for any innovation to succeed and for the educational objectives and aims to be met. The generalization of educational innovation is accompanied by the need for new resources, which should be available for sufficiently long time in order that the innovation becomes part of the daily life of educational establishments (Kabiru & Njenga, 2009). Sufficient coherence should be maintained between the supply of different resources, building equipments, and finances for
the salaries for ECE teachers. Mostly, the parents and the community provide funds for the ECE centers as they build classrooms, give support grant and pay the ECE teachers (GOK, 2006).

According to UNESCO (2009), the responsibility of promoting children’s education lies with the state. Social organizations such as charitable, faith-based, community-based and other Non-governmental Organizations play an important role in financing ECE, (Myers 2011). With adequate finances, implementation of ECE Curriculum is made possible as teachers are motivated, school facilities and necessary materials are bought to enhance learning thus realizing the national goals of education.

(UNESCO 2012) highlights that the responsibility of ensuring children’s education, lies with the state. However in many developing countries, Kenya included, poor financial assistance is given to ECDE. This has led to poor remuneration of teachers, poor infrastructures and inadequate teaching and learning materials in ECDE centres. The poor allocation of finances to ECDE does not only affect the quality of education provided but also access to ECDE. Kivuva (2012) notes that teacher’s competency was not only affected by the terms and conditions of service but also availability of teaching and learning materials. He also noted that some pre-school teachers were not satisfied with their work because they are either not regularly paid or they are underpaid. Such stressed teachers are likely to be harsh to the learners making them drop out of the ECDE centers or perform dismally. In her study, Wawire (2013), notes that lack of teachers at this level of academic ladder is reason enough for poor access to education and poor quality services in the subsector.

2.2.2 Teaching and Learning Resources

Many ECDE centers lack adequate teaching and learning resources and facilities suitable for ECDE in their learning environment. These include lack of properly ventilated classrooms,
furniture suitable for children, kitchen, safe clean water, play ground, toilets and play material (International Association for the Education of Young Children, 1991). This implies that teachers do not have adequate teaching and learning resources to enable them to implement ECDE Curriculum effectively. This affects implementation of ECDE Curriculum negatively as the creation of an unsustainable learning environment helps deprive children to improve their academic performance (Offenheiser & Holcombe, 2003).

According to Kasim (2008), instructional resources are very vital in acquisition of knowledge, concepts and skills in pre-schools. Children learn by doing. They learn better by manipulating materials and making sense out of them. For a long time, there has been a debate on the best time to introduce instructional resources in number work in the life of a learner. The pre-school curriculum is thus designed to include learning of number work since it has emerged that the best time to introduce instructional resources in number work to a learner is at the pre-school age ECDE policy guideline (2006).

Guthrie (2012), notes that instructional materials, if used efficiently and actively facilitate the learning process in classrooms. However the situation is not good in most pre-schools. Firstly, only the lower quality and the less quantity of instructional resources are provided to pre-schools. In this way the availability of instructional resources is strained and very limited. Secondly, pre-school teachers are not trained for using instructional resources. Teachers do not take interest in using the instructional resources as observed by Waithaka (2005).

Kate (2012), postulates that learning of number work is a result of experience and active learner involvement in the routine use of different types of instructional resources continues to be sensual because it helps learners to connect real things and events with their abstract representations. The ability to picture and do things in their minds would be enhanced by frequent reference to real world application. Meade (2010), suggests that long term use of concrete materials with pre-scholars is positively related to increase in learner’s number work.
achievement and improved attitudes of learners towards number work. Farrant (2011), suggests that good instructional resources need little or no explanation, stimulate ideas and demand active responses from the learners.

Waithaka (2005), emphasizes the importance of training ECDE teachers as he observes that most ECDE centers in Kenya lay emphases on academic work, giving little or no time at all for learners to interact with instructional materials. He further observes that in Kenya pre-school children are subjected to academic work due to pressure from parents who would like to see their children read and write within weeks upon joining pre-school. The ECDE curriculum developed by Kenya Institute of Curriculum Development (KICD) has the provision for learners to interact with instructional materials but this is overlooked by parents and private school managers who insist that the pre-school children have to be taught numeracy and literacy to have the ability to read and write. This fact is compounded by the fact that the primary school head teachers subject the ECDE children to oral and written interviews for them to be admitted to standard one, hence giving no room for learners to interact with instructional resources.

2.2.3 Socio-Economic Factors

Malnutrition and ill-health are factors associated with the socio-economic factor. These factors can significantly damage the cognitive processing ability of children. Children whose processing capacity is impacted by ill-health and malnutrition may require more hours of instruction to learn various skills. As such, implementation of early childhood education may prove critical especially among low income countries (Van de Linde, 2005). Children learn through observation and imitation of modeled behavior and listening to instructions from parents or caregiver, (Bandura 1974). The kind of environment at home, both physical and psychological are key as they determine the behavioral characteristics and attitudes of a child.
which in turn greatly influence the ability of the child in coping with learning activities away from home, (Cobb, 2001).

Socio-economic differences affecting effective implementation of ECDE also cut across regions, with some being labeled ‘marginalized’ or Arid and Semi Arid Lands. Regional disparities have significant role in facilitating access to early childhood care and education, where enrollment levels in rural and marginalized areas are low in comparison to those in the urban areas, (Nair & Rekha, 2012). Children from the marginalized communities in rural Arid and Semi Arid Lands suffer from lack of access to early childhood education. One typical example is the nomadic Maasai community, which is one of the communities experiencing the least access to early childhood education and care because of the way of life and regional disparities, (Biersteker & Robinson, 2010).

Attitudes of parents who are educated and those who are not are conspicuously different. Michelle and Ayana (2006), in their research noted that parents who were educated had better attitudes towards their children’s schooling than their illiterate counterparts. According to a research study by UNESCO (2000), illiteracy level is high in Kenya and Africa at large; 142 million African adults are illiterate. Sammons, (2007), indicates that virtually all successful programmes are influenced by education and participation and other researchers have confirmed the same. For example, a study done in Tabaj Division, Wajir East by Saadia Abdi, (2010), indicates that illiterate parents denied their children enrolment in ECD centres in order to stay at home with their siblings as they went to fetch water and perform other household chores including herding.

Education in many countries according to UNESCO (2010) is not free and compulsory; this has made children from poor households not to access basic education. An estimated 56% of the Kenyan population of which 8.6 million are children, live below the poverty line. UNESCO further outlines the causes of poverty to include low agricultural productivity,
insecurity, unemployment, low wages, poor governance and shortage of land, inadequate and poor infrastructure, high cost of social services including education and health. Combination of ignorance and poverty prevents children from partaking of the rich experiences offered by pre-schools which provide a head start to a solid foundation for development of lifelong learning. Such parents propagate the risk of their children remaining disadvantaged and caught up in a lifelong cycle of poverty. Moreover, KEMI (2014) confirms that poverty contributes to inadequate access, low participation and poor performance in education. Educational outcomes are influenced by family income. Children from low-income families are likely to lag behind their peers from high-income families. Poverty thus undermines the efforts put towards the realization of the national goals of education in the ECDE, as illustrated in the model below.

**Figure 2.1: Poverty Effects Model**
2.2.4 Teacher-Child Ratio

Teacher child ratio has been a subject of much attention among researchers in relation to the factors affecting teaching and learning process. Early childhood development education has not been left out. Research shows that teacher child ratio has continued to grow. On average, teacher child ratio for both 3-5 year old children and 6-8 year olds still remains critical. Teachers are not comfortable with the increasing number of children in the classes they handle (Dodge & Colker, 1992). Still with these high ratios, ECDE teachers are poorly remunerated and under the mercy of parents.

Maicibi (2009), asserts that all institutions or organizations are made up of human resources (workers) and other non-human resources. Maicibi (2009) further asserts that when the right quantity and quality of human resources are brought together, it can manipulate other resources towards realizing institutional goals and objectives. Consequently every institution should strive to attract and retain the best of human resource. KEMI (2014) ascertains that human resource in an organization or institution like ECDE centre is not only the number of people employed, but also their quality and capacity to perform. Human resource implies the number of people employed in an organization to carry out its activities and their capacities and potential to perform such duties, facilitated by academic and professional qualification.

The implication of these opinions is that well trained teachers in numeracy work, if well deployed to pre-schools will bring about well rounded pupils who will perform academically well in number work. According to Waithaka (2005), most Kenya pre-school teachers are not trained hence types of the instructional resource materials seem not to be seen in number work lessons. As a result there is a poor foundation for prescholars in number work which leads to low performance in number work right from pre-schools to higher levels of learning.
2.3 Theoretical Framework

The researcher employed the constructivist theory, which was presented in discussions to authenticate and justify the use of the theory.

2.3.1 Constructivist Theory

Woolfolk (2004) states that constructivism is based on the premise that we all construct our own perspective of the world through individual experience and schema. He relates to Tassoni (1999), a constructivist theories proponent who suggests that children learn from action and exploring their own environment and Jean Piaget, the Swiss psychologists was also a constructivist. One of Woolfol’s fundamental insights was that individuals construct their own understanding: learning is a constructive process at every level of cognitive development. According to Herganhahn (1988) to Piaget, intelligence allows an organism to deal effectively with its environment.

Mwamwenda (1995) writes that Piaget believed that learning is a constructivist process at every level of cognitive development. He believed that children construct knowledge as they act physically on the environment. They form images known as schemas and begin to reason logically as they play, manipulate, explore and experiment with objects in the environment. For proper integration of the national goals of education in ECDE, teachers should ensure classes have adequate, relevant as well as age appropriate instructional materials and enough space for children to move as they interact with these materials. The teacher’s role is that of a facilitator as the method of learning is that of child-centered approach.

2.3.2 Systems Approach Theory

This study was also guided by systems approach theory. The main proponent to this theory was Ludwig Von Beftalanffy (1967). According to this theory, interrelated elements interact together towards a common goal. In a system, there are three elements that are: inputs,
transformational process (activities) and outputs (the intended results or outcomes). Such a system can be suitable to the successful implementation of any education program. The elements mentioned in system approach theory and the features of Beftalanffy model of input, process and output will be considered in analyzing factors affecting the implementation of early childhood education development.

According to KEMI (2014), for curricula to be effective it must embrace the systems approach theory. The model must ensure that the planned courses, programs, activities and learning opportunities are well developed and organized to produce the required results. Such a curriculum should embrace the Industrial Evaluation Model.

**Figure 2.2: Institutional Evaluation Model**

The main purpose of this model in curriculum management is to ensure that the curriculum implementation leads to the achievement of its intended outcomes/outputs. It also ensures that both the inputs and the process are relevant, appropriate and adequate for effective curricula delivery.
The parent is the first child’s teacher. He/she socializes the child toward the expectations of the society. The way the parent socializes the child should form the base of the curriculum implementation in school. The parent is expected to bring up a well fed (input) child as a basic necessity in the curriculum implementation (output). For instance the child should not only be fed but shown how (process) to feed him/herself. The child should be guided on how to cope with life skills for effective services in the society. The teacher supplements and advances the child’s knowledge and skills. The teacher acts as a guide towards the curriculum implementation.

2.4 Conceptual Framework

This is an illustration presenting the independent variables, intervening variables and the dependent variables. The independent variables as indicated are the factors of study that the researcher wants to find out how they influence the integration of the national goals of education in ECDE.

![Conceptual Framework Diagram]

**Independent Variables**
- **Financial Resources**
  - Exchequer funding
  - Pupils’ fees payment
- **Teaching and Learning Resources**
  - Availability of T/L resources
  - Application of T/L resources
- **Socio-Economic Factors**
  - Level of parents education
  - Parents’ income
- **Teacher-Child Ratio**
  - Number of pupils per class
  - Number of teachers per class

**Intervening Variables**
- **Government Policy on ECDE**
- **Learners’ Age**
- **Instructional Methods**
  - ECDE syllabus
  - ECDE handbook
  - Cognitive level
  - Physical development
  - Learner centered
  - Teacher centered

**Dependent Variable**
- **Effective Early Childhood Development Education**
  - Academic performances numerous & literacy
  - Transition index

Figure 2.3: Conceptual Framework

25
This conceptual framework illustrates how effective early childhood development and education may be influenced by financial resources, teaching/learning resources, social-economic factors and teacher/child ratio. For effective curriculum delivery to take place in the ECDE centers these factors need to be well integrated with the government policy on ECDE as outlined in the national goals of education.

One of the major functions of the teacher is to facilitate effective teaching/learning KEMI (2014). The teacher should use appropriate instructional methods for proper curriculum delivery. These methods should be learner centred so as to help him/her to develop the necessary knowledge, skills attitudes and values as outlined in the national goals of education. The methods should also match the learners’ age. This will go a long way in choosing activities that address the learners’ cognitive as well as physical level of development. KEMI also says that such active learning has several benefits including enhancing retention, creating interest, promoting good teacher-learner relationship, enhancing creativity and imagination as well as helping learners to apply the learnt knowledge and skills since they are actively involved other than being treated as passive recipients of knowledge. These, as envisaged in the conceptual framework may also influence the integration of the national goals of education.

The researcher studied the effects of these phenomena to find out the impacts exerted on the curriculum delivery in ECDE centers. This was in relation to the national goals of education. The research also interrogated the current status of the MDGs, the year 2015 being the target year of attainment of the MDGs (UNDP, 2005). The study may also shed light on the level of readiness to embrace and accommodate the SDGs projected to be achieved by the year 2030, as per the SDSNs Post-2015 Global Policy Agenda; Early Childhood Development as a Foundation for Sustainable Development (SDSN, 2014).
2.5 Summary and Gaps in the Literature Review

The literature review shows that financial resources, teaching and learning resources, socio-economic factors and teacher-child ratios have a great influence in the integration of the national goals of education on early childhood development and education. Bruce (2007) argues that financial resources are very important for any innovation to succeed and for the educational objectives and aims to be met. The generalization of educational innovation is accompanied by the need for new resources, which should be available for sufficiently long time in order that the innovation becomes part of the daily life of educational establishments (Kabiru & Njenga, 2009).

According to Kasim (2008), instructional resources are very vital in acquisition of concepts, attitudes and skills in pre-schools. Children learn by doing. They learn better by manipulating materials and making sense out of them. Guthrie (2012) notes that instructional materials, if used efficiently and actively facilitate the learning process in classrooms. However, the situation is not good in most pre-schools. Firstly, only the lower quality and the less quantity of instructional resources are provided to pre-schools. In this way, the availability of instructional resources is very minimal. Secondly, most pre-school teachers are not trained on using instructional resources and in some cases are of low academic qualifications. Teachers too, do not take interest in using the instructional resources as observed by Waithaka (2005).

Socio-economic differences affecting effective implementation of ECDE also cut across regions, with some regions being labeled ‘marginalized’ or Arid and Semi Arid Lands. Regional disparities have significant roles in facilitating access to early childhood care and education, where enrollment levels in rural and marginalized areas are low in comparison to those in the urban areas (Nair & Rekha, 2012). Children from the marginalized communities in rural Arid and Semi Arid Lands suffer from lack of access to early childhood education.
Teachers are not comfortable with the increasing number of children in the classes they handle (Dodge & Colker, 1992). Still with these high ratios, ECDE teachers are poorly remunerated and are left under the mercy of parents. According to Waithaka (2005), most Kenya pre-school teachers are not trained hence instructional resource materials seem not to be seen in number work lessons, and where there are any, they are not to the recommended quality and quantity.

From the observations made by the authors and researchers cited in these discussions the researcher is in agreement with them that quite a lot needs to be done in order to ensure proper integration of the national goals of education in ECDE. Firstly there is clear evidence that the failure to have direct funding from the exchequer has created a gap in the integration of the national goals of education in ECDE. Where this has been done it is not well established as an acknowledged policy, but the mercy of the county governments’ Support Grant to pay the teachers’ wages. It is important to note that for any learning institution to function there should be sufficient financial stability.

It is also true that children at the ECDE level are in the pre-operational level of cognitive development. They need concrete teaching/learning resources. Children learn by doing. As they interact with these resources they will enhance their acquisition of knowledge, skills, attitudes and values. Teachers, parents and school management committees should facilitate the development of teaching/learning resources to ensure that the ECDE centers are appropriately equipped to promote the teaching/learning process. The resources should also be in tandem with the national goals of education for integrating the policy fully.

The researcher observes that the level of teacher motivation in ECDE is wanting. This is as a result poor remuneration, lack of job security and pressure from parents who want their sons or daughters to acquire numeracy and literacy capacities within a few days of joining the class. This is evidenced by the subjecting the ECDE pupils to interviews to join class one in
the lower primary school. The teachers are also intimidated by the inferiority complex emanating from their level of academic and professional qualification. Very few teachers have high school qualification certificates, undermining their academic capacity to perform. They are also not professionally trained on ECDE matters including child psychology and child growth and development. This hinders the teachers’ ability to handle these young learners, as well as their capacity to comprehend and implement the national goals of education in ECDE. This is a conspicuous gap of lack of a policy addressing ECDE teachers’ minimum academic and professional qualifications for one to be an ECDE teacher.

The mushrooming of preschools in the zone is a clear indicator that there is a dense population of young children who need formal education. This has led to overcrowded classrooms where the teacher-pupil ratio is unbearably high. In some classes, the high numbers of learners hinder the teaching/learning process. Such overcrowded classrooms are prone to poor class control, limited teacher-pupil interaction and inadequate attendance to pupils’ needs. There is dire need to align the enrolment in ECDE classes with the international enrolment standards of one teacher to fifteen (1:15) pupils, to move away from the current one teacher to forty-fifty (1:40-50) pupils, which adversely affects the integration of the national goals of education in ECDE.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter comprises of the research design, target population, sampling procedures and sample size, data collection instruments, pilot study, data collection procedure, data analysis and ethical considerations.

3.2 Research Design

Ogula (2005) describes a research design as a plan, structure and strategy of investigation to obtain answers to research questions and control variance. Additionally, a study design is the plan of action the researcher adopts for answering the research questions and it sets up the framework for study or is the blueprint of the researcher (Creswell, 2011). This study employed a descriptive survey research design. Descriptive survey research designs are used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification (Orodho, 2003). Mugenda and Mugenda (2003) on the other hand give the purpose of descriptive research as determining and reporting the way things are. Borg and Gall (1989) observe that, descriptive survey research is intended to produce statistical information on aspects of education that interests policy makers and educators. The study suited within the provisions of descriptive survey research design because the researcher collected data and reported the way things were given by respondents without manipulating any variables.

3.3 Target Population

According to Ogula (2005), population refers to any group of institutions, people or objects that have common characteristics. The target population for this study constituted of 28 head teachers, and 130 pre-school teachers in Kalundu Zone. Therefore, the target population was 158 in total, from which the researcher carried out the sampling to get the 14 head- teachers, and 52 pre-school teachers that were involved in the study.
3.4 Sampling Procedure and Sample Size

Sampling is a procedure, process or technique of choosing a sub-group from a population to participate in the study (Ogula 2005). It is the process of selecting a number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected. Simple random sampling and Purposive sampling were used to select the respondents. In a descriptive research, a sample size of 10-50% is acceptable (Mugenda & Mugenda, 2003). The researcher applied the sampling error formula (Creswell, 2011 pp. 609-612) to get a sample size of 66 respondents. These comprised of 14 head teachers and 52 pre-school teachers. This formed a sample size of 41.8% of the target population, because the larger the sample, the better the representative of the mean and standard deviation of the target population.

Table 3.1: Representation of the Sampling Matrix

<table>
<thead>
<tr>
<th>Population Description</th>
<th>Target Population</th>
<th>Sample Size %</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head teachers</td>
<td>28</td>
<td>50%</td>
<td>14</td>
</tr>
<tr>
<td>Pre-school teachers</td>
<td>130</td>
<td>40%</td>
<td>52</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>158</strong></td>
<td><strong>41.8%</strong></td>
<td><strong>66</strong></td>
</tr>
</tbody>
</table>

3.5 Research Instruments

The data collection tools for this study were questionnaires and interview guides. The questionnaires were filled in by the pre-school teachers. They had open and closed questions for the respondents to record their answers. The interview guides were used for the head teachers. The researcher followed a script of questions to elicit answers from the head teachers.
3.5.1 Questionnaires

Preschool teachers filled in the questionnaires for the purpose of collecting primary quantitative data. The questionnaires were used for the following reasons: a) It has potential in reaching out to a large number of respondents within a short time, b) It is able to give the respondents adequate time to respond to the items, c) It offers a sense of anonymity to the respondent and d) It is an objective method hence no bias resulting from the personal characteristics - as in an interview (Owens, 2002). The questionnaires were divided into two areas. The first part captured the demographic characteristics of the respondents. The second was organized into the four sections of the investigations (financial resources, teaching/learning resources, socio-economic factors, and teacher- pupil ratio) with closed and open ended questions that the teachers responded to.

3.5.2 Interviews

An interview is one way of investigating a group’s attitudes and opinions. The interview guides contained items covering all the objectives of the study. The researcher used semi-structured interviews to obtain data on head teachers’ views and opinions. The interview enabled these head teachers to express themselves freely on the subject matter. As Nunan (1992), claims semi-structured interviews can produce valid and rich information because of their flexibility and the room for probing further. The researcher also had the opportunity to read the facial communication from the head teachers as they engage in the interview.

3.6 Pilot Study

According to Mugenda and Mugenda (2003), a pilot study with a sample of a tenth of the total sample with homogenous characteristics is appropriate for the pilot study. Pilot testing was an important step in the research process because it revealed vague questions and unclear instructions in the instrument. The researcher made the adjustments on the instruments. It
also captured important comments and suggestions from the respondents that enabled the researcher to improve on the efficiency of the research instrument. Pilot study was carried out among the surplus population identified for the study but not sampled as respondents in Kitui Central Sub-County as had been planned.

3.6.1 Instruments of Validity

Validity refers to the degree to which evidence and theory support the interpretation of test scores entailed by use of tests. The validity of instrument is the extent to which it does measure what it is supposed to measure. According to Mugenda and Mugenda (1999), validity is the accuracy and meaningfulness of inferences, which are based on the research results. It is the degree to which results obtained from the analysis of the data actually represent the variables of the study. The research instrument was validated in terms of content and face validity. The content related technique measured the degree to which the questions items reflected the specific areas covered.

3.6.2 Reliability of the Research Instruments

Reliability is the ability of a research instrument to consistently measure characteristics of interest over time. It is the degree to which a research instrument yields consistent results or data after repeated trials. If a researcher administers a test to a subject twice and gets the same score on the second administration as the first test, then there is reliability of the instrument (Mugenda and Mugenda, 1999). The researcher measured the reliability of the questionnaire to determine its consistency in testing what they were intended to measure. The test re-test technique was used to estimate the reliability of the instruments. This involved administering the same test twice to the same group of respondents who had been identified for this purpose.
3.7 Data Collection Procedure

Prior to the commencement of data collection, the researcher obtained all the necessary documents, including an introduction letter from the University and a research permit was obtained from the National Commission for Science, Technology and Innovation (NACOSTI). Audience with the sampled respondents in the region was also sought to clarify the purpose of the study. Upon getting clearance, the researcher in person distributed the questionnaires to the sampled respondents and conducted interviews to the head teachers. Use of questionnaires was expected to ease the process of data collection as all the selected respondents were reached in time. During the distribution of the instruments, the purpose of the research was explained to get rid of suspicion and fear among respondents.

3.8 Data Analysis

On receipt of the completed questionnaires, the collected data was checked for errors in responses, omissions, exaggerations and biases. The researcher used both the quantitative and the qualitative analysis of the data obtained from the study. Content analysis technique was used to analyze qualitative data collected using interview schedules and reported in narrative form along with quantitative presentation. The researcher used summary tables to describe the qualitative data. The answers/responses given in the interviews were categorized into their particular types and the numbers of each type were counted up. In this way the researcher converted qualitative data into quantitative data or nominal data Creswell, (2011). The qualitative data was used to reinforce the quantitative data. Descriptive statistics such as frequencies and percentages were used to describe the data and for this reason Statistical Package for Social Sciences (SPSS) version 20.0 was used. The researcher also used the Spearman’s correlation coefficient to determine the relationship between teaching/learning resources and the integration of the national goals of education. Analysis of Variance was used to test the level of significance of the variables on the dependent variable at 95%
confidence level. In addition, the study conducted a multiple regression analysis. The regression equation was: \( Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \)

Whereby \( Y \) = Early Childhood Development Education;
\( X_1 \) = Financial Resources;
\( X_2 \) = Teaching and Learning Resources;
\( X_3 \) = Socio-Economic Factors;
\( X_4 \) = Teacher-Child Ratio

\( \beta_1, \beta_2, \beta_3 \) and \( \beta_4 \) are coefficients of determination

\( \varepsilon \) is the error term.

3.9 Ethical Issues

Research in education is governed by various ethics. According to APA (2010), these experiments involve human beings which may expose them to stressful or unpleasant experiences. This may affect the subjects to risks or negatively affect the lives of the research participants. To deal with this problem, the researcher explained to the respondents about the research and that the study was for academic purposes only.

3.9.1 Informed Consent

The participants had informed consent to make the choice to participate in the study or not. The subjects had a right to decline, or discontinue participating in the research at any time and at will. This gave the respondents confidence to take part.

3.9.2 Anonymity

Subjects had a right to conceal information about themselves that they felt may be sensitive and private. To safeguard the privacy of subjects the researcher did not use their names but
only the relevant demographic information as well as random code numbers in the case of interviews.

3.9.3 Confidentiality

The participants were guaranteed that there would be protection of information given and that the data collected would be treated with total confidentiality. To ensure this, the researcher listed the data using number codes rather than names. The researcher also destroyed the used questionnaires as soon as the study was completed.

3.9.4 Data Protection

The researcher explained and assured the participants that the information given in the study would be used for academic purposes only. The participants’ data was treated with total privacy and not exposed to any other subject in the study or shared with other respondents. Each participant’s information was handled with care and privacy to conceal it from reaching any unauthorized population.
CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents data analysis, interpretations and discussions following the objectives of the research. The general objective of this study was to investigate the integration of the national goals of education in early childhood development and education in Kenya. The study sought; (a) to examine the influence of financial resources on the integration of the national goals of education in early childhood education (b) to establish whether there is a significant statistical relationship between the teaching and learning resources and the integration of the national goals of education in early childhood development and education (c) to identify the effects of socio-economic factors on the integration of the national goals of education in early childhood development and education and (d) to investigate the influence of teacher-child ratio on the integration of the national goals of education in early childhood development and education.

4.2 Questionnaire Return Rate

The study targeted a sample size of 66 respondents comprising of 14 head teachers and 52 pre-school teachers. All the 14 head teachers were interviewed giving a 100% response rate. 50 copies out of the 52 questionnaires distributed were returned which was 96.153% of the total questionnaires expected. The responses from the interviews and questionnaires were used to analyze the data and write the report for this study. According to Mugenda and Mugenda (2003), a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a rate of 70% and over is excellent. Based on this assertion, the response rate was excellent.
4.3 Respondents’ Demographic Information

The respondents’ demographic information included the respondent’s gender, age bracket, working experience and professional qualification.

4.3.1 Distribution of Respondents by Gender

The first demographic data to be collected was the gender of the respondents. The results were as shown in Table 4.1.

Table 4.1: Respondents’ Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>Female</td>
<td>40</td>
<td>80.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4.1 revealed that majority, (80%) of the respondents interviewed were female teachers, while 20% were male teachers. This shows that there are more female pre-school teachers in Kalundu zone than the male teachers.

4.3.2 Age Distribution of Respondents

The respondents were also required to indicate their age as part of demographic information. The results were as presented in Table 4.2.
Table 4.2 Age Distribution of Respondents

<table>
<thead>
<tr>
<th>Age bracket</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 20</td>
<td>4</td>
<td>8.0</td>
</tr>
<tr>
<td>21-30</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>31-40</td>
<td>12</td>
<td>24.0</td>
</tr>
<tr>
<td>Over 41</td>
<td>24</td>
<td>48.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.2 shows that, majority (48%) of the respondents were over 41 years followed by (24%) aged 31 – 40, and (20%) were those aged between 21-30. The least of the respondents were those aged below 20 years (8%).

4.3.4 Working Experience of the Respondents

The teachers were requested to indicate their working experience. The responses were as presented in Table 4.3.

Table 4.3 Respondents’ Working Experience

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3 years</td>
<td>8</td>
<td>16.0</td>
</tr>
<tr>
<td>3 – 5</td>
<td>4</td>
<td>8.0</td>
</tr>
<tr>
<td>6 – 8</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>9 -12</td>
<td>24</td>
<td>48.0</td>
</tr>
<tr>
<td>Above 12 years</td>
<td>4</td>
<td>8.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
Table 4.3 shows that majority (48%) of the respondents had worked for 9 -12 years as preschool teachers. However the working experience was not a factor in this study.

4.3.4 Academic Qualification of Respondents

The researcher sought to investigate the academic qualification for respondents. The results were as presented in Table 4.4.

**Table 4.4 Respondent’s Academic Level**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate in ECD</td>
<td>7</td>
<td>14.0</td>
</tr>
<tr>
<td>P1 certificate</td>
<td>25</td>
<td>50.0</td>
</tr>
<tr>
<td>Diploma in ECD</td>
<td>16</td>
<td>32.0</td>
</tr>
<tr>
<td>Degree in ECD</td>
<td>2</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.4 shows that majority (50%) of the respondents had P1 certificate as their highest level of professional qualification while the least (4%) had degree in ECDE. This shows that all the teachers were qualified to effectively integrate the national goals of education in ECE.

4.4 Financial Resource and Integration of the National Goals of Education

The first objective for this study was to examine the influence of financial resources on the integration of the national goals of education in early childhood education in Kalundu Zone, Kitui County. To achieve this objective the respondents were required to indicate the extent to which they agree/disagree on each of the statements on a scale of 5-1 scale where {5-- Strongly Agree} {4-- Agree} {3-- Neutral} {2-- Disagree} {1-- Strongly Disagree}. The responses were as presented in Table 4.5.
Table 4.5 shows that majority (38%) of respondents on average indicated that the financial resources which influenced the integration of the national goals of education in early childhood education include; schools levies, inadequate government funding, insufficient supply of different resources, financing of preschool teachers’ salaries, unpaid school levies and ineffective community programmes. This was followed by 30% who strongly agreed with the statements in Table 4.5.

These findings are in line with the findings of Mbiti (2007) who observed that financial constraints can lead to ineffective integration of the national goals of education in early childhood education. At macro level, Kenya has suffered from the heavy debt burden following its pursuit on the World Bank and International Monetary Fund fiscal policies such as the Structural Adjustment Programs. It is reported that these debt-servicing programs are

<table>
<thead>
<tr>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of school levies</td>
<td>12(24%)</td>
<td>22(44%)</td>
<td>4(8%)</td>
<td>10(20%)</td>
<td>4(8%)</td>
</tr>
<tr>
<td>Inadequate government funding</td>
<td>18(36%)</td>
<td>20(40%)</td>
<td>6(12%)</td>
<td>3(6%)</td>
<td>3(6%)</td>
</tr>
<tr>
<td>Insufficient supply of different resources e.g. building equipments</td>
<td>20(40%)</td>
<td>14(28%)</td>
<td>5(10%)</td>
<td>5(10%)</td>
<td>6(12%)</td>
</tr>
<tr>
<td>Financing of preschool teachers</td>
<td>16(32%)</td>
<td>26(52%)</td>
<td>3(6%)</td>
<td>2(4%)</td>
<td>3(6%)</td>
</tr>
<tr>
<td>Underpaid school</td>
<td>22(44%)</td>
<td>12(24%)</td>
<td>7(14%)</td>
<td>4(8%)</td>
<td>5(10%)</td>
</tr>
<tr>
<td>Ineffective community funding programs</td>
<td>6(12%)</td>
<td>20(40%)</td>
<td>8(16%)</td>
<td>6(12%)</td>
<td>10(20%)</td>
</tr>
</tbody>
</table>

| Mean Total                                                               | 15(30%) | 19(38%) | 6(12%) | 5(10%) | 5(10%) |
partly responsible for significant reduction in government funding for subsidized education, health care and school related expenses. The result has been that families bear more responsibilities in implementation of early childhood education programmes (Kilbride & Kilbride, 2010). According to UNESCO (2009), the responsibility of promoting children’s education lies with the state. Social organizations such as charitable, faith-based, community-based and other Non-governmental Organizations play an important role in financing ECE, (Myers 2011). With adequate finances, implementation of ECE Curriculum is made possible as teachers are motivated, school facilities and necessary materials are bought to enhance learning thus realizing the national goals of education.

4.5 Teaching/ Learning Resource and Integration of the National Goals of Education

The second objective for this study was to establish whether there is a statistically significant relationship between the teaching and learning resources and the integration of the national goals of education in early childhood education Kalundu Zone, Kitui County. Since this objective was about relationship, the researcher used Spearman’s correlation coefficient to determine whether there was a relationship between teaching and learning resources and the integration of the national goals of education in early childhood education and the strength of the relationship if it existed. The results were as presented in Table 4.6.
Table 4.6 Relationship Between Teaching/ Learning Resources and the Integration of the National Goals of Education

<table>
<thead>
<tr>
<th>Teaching/ learning</th>
<th>Pearson Correlation</th>
<th>Integration of the national goals of education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0.85</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.001</td>
</tr>
<tr>
<td>N</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

| Integration of the national goals of education | Pearson Correlation | 0.85 | 1 |
|                                                | Sig. (2-tailed)     | 0.004 |
|                                                | N                  | 50     | 50 |

Table 4.6 shows that the correlation coefficient between teaching and learning resources and the integration of the national goals of education in early childhood education is 0.85. This shows that there is a very strong positive (relationship) correlation between teaching and learning resources and the integration of the national goals of education in early childhood education which is statistically significant (p < 0.05).
These findings concur with the findings of Offenheiser and Holcombe (2003) who found that teachers do not have adequate teaching and learning resources to enable them to implement ECDE Curriculum effectively. This affects implementation of ECDE Curriculum negatively as the creation of an unsustainable learning environment helps deprive children to improve their academic performance. According to Kasim (2008), instructional resources are very vital in acquisition of knowledge, concepts and skills in pre-schools. Children learn by doing. They learn better by manipulating materials and making sense out of them. For a long time, there has been a debate on the best time to introduce instructional resources in number work in the life of a learner.

Guthrie (2012), notes that instructional materials, if used efficiently and actively facilitate the learning process in classrooms. However, the situation is not good in most pre-schools. Firstly, only the lower quality and the less quantity of instructional resources are provided to pre-schools. In this way the availability of instructional resources is strained and very limited. Secondly pre-school teachers are not trained for using instructional resources. Teachers do not take interest in using the instructional resources as observed by Waithaka (2005).

4.6 Social Economic Factors and Integration of the National Goals of Education

The third objective for this study was to identify the effects of socio-economic factors on the integration of the national goals of education in early childhood education in Kalundu Zone, Kitui County. To achieve this objective the respondents were required to indicate the extent to which they agree/disagree on each of the statements given in Table 4.7 on a scale of 5-1 scale where {5-- Strongly Agree} {4-- Agree} {3-- Neutral} {2-- Disagree} {1-- Strongly Disagree}. 
Table 4.7: Social Economic Factors

<table>
<thead>
<tr>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical environment at home</td>
<td>24(48%)</td>
<td>14(28%)</td>
<td>4(8%)</td>
<td>4(8%)</td>
<td>4(8%)</td>
</tr>
<tr>
<td>Psychological environment at home</td>
<td>20(40%)</td>
<td>16(32%)</td>
<td>6(12%)</td>
<td>5(10%)</td>
<td>3(6%)</td>
</tr>
<tr>
<td>Regional disparities</td>
<td>8(16%)</td>
<td>14(28%)</td>
<td>16(32%)</td>
<td>7(14%)</td>
<td>5(10%)</td>
</tr>
<tr>
<td>Attitudes of parents</td>
<td>22(44%)</td>
<td>10(20%)</td>
<td>10(20%)</td>
<td>6(12%)</td>
<td>2(4%)</td>
</tr>
<tr>
<td>Educational level of parents</td>
<td>24(48%)</td>
<td>10(20%)</td>
<td>10(20%)</td>
<td>4(8%)</td>
<td>2(4%)</td>
</tr>
<tr>
<td>Lack of commitment by parents</td>
<td>26(52%)</td>
<td>8(16%)</td>
<td>11(22%)</td>
<td>3(6%)</td>
<td>2(4%)</td>
</tr>
<tr>
<td>Poverty level</td>
<td>24(48%)</td>
<td>10(10%)</td>
<td>12(24%)</td>
<td>2(4%)</td>
<td>2(2%)</td>
</tr>
</tbody>
</table>

**Mean Responses**

|                  | 21(42%) | 12(24%) | 10(20%) | 4(8%) | 3(6%) |

Table 4.8 reveals that on average majority of respondents (42%) strongly agreed that social economic factors which influence the integration of the national goals of education in early childhood education are; physical environment at home, psychological environment at home, regional disparities, attitudes of parents, Educational level of parents, lack of commitment by parents and poverty levels.

These findings concur with the findings of Cobb (2001) who argues that the kind of environment at home, both physical and psychological are key as they determine the behavioral characteristics and attitudes of a child which in turn greatly influence the ability of the child in coping with learning activities away from home. Socio-economic differences affecting effective implementation of ECDE also cut across regions, with some being labeled ‘marginalized’ or Arid and Semi Arid Lands. Regional disparities have a significant role in
facilitating access to early childhood care and education, where enrollment levels in rural and marginalized areas are low in comparison to those in the urban areas, (Nair & Rekha, 2012).

Children from the marginalized communities in rural Arid and Semi Arid Lands suffer from lack of access to early childhood education. One typical example is the nomadic Maasai community, which is one of the communities experiencing the least access to early childhood education and care because of the way of life and regional disparities (Biersteker & Robinson, 2010). Attitudes of parents who are educated and those who are not are conspicuously different. In their research Michelle and Ayana (2006), note that parents who are educated have better attitudes towards their children’s schooling than their illiterate counterparts.

4.7 Teacher-Child Ratio and the Integration of the National Goals of Education in Early Childhood Education.

The last objective for this study was to investigate the influence of teacher-child ratio on the integration of the national goals of education in early childhood education in Kalundu Zone, Kitui County. To achieve this objective the respondents were required to indicate the extent to which they agree/disagree on each of the statements given in Table 4.7 on a scale of 5-1 scale where {5-- Strongly Agree} {4-- Agree} {3-- Neutral} {2-- Disagree} {1-- Strongly Disagree}. The responses were as presented in Table 4.9.
Table 4.8  Teacher-Child Ratio

<table>
<thead>
<tr>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large numbers of enrolment in pre-schools</td>
<td>34(68%)</td>
<td>12(24%)</td>
<td>0(0%)</td>
<td>2(4%)</td>
<td>2(4%)</td>
</tr>
<tr>
<td>Lack of preschool teachers</td>
<td>24(48%)</td>
<td>8(16%)</td>
<td>4(8%)</td>
<td>10(20%)</td>
<td>6(12%)</td>
</tr>
<tr>
<td>Lack of school facilities</td>
<td>20(40%)</td>
<td>16(32%)</td>
<td>6(12%)</td>
<td>4(8%)</td>
<td>4(8%)</td>
</tr>
<tr>
<td>Inadequate number of pre-schools</td>
<td>12(24%)</td>
<td>18(36%)</td>
<td>8(16%)</td>
<td>6(12%)</td>
<td>6(12%)</td>
</tr>
<tr>
<td>Education level of preschool teachers</td>
<td>18(32%)</td>
<td>12(24%)</td>
<td>8(16%)</td>
<td>2(%)</td>
<td>10(20%)</td>
</tr>
</tbody>
</table>

**Mean Responses**

| 22(44%) | 13(26%) | 5(10%) | 5(10%) | 5(10%) |

Table 4.9 reveals that majority (44%) of respondents on average strongly agreed that; large numbers of enrolment in preschools, lack of preschool teachers, lack of school facilities, Inadequate number of pre-schools and Education level of preschool teachers influence teacher-child ratio and the integration of the national goals of education in early childhood education. The head teachers interviewed indicated that teacher-child ratio has continued to grow, teachers are not comfortable with the increasing number of children in their classes they handle. These results agree with Maicibi (2009) who argues that all institutions or organizations are made up of human resources (workers) and other non-human resources. Maicibi (2009) further asserts that when the right quantity and quality of human resources are brought together, it can manipulate other resources towards realizing institutional goals and objectives. Consequently every institution should strive to attract and retain the best of human resource. KEMI (2014) ascertains that human resource in an organization or institution like ECDE centre is not only the number of people employed, but also their quality and capacity.
to perform. Human resource implies the number of people employed in an organization to carry out its activities and their capacities and potential to perform such duties, facilitated by academic and professional qualifications.

4.8 Regression Analysis

According to Kothari (2004) regression analysis is a statistics process of estimating the relationship between variables. Regression analysis helps in generating equation that describes the statistical relationship between one or more predictor variables and the response variable (Gupta, 2007). The study adopted a multiple regression analysis so as to establish the relationship between the independent variables (financial resources, teaching and learning resources, socio-economic factors and teacher-ratio) and dependent variable (Effective Early Childhood Development Education). The study applied SPSS version 20.0 to code, enter and compute the measurements of the multiple regression.

Table 4.9: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.754^a</td>
<td>.691</td>
<td>.578</td>
<td>.214</td>
<td>1.759</td>
</tr>
</tbody>
</table>

Adjusted R squared is the coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in Table 4.8 the value of adjusted r squared was 0.578, an indication that there was a variation of 57.8% on Effective Early Childhood Development and Education due to changes in financial
resources, teaching and learning resources, socio-economic factors and teacher-ratio at 95% confidence level. This shows that 57.8% changes in effective early childhood development and education could be accounted to financial resources, teaching and learning resources, socio-economic factors and teacher-ratio.

R is the correlation coefficient which shows the relationship between the study variables and from the findings shown in the Table 4.8 is notable that there exists strong positive relationship between the study variables as shown by 0.754. Additionally, this therefore means that factors not studied in this research contribute 42.2% of effective early childhood development education and a further research should be conducted to investigate the other factors (42.2%) that affect Effective Early Childhood Development and Education in Kalundu Zone, Kitui County, Kenya.

**Table 4.10: Analysis of Variance**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3.454</td>
<td>4</td>
<td>0.7437</td>
<td>1.759</td>
<td>0.002*</td>
</tr>
<tr>
<td>Residual</td>
<td>25.13</td>
<td>51</td>
<td>0.4520</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>28.584</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Critical value =1.3997

From the ANOVA statistics in Table 4.9, the study established the regression model had a significance level of 0.002% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value (1.759>1.3997) an indication that financial resources, teaching and learning resources, socio-economic factors and teacher-
child ratio all affect effective early childhood development and education. The significance value was less than 0.05 indicating that the model was significant.

Table 4.11: Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.475</td>
<td>.141</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td>Financial Resources</td>
<td>0.683</td>
<td>.241</td>
<td>.567</td>
<td>.002</td>
</tr>
<tr>
<td>Teaching and learning resources</td>
<td>0.702</td>
<td>.493</td>
<td>.374</td>
<td>.003</td>
</tr>
<tr>
<td>Socio-economic factors</td>
<td>0.793</td>
<td>.106</td>
<td>.643</td>
<td>.001</td>
</tr>
<tr>
<td>Teacher-child ratio</td>
<td>0.699</td>
<td>.178</td>
<td>.579</td>
<td>.004</td>
</tr>
</tbody>
</table>

The finding revealed that holding independent variables constant (financial resources, teaching and learning resources, socio-economic factors and teacher-pupil ratio) to a constant zero, effective early childhood development education in Kalundu Zone, Kitui County, Kenya would be at 47.5%, a unit increase in financial resources would lead to an increase in effective early childhood development education in Kalundu Zone, Kitui County, Kenya by a factor of 0.683. A unit increase in teaching and learning resources would lead to an increase in effective early childhood development education in Kalundu Zone, Kitui County, Kenya by a factor of 0.702. A unit increase in socio-economic factors would lead to an increase in effective early childhood development education in Kalundu Zone, Kitui County, Kenya by a factor of 0.793. A unit increase in teacher-child ratio would lead to an increase in effective
early childhood development and education in Kalundu Zone, Kitui County, Kenya by a factor of 0.699.

From the data in Table 4.10, it was established that regression equation was $Y = 47.5 + 0.683X_1 + 0.702X_2 + 0.793X_3 + 0.699X_4$. Therefore, effective early childhood development and education in Kalundu Zone, Kitui County, Kenya = 47.5 + (0.683 x financial resources) + (0.702 x teaching and learning resources) + (0.793 x socio-economic factors) + (0.612 x teacher-child ratio). It was established that socio-economic factors contribute most to the effective early childhood development and education in Kalundu Zone, Kitui County, Kenya.
CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter provides the summary of findings, gives the conclusions and recommendations of the study based on the objectives of the study.

5.2 Summary of Findings

These findings are presented according to the data analysis as obtained in chapter four. They are based on the sub themes drawn from the study objectives.

5.2.1 Financial Resources

The study established that a unit increase in financial resources would lead to increase in effective early childhood development and education by a factor of 0.683. The study also established that majority of the respondents strongly agreed on the statement that insufficient supply of different resources e.g. building equipments and ineffective community funding programs respectively. The head teachers interviewed indicated that the current state of standards for publicly funded preschool programs vary widely, particularly in the areas of teacher qualifications, per-pupil spending, and learning standards. Low standards and spending levels will most likely result in programs that do little to enhance children’s learning and development.

5.2.2 Teaching and Learning Resources

The study revealed that a unit increase in teaching and learning resources would lead to an increase in effective early childhood development and education in Kalundu Zone, Kitui County, Kenya. The study further revealed that majority of the respondents strongly agreed
on the statements that there existed poor quality instructional resources and more emphasis on academic rather than instructional materials. Head teachers interviewed indicated that the school administrators should participate in education and training that focuses on how young children grow and learn and also that increases knowledge of the subject matter being taught and understanding of how to teach young children. They also indicated that the government should provide adequate teaching and learning materials in all public primary schools. The correlation coefficient between teaching and learning resources and the integration of the national goals of education in early childhood development and education is 0.85. This shows that there is a very strong positive (relationship) correlation between teaching and learning resources and the integration of the national goals of education in early childhood development and education which is statistically significant (p < 0.05).

5.2.3 Socio-Economic Factors

The study found that a unit increase in socio-economic factors would lead to an increase in effective early childhood development and education in Kalundu Zone, Kitui County, Kenya by a factor of 0.793. The study further found that respondents strongly agreed on the statements that physical environment at home and psychological environment at home influence the integration of the national goals of education in early childhood education. The head teachers interviewed indicated that malnutrition and ill-health are factors associated with the socio-economic factor. These factors can significantly damage the cognitive processing ability of children. Children whose processing capacity is impacted by ill-health and malnutrition may require more hours of instruction to learn various skills. As such, implementation of early childhood development and education may prove critical especially in children coming from low income families.
5.2.4 Teacher-Child Ratio

The study established that a unit increase in teacher-child ratio would lead to an increase in effective early childhood development and education in Kalundu Zone, Kitui County, Kenya. The study further established that majority of the respondents strongly agreed on the statements that lack of school facilities and large numbers of enrolment in preschools influence the integration of the national goals of education in early childhood development and education. The head teachers interviewed indicated that teacher-child ratio has continued to grow. Teachers are not comfortable with the increasing number of children in their classes they handle. Still with these high ratios, ECDE teachers are poorly remunerated and under the mercy of parents most of who have little or nothing to give.

The regression results revealed that holding independent variables constant (financial resources, teaching and learning resources, socio-economic factors and teacher-pupil ratio) to a constant zero, effective early childhood development and education in Kalundu Zone, Kitui County, Kenya would be at 47.5%, a unit increase in financial resources would lead to an increase in effective early childhood development and education in Kalundu Zone, Kitui County, Kenya by a factor of 0.683. A unit increase in teaching and learning resources would lead to an increase in effective early childhood development and education in Kalundu Zone, Kitui County, Kenya by a factor of 0.702. A unit increase in socio-economic factors would lead to an increase in effective early childhood development and education in Kalundu Zone, Kitui County, Kenya by a factor of 0.793. A unit increase in teacher-child ratio would lead to an increase in effective early childhood development and education in Kalundu Zone, Kitui County, Kenya by a factor of 0.699.

5.3 Conclusion

The study concludes that financial resources influence the integration of the national goals of education in early childhood development and education program. It also establishes that if
the government provides enough funds, have sufficient supply of different resources such as building equipments and enhance community funding programs this can lead to effective integration of the national goals of education in early childhood education program.

The study concludes that teaching and learning resources have a positive influence on the integration of the national goals of education in early childhood education program. The study also concludes that if the government can provide high quality instructional resources, put more emphasis on instructional materials rather than academic achievements and provide enough school play ground, toilets and other relevant as well as pupil friendly play materials can lead to effective integration of the national goals of education in early childhood development and education program.

The study concludes that socio-economic factors have a positive influence on the integration of the national goals of education in early childhood education program. The study also concludes that availability of school facilities, manageable enrolment number of pupils in a class and improving education level of preschool teachers can lead to a greater influence on the effective integration of national goals of education in early childhood education program.

The study also concludes that teacher-child ratios have a positive influence on the integration of the national goals of education in early childhood education program. The study also concludes that physical and psychological environments at home, poverty levels and attitudes of the parents have a greater influence on the effective integration of the national goals of education in early childhood education program.

**5.4 Recommendations**

On financial resources, the study recommends that ECDE programs centers should receive adequate funding to maintain effective class sizes and teacher-child ratios, hire and retain qualified teachers, and provide other forms of support that are crucial for meeting their
community’s needs. Policymakers should also recognize that choosing increases in available slots over this goal will jeopardize the economic benefits of preschool programs. In order to mobilize adequate resources we recommend that all stakeholders should be involved in implementation of ECD programmes. These include government, local councils, traditional/community opinion leaders, political leaders, private sector as well as parents.

On teaching and learning resources, the study suggests that all ECDE centers should be provided with adequate teaching and learning resource and facilities suitable for ECDE in their learning environment. These include properly ventilated classrooms, furniture suitable for children, kitchen, safe clean water, play ground, toilets and play materials among others. Pre-primary schools teachers should always prepare and use effectively relevant professional documents which include; schemes of work, lesson plans, lesson notes and record of work. There is need for the government and other stakeholders to develop a scheme for the ECDE teachers so as to enable them work for many years to enable them develop positive attitudes which are required to facilitate smooth learning in ECDE programmes.

On socio-economic factors, the study recommends that families and community opinion leaders should join together to determine how effective preschools are in teaching early literacy. They should also develop advocacy efforts to ensure that parents and community leaders have a voice in improving early learning outcomes and implementing an intentional curriculum and effective teaching strategies across all preschool settings. Children whose processing capacity is impacted by ill-health and malnutrition should be given more hours of instruction to learn various skills as they mitigate these drawbacks to boost learning.

On teacher-child ratio, the study advises that there is need to harmonize ECDE professional training so as to produce teachers of high a caliber and with positive attitudes towards the early childhood education programme. Policy makers should ensure that incentives for
quality early childhood programs include warm, healthy teacher-child interactions, child-focused teaching, and content-driven classroom instructions.

5.5 Suggestion for Further Studies

Based on these findings, this study moreover recommends that further studies should be carried out to investigate the factors influencing children’s access to early childhood development and education centres.
REFERENCES

   Future, Africa’s Challenge, 29.


Aunio, H., & Niemivirta, J. (2010). Investment in early childhood development lays the 
   foundation.


Black, M., (2014). Every child’s potential: Integrating nutrition, health and psychosocial 
   interventions to promote early childhood development (special issue). 

   Adversity, 26-59.

   York: Longhorn Publishers Ltd.

   Processes, 3 (2), 26-38.

   pediatrics, 41(3) 227-238.

   Quantitative and Qualitative Research (4th Ed). New Delhi: Pearson 
   Education Inc.


59


APPENDICES

Appendix I: Letter of Introduction

Tiberious Murithi

P.o Box 57_90200

Kitui

Dear Sir/Madam,

Re: Research Study

I am a postgraduate student from South Eastern Kenya University (SEKU) Kitui Campus, Pursuing Master of Education in Early Childhood Development and Education (ECDE). Currently, I am in the process of undertaking research on the Integration of the National Goals of Education in Early Childhood Development Education in Kenya: A Case Study of Kalundu Zone, Kitui County.

I kindly request to be granted permission to carry out the study in your school.

Yours Faithfully

Tiberious Murithi

E56/KIT/20404/2013

MED, Student

SEKU Kitui Town- Campus
Appendix II: Questionnaires for the Pre-school Teachers

Instructions

➢ Kindly provide answers to these questions as honestly and precisely as possible.

➢ Answers to these questions will be treated as confidential.

➢ (Tick) (√) where appropriate or fill in the required information on the spaces provided.

Section A: Background Information

1. Indicate your gender: Male [ ] Female [ ]

2. Indicate your age:

   Less than 20 years [ ] 21-30 years [ ]

   31-40 years [ ] Above 41 years [ ]

3. How long have you served as a pre-school teacher?

   Below 3 years [ ] 3-5 years [ ] 6-8 years [ ]

   9-12 years [ ] Above 12 years [ ]

4. What is your professional training?

   Certificate in ECDE [ ] Diploma in ECDE [ ] PI Certificate [ ]

   Degree in ECDE [ ] Others (Specify) .................................

Section B: Financial Resources

Listed below are statements regarding the influence of financial resources on the integration of national goals of education in early childhood education in Kalundu Zone, Kitui County. Please indicate the extent to which you agree/disagree on each statement. (Please tick as appropriate on a scale of 5-1).

{5-- Strongly Agree} {4-- Agree} {3-- Neutral} {2-- Disagree} {1-- Strongly Disagree}
Lack of school levies
Inadequate government funding
Insufficient supply of different resources e.g. building equipments
Financing of preschool teachers salaries
Underpaid school purchases e.g. foodstuffs, stationeries, office equipment etc.
Ineffective community funding programs

5. Based on your opinion, how do financial resources influence the integration of national goals of education in early childhood education in Kalundu Zone, Kitui County?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

Section C: Teaching and Learning Resources

Listed below are statements regarding the influence of teaching and learning resources on the integration of national goals of education in early childhood education in Kalundu Zone, Kitui County, in Kenya. Please indicate the extent to which you agree/disagree on each statement. (Please tick as appropriate).
<table>
<thead>
<tr>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of school playground, toilets and play material</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor quality instructional resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of instructional resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long term use of concrete materials in pre-scholars</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More emphasis on academic rather than instructional material</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of furniture suitable for children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of properly ventilated classrooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Based on your opinion, how do teaching and learning resources influence the integration of national goals of education in early childhood education in Kalundu Zone, Kitui County?

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

**Section D: Socio-Economic Factors**

Listed below are statements regarding the influence of socio-economic factors on the integration of national goals of education in early childhood education in Kalundu Zone, Kitui County. Please indicate the extent to which you agree/disagree on each statement.

(Please tick as appropriate).
7. Based on your opinion, how do socio-economic factors influence the integration of national goals of education in early childhood education in Kalundu Zone, Kitui County?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

Section E: Teacher-Pupil Ratio

Listed below are statements regarding the influence of teacher-pupil ratio factors on the integration of national goals of education in early childhood education in Kalundu Zone, Kitui County. Please indicate the extent to which you agree/disagree on each statement. (Please tick as appropriate).
Large numbers of enrolment in preschools

Lack of preschool teachers

Lack of school facilities

Inadequate number of pre-schools

Education level of preschool teachers

8. Based on your opinion, how does the teacher-pupil ratio influence the integration of the national goals of education in early childhood education in Kalundu Zone, Kitui County?

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

........
Appendix III: Interviews for the Head Teachers

i. What is the influence of financial resources on the integration of national goals of education in early childhood education in Kalundu Zone, Kitui County?

ii. What is the influence of teaching and learning resources on the integration of national goals of education in early childhood education Kalundu Zone, Kitui County?

iii. What is the influence of socio-economic factors on the integration of national goals of education in early childhood education in Kalundu Zone, Kitui County?

iv. What is influence of teacher-child ratio on the integration of national goals of education in early childhood education in Kalundu Zone, Kitui County?