A COMPARATIVE EVALUATION OF THE IMPLEMENTATION OF THE PHYSICAL EDUCATION CURRICULUM IN NAIROBI AND NYERI PRE-SCHOOLS

RUTH MUGO KAHIGA

A RESEARCH THESIS SUBMITTED IN FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF DOCTOR OF PHILOSOPHY DEGREE IN EDUCATION IN THE DEPARTMENT OF EDUCATIONAL COMMUNICATION AND TECHNOLOGY OF UNIVERSITY OF NAIROBI.

2014

DECLARATION

This research thesis is my original work and has not been presented for a degree in any other university.

RUTH MUGO KAHIGA

This research thesis has been submitted for examination with our approval as University Supervisors.

Dr. JANE C. GATUMU (Ph.D)
Senior Lecturer
Department of Educational Communication and Technology
University of Nairobi

Prof. JACOB S. NTEERE (Ph.D)
Associate Professor
Department of Physical Education and Sport
University of Nairobi

Dr. ELIJAH G RINTAUGU (Ph.D)
Senior Lecturer
Department of Recreation, Management and Exercise Science
Kenyatta University

DEDICATION

To my family Ngumo Kahiga, Benson Mugo, Bryan Kahiga and Carlvin Mutahi.

ACKNOWLEDGEMENTS

My sincere thanks go to all those who in one way or another, directly or indirectly, played a role towards the completion of this thesis.

First, my special thanks to all my supervisors Dr. Jane C. Gatumu, Prof. Jacob S. Nteere and Dr. Elijah G. Rintaugu for their professional guidance and dedication towards shaping my work.

I take this opportunity to also express my deep gratitude to my family and friends, for their support and encouragement during the period of undertaking this thesis.

My appreciation and thanks go to all the headteachers, teachers, parents, DICECE officers and pre-school children who took part in this study.Most importantly, I would like to thank the almighty God for giving me the grace and the strength to complete this work.

ABSTRACT

The purpose of this study was to conduct a comparative evaluation of the implementation of the Physical Education (PE) curriculum in Nairobi and Nyeri pre-schools. This was against the backdrop of the need for young children to engage in regular physical activity for physical fitness and to prevent an increase in lifestyle diseases. The Development Assistance Committee (DAC) programme evaluation criteria which consist of relevance, efficiency, effectiveness, impact and sustainability were used. Stratified and simple random sampling was used to select 120 pre-schools comprised of public, private, council and welfare pre-schools, 120 teachers, 60 headteachers, 60 parents, 120 pre-school pre-unit children and 4 DICECE officers for the study. To adequately achieve the objectives of the study, qualitative and quantitative methods of data collection and analysis were used. This involved the use of questionnaires, interview schedules, observation guide, resource checklist guide and document analysis guide. Descriptive analysis techniques (frequencies, percentages) and content data analysis were used. The study found that, 99 (100%) teachers both from Nairobi and Nyeri pre-schools viewed PE as a relevant activity area in the ECE curriculum as it addressed the needs of the child. A higher percentage of teachers from Nairobi pre-schools (90%) indicated that the PE objectives were clear, relevant and achievable than teachers from Nyeri pre-schools. Nairobi and Nyeri pre-schools teachers 93 (93.94%) indicated that PE was taught in their pre-schools but the observations revealed that, the actual practice on the ground was different. PE lessons were used to teach other activity areas especially in Nyeri pre-schools and teachers mostly supervised children playing but did not give instructions. Nyeri pre-schools had more adequate PE learning facilities than Nairobi pre-schools. The biggest challenge in the acquisition of PE learning facilities and equipment in Nairobi and Nyeri pre-schools was lack of funds. The teachers both from Nairobi and Nyeri pre-schools were found to be professionally trained thus competent to implement the PE programme, though professional developmental programmes such as seminars and workshops were lacking. Children were exposed to a variety of physical skills and they acquired and performed different movement skills in Nairobi and Nyeri pre-schools. However, instructions and guidance from the teachers, adequate practice time and adequate PE learning facilities and equipment were required to enhance the effectiveness of skill acquisition. The PE programme had an impact on the growth and development of the children in terms of physical, social, mental and emotional development in Nairobi and Nyeri pre-schools where it was taught. Pre-schools' administrators and parents were reported to be supporting the PE programmes but findings from the observations showed that the Ministry of Education, Science and Technology, the pre-schools' administrators and parents needed to fully support the PE programme to make it sustainable. Based on the findings of the study it is recommended that, PE should be taught like all other activity areas and the Ministry of Education inspectorate unit should ensure that this is adhered to in all Nairobi and Nyeri pre-schools. All stakeholders should be sensitised on the importance of PE and seminars and workshops should be held regularly for the pre-schoolteachers. Provision of PE learning facilities and equipment should be a requirement for all pre-schools and all pre-schools' stakeholders should support the implementation of the PE curriculum to ensure its sustenance. Pre-schools should evaluate the PE programme continuously to improve on its implementation. The findings of this study will provide valuable data to various educational stakeholders such as policy makers and curriculum developers in Early Childhood Education.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF MAPS

LIST OF ACRONYMS AND ABBREVIATIONS

AAHPERD: American Alliance for Health, Physical Education, Recreation and Dance

A-LEVEL: Advanced Certificate of Education

CATCH: The Child and Adolescent Trial for Cardiovascular Health

CARICOM: Caribbean Community Secretariat

CDC: Centres for Disease Control and Prevention

CICECE: City Centres for Early Childhood Education

CIPP: Context, Input, Process and Product

COPEC: Council on Physical Education for Children

CPE: Certificate of Primary Education

DAC: Development Assistant Committee

DICECE: District Centres for Early Childhood Education

ECE: Early Childhood Education

ECD: Early Childhood Development

KACE: Kenya Advanced Certificate of Education

KCE: Kenya Certificate of Education

KCPE: Kenya Certificate of Primary Education

KCSE: Kenya Certificate of Secondary Education

KHA: Kindergarten Headmistress Association

KEMU: Kenya Methodist University

KICD Kenya Institute of Curriculum Development

MoEST: Ministry of Education, Science and Technology

NACECE: National Centre for Early Childhood Education

NAEYC: National Association for the Education of Young Children

NASPE: National Association for Sports and Physical Education

NCST: National Council of Science and Technology

NCTM: National Council of Teacher of Mathematics

OECD: Organization for Economic Co-operation and Development

O-LEVEL Ordinary Level of Education

PE: Physical Education

PUEA: Presbyterian University of East Africa

UNEP: United Nations Environment Programme

UNESCO: United Nations Educational, Scientific and Cultural Organization

UNICEF: United Nations Children's Fund

WHO: World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Physical Education plays a critical role in educating the whole child as it contributes to its physical, mental, social and emotional development. It provides a wide range of developmentally appropriate activities for all children that facilitate development of physical competence in movement activities. It reinforces knowledge across the curriculum in other activity areas such as science, mathematics and social studies. Participation in regular physical activity improves children's muscular strength, flexibility, muscular endurance, body composition and cardiovascular endurance thus improving their physical fitness levels. Physical Education (PE) teaches self-discipline, improves self-confidence and self-esteem, influences moral development, facilitates socialization and development of social skills such as co-operation, and nurtures leadership skills (Robinson, Beith & Pullan, 1998; Drewe, 2001; Galloway, 2007; Macfadyen & Bailey, 2002).

Physical Education is unique to the school curriculum as it is the only programme that provides learners with opportunities to learn motor skills, develop physical fitness and gain understanding about physical activity. Participation in physical activity in form of play, games, dance and PE, and health education has immediate and long term health benefits. Physical activity or exercise can improve a child's health and reduce the risk of developing several diseases like type 2 diabetes, cancer and cardiovascular diseases. Most importantly, it can improve a child's quality of life. Schools can provide many opportunities for children to engage in vigorous physical activity and are thus better placed amongst societal institutions to motivate children to live active lifestyles (Jenkinson & Benson, 2010).

The inclusion of Physical Education in the school curriculum is in line with the United Nations Charter on Physical Education and Sport which states that PE and sports is a fundamental right for all and forms an essential element of the education system (UNESCO, 1978). To further the role of PE, the World Health Organization (WHO) links with school-based education to advocate for school and community engagement in the promotion of physical activity among children and adolescents with the view to eliminate the risk factors for chronic diseases that are associated with adult morbidity and mortality (WHO, 2004). The global physical activity guidelines by WHO recommend that children and youth 5-17 years of age should accumulate an average of at least 60 minutes of daily moderate-to-vigorous physical in order to improve or maintain a healthy cardio-respiratory, fitness and body composition profile (WHO, 2010).

Despite the essential role that physical activity plays in the life of a child, the provision of PE in schools has declined in many countries. An international survey conducted in some African countries revealed that the status of PE was low and the subject was in danger of being sidelined. According at Ajisafe (1997), the implementation of PE in African schools has a lot of setback. The challenges in the provision of PE included pressure for good academic performance, inadequate time allocation, inadequate and poor state of learning facilities and equipment, lack of adequately trained teachers and poor attitudes from teachers, learners and parents towards PE (Hardman 2008; DiFiore, 2010).

In many schools in Kenya, PE is marginalized because it is not an examinable subject and because of a lack of standards and a strong policy of implementation from the Ministry of Education, Science and Technology (MoEST). PE class time is used as a time to take a break from serious class work (Wanyama, 2011, Jepkorir & Hsu, 2013). Studies on factors affecting children's outdoor play and pre-school PE programmes in Langat division in Nairobi and Sagana zone in Kirinyaga district revealed that, learning

facilities and equipment for PE were inadequate, time allocated was inadequate and PE lessons were on the timetable but they were not taught in some pre-schools(Njoki, 2007; Giceri,2010). This scenario was similar in primary and secondary schools in Kenya (Simiyu, 1990; Muindi, 1998; Nyonje, 2004). At Kenya Teachers' Diploma and Primary Training Colleges, teaching of PE was affected by inadequate time allotment and resources (Muniu, 1986,; Kiganjo, 1987). According to Sallis and McKenzie (1991), physical inactivity has profound effects on the health of young children while lack of physical literacy at school may have ramifications for health throughout life.

Reports from World Health Organization (WHO) show that physical inactivity, overweight and obesity are classified as the fourth and fifth leading causes of global mortality and two of the greatest health challenges and determinants for various chronic diseases (WHO, 2010). There is an increase in childhood obesity and other lifestyle diseases such as heart diseases and diabetes in developed and developing countries such as the USA and China respectively. In the USA, where childhood obesity is a major issue, almost half of the children do not engage in enough exercises. Modifications of school policies have been used in an attempt to address the overweight epidemic among children. Similarly, due to the increase of lifestyle disease in China among young children, there are plans to increase daily activity in schools as many schools especially in the rural areas had a low regard for physical education (Bauer, Patel, Prokop & Austin, 2006; Pho, 2009).

In Kenya, increasing cases of diabetes among children which are triggered by obesity are raising concern (Wesangula & Wanja, 2009; Jamah, 2010). Local statistics show that out of the 3.3 million Kenyans said to suffer from diabetes, 10% are young people and trends indicate that this percentage is bound to increase. Of concern is that these diseases were once associated with the elderly people but this is no longer the case (Njunge, 2009). Epidemiological surveys conducted by the Nairobi-based Diabetic Management and Information Center gave the estimated

prevalence of diabetes mellitus in Kenya at 3% in 2003, and above 6% in 2007. The survey also revealed that in some rural parts of the country such as Nyeri in central Kenya and Kilifi in the coast province, the prevalence was as high as 11.6% and above 20% among the richer families in the major urban centres (Chege, 2007).

A study on the prevalence of overweight and obesity among primary school children in Nairobi province revealed that overweight and obesity were prevalent among primary school children aged 10-15 years in Nairobi (Kamau, Wanderi, Njororai & Wamukoya, 2011). High prevalence of obesity was also observed among school aged children in Nairobi (Aballa, 2010) and among public and private children from Nairobi with girls showing a higher risk of becoming overweight (Kyallo, Makokha & Mwangi, 2013). Children from rural Kenya were found to be less overweight and more physically active than their urban counterparts as they accrued more daily step counts. This was because of the different mode of transportation to and from school, household chores, active play and participation in PE and Sports. Children from urban Kenya appeared to be showing signs of nutrition and physical activity transition which was being caused by advanced technology and availability of cheap high calorie and poor nutrient foods (Healthy Active Kids Kenya, 2011).

The issue of physical inactivity among children in Kenya has been highlighted (Onywera, 2010) and some of the factors that lead to lack of engagement in physical activity are technology, poor planning in city estates, land grabbing and insecurity (Kwenya, 2003). This is an issue that needs to be addressed as there is evidence that lack of physical activity causes the body processes to deteriorate leading to medical problems such as hypertension and obesity (Bucher & Prentice, 1985).Sallis and Mckenzie (1991) point out that many diseases can be prevented by

individuals taking a proactive approach to their health such as including amounts of physical activity in their daily lives.

To achieve the Kenya Vision 2030, there is need to focus on the promotion of healthy active lifestyles for children as the destiny of a nation depends on the health and strength of its citizens. One of the national goals of education in Kenya is to promote positive attitudes towards good health (Kenya Institute of Curriculum Development, 2008). It is towards the achievement of this goal that the first national guidelines for pre-school education in Kenya (KICD, 1984) included outdoor play and physical activities as one of its activity area in the curriculum. Physical Education (PE) for young children is referred to as outdoor activities in pre-school curriculum in Kenya and addresses children's need for physical activity. It can help young children develop positive attitudes and regular patterns of physical activity which can enhance their health (Wetton, 1988). Since most children spend the majority of their day in educational settings, PE programmes should effectively be implemented in schools as these are the most likely places to influence and change children's physical activity patterns.

The general objectives of outdoor activities in the pre-school syllabus are:to explore and develop personal talents and skills, to increase vocabulary and self-expression**,** to develop large and small motor skills and strengthen body muscles**,** to explore the world around them**,** to control and co-ordinate different parts of the body**,** to develop estimation and accuracy skills**,** to relax and enjoy**,** to develop co-operation and socialization skills**,** to appreciate his/her cultural heritage and develop a sense of nationhood (KICD,2008).At pre-school level, Physical Education (PE) focuses on teaching fundamental movement skills, games, dance and swimming (KICD, 2008). The movement skills should be acquired and practised during the early years as they are the building blocks for more complex movements and

combination of movements needed for successful participation in physical activities (Graham, Holt/Hale, & Parker, 2004). As Sallis and McKenzie (1991) point out, children who learn a myriad of movement skills are more likely to be physically active throughout school which facilitates the development of lifetime patterns of physical activity. Moreover, these children can participate in games, dance and swimming and thus derive physical, health, socio-emotional and intellectual benefits. Physically, children learn motor skills, socially they learn social skills like sharing and taking turns, emotionally they gain self-confidence and self-control; intellectually they learn various concepts and acquire problem solving skills (Robinson et al., 1998). For this to be achieved, the PE curriculum should be effectively implemented. There was need therefore, to examine the implementation of the PE curriculum in pre-schools to examine whether what was being implemented was what was initially intended.

Seefeldt and Vogel (1987) point out that evaluation of PE programmes provides information to the public about its success. They argue that when physical educators describe results of PE programmes, they are more likely to get the support they need for effective school PE programmes. Moreover, erosion of PE programmes can be stopped when physical educators identify the anticipated outcomes of their programmes, select and implement appropriate instructional methods, evaluate the degree to which learners achieve the desired outcomes and alter programmes or methodology so that learners' achievement of objectives is realized.

Evaluation is the process of ascertaining the decision areas of concerns, selecting appropriate information, collecting and analyzing information in order to report summary data useful to decision makers. It is also a systematic and objective assessment of a programme, its design, implementation and results. The aim of an

evaluation is to determine the relevance and fulfillment of objectives, developmental efficiency, effectiveness, impacts and sustainability (Organization for Economic Co-operation and Development (OECD)/ Development Assistant Committee (DAC), 2008). There are various models to evaluate a programme. This study used the DAC (Development Assistance Committee) programme evaluation criteria which consist of relevance, efficiency, effectiveness, impact and sustainability (Ministry of Foreign Affairs of Denmark, 2006). These evaluation criteria have proved to be of effective in programme and project evaluations. The criteria are in line with major issues that should be addressed in programme evaluation; rationale, effectiveness, efficiency, relevance, effects/impacts (Anderson & Arsenault, 2002).

The relevance criterion focuses on the usefulness of the programme. It looks at the extent to which the objectives of the programme correspond with the national educational goals. For example, does the pre-school PE programme address the needs of the children? Efficiency measures the relationship between outputs and inputs. It looks at how economically resources/inputs such as funds, expertise and time are converted to results. Are the PE objectives being achieved economically? The effectiveness criterion focuses on the extent to which the objectives of a programme are achieved or are likely to be achieved. A PE programme is effective when its outputs produce the desired outcomes. Impact measures what has happened as a result of the programme. It looks at the difference that the programme has made to the children in the physical, social, mental and affective domains. The sustainability criterion focuses on the effects of the programme over the long term. Are the positive effects/impacts sustainable? It is concerned with the maintenance, financial and economic viability of keeping the PE programme running despite the challenges (Organization for Economic Co-operation and Development (OECD)/ Development Assistant Committee (DAC), 2008).

Vives-Rodriguez (2005) points out that, for effective programme implementation, teachers are expected to adhere to the curriculum while educational administrators make official decisions on the formal curriculum. A curriculum is a work schedule or a particular body of courses planned in an orderly and progressive manner. It is all that is planned to enable learners to acquire the desired knowledge, skills and attitudes within an educational institution (Kabiru & Njenga, 2009). The primary function of a curriculum as pointed out by Annario, Cowell and Hazelton (1980) is to translate educational philosophies and theories into a series of progressive meaningful and guided experiences for children to attain long-range goals. As Seefeldt and Vogel (1987) point out, it is possible to develop an outstanding curriculum only to discover that learners fail to achieve desired learning outcomes because the curriculum development has not been translated successfully into teaching methods. The headteachers and the teachers have a lot to do with the achievement of curriculum objectives as it is possible to develop a fine course of study only to find that it partially does the job for which it was intended because they failed to grasp its significance or were indifferent to its content.

Kinoo (1999) stresses that, it is important to note that teaching methods and materials are not ends in themselves. Their use should be accompanied by appropriate learning activities, which are the key to success in the learning of PE. The teacher has the responsibility of tailoring the content, the teaching methods and materials around suitable learning activities. Carribbean Community Secretariat (CARICOM) (2011) further point out that, once a curriculum has been adopted, policies must be put into place to guide the achievement of the objectives and goals. These include policies, time allotments and scheduling, play attire, learning facilities, health and safety.

Parents' contribution and support in the PE activity area is crucial as they are stakeholders in the pre-schools. Swadener, Kabiru and Njenga (2000) point out that pre-schools are funded primarily by parents and the local community. They are expected to participate in the provision of land, funds for the construction and maintenance of physical facilities, labour, feeding programmes, learning and playing materials, employment of the teachers and management of the pre-schools (Kwenya, 2003). Similarly, educational officers such as the DICECE officers have a role to play in the implementation of the PE curriculum in pre-schools. They are expected to conduct supervisory duties in the pre-schools and advice on mechanisms or strategies to ensure the pre-school programmes are efficiently and effectively implemented (Swadener, Kabiru & Njenga, 2000).

Children are also required to have a positive predisposition towards the programme as a negative predisposition may affect its outcome. A positive attitude will ensure that they are able to acquire various movement skills and the social, mental and emotional benefits of play. As Coon (1997) points out, a learner's attitude towards something consists of feelings for or against what he/she conceives that thing to be. He further points out that, attitudes like motives similarly arouse and direct purposeful activity.

The support and involvement of the administrators, teachers, educational officers, parents and children in the implementation process of the PE curriculum has an impact on the outcome of the programme (Vives-Rodriguez, 2005). It was therefore necessary to carry out a study to evaluate the implementation of the PE programme in pre-schools to establish its relevance, effectiveness, efficiency, impact, and sustainability (OECD/DAC, 2008).

Studies have been done in Kenya and other countries to evaluate the implementation of PE programmes at primary school level (Madeje, 1981; Akiiki, 2010), secondary level (Akiiki, 2010), Kenya Teachers' Primary Training Colleges (Kiganjo, 1987) and Kenya Teachers Diploma Training Colleges (Muniu, 1986). Madeje (1981) conducted an evaluation study on the implementation of the PE programme in Dar-es-salaam city primary schools, which revealed that the unavailability of PE teachers, the negative attitude of some teachers, city education administrators and parents contributed a lot towards poor implementation of PE programmes. Muniu (1986) and Kiganjo (1987) found that the teaching and learning of PE was affected also by time allotment and inadequate resources. No study has been done to evaluate the implementation of the PE curriculum at pre-school level to establish whether the programme's objectives have been achieved. This study therefore evaluated the implementation of the PE programme at pre-school level in Nairobi and Nyeri counties. The evaluation was comparatively done between the two counties using the relevance, effectiveness, efficiency, impact and sustainability criteria.

1.2 Statement of the Problem

The national goals of education in Kenya are geared towards the promotion of individual development, self fulfillment and the promotion of positive attitudes towards good health among other benefits (KICD, 2008). In line with the national goals of education, ECE objectives aim at enabling the child to enjoy living, learn through play, and develop mental and physical capabilities among others. Through the outdoor activities area, the ECE aims at enabling the child to explore and develop personal talents and skills, develop large and small motor skills, strengthen body muscles, control and co-ordinate different parts of the body, relax and enjoy (KICD,

2008). To achieve these objectives, the PE programme needs to be effectively implemented in pre-schools and all concerned, administrators, teachers, parents and children need to be fully supportive and involved in the implementation (Vives-Rodriguez, 2005). However, there are wide disparities between official policies of government and practices in the actual implementation of PE in schools (Ajisafe, 1997).

Recognition of the importance of physical activity has reached a new height and in fact physical activity was named as one of the leading health indicators in Healthy People 2010 (CDC/National Center for Health Statistics, 2011). There is empirical evidence on the benefits of PE (Nallemtamby, 1987, Kinoti, 1998) on learners but there is concern of a decrease in children fitness and an increase in lifestyle diseases in Kenya (Wesangula & Wanja, 2009). Studies carried out in Nairobi have revealed that overweight and obesity are prevalent among primary school children of different ages (Aballa, 2010; Kamau, Wanderi, Njororai & Wamukoya, 2011; Kyallo, Makokha & Mwangi, 2013). Data from Diabetic Management and Information Center based in Nairobi also reveals that the prevalence of diabetes is above 20% among the richer families in the major urban centres and as high as 11.6% in some rural parts of the country such as Nyeri in Central Kenya and Kilifi in coast province (Chege, 2007). No empirical studies have been done to investigate the prevalence of overweight and obesity at pre-school level in rural and urban Kenya. However, the evidence from the studies carried out among primary school children and the data from the Diabetic Management and Information Center point to the need to promote physical activity among children both in urban and rural Kenya.PE programmes are geared to address children's physical activity needs and to help them develop positive attitudes and regular patterns of physical activity (Wetton, 1988). The PE programmes need to be effectively implemented if

the objectives are to be achieved. The pertinent questions are, is the PE programme being implemented effectively at the pre-school level to address the needs of children? Is it being efficiently implemented to ensure achievement of the intended objectives both in rural and urban Kenya? Is it having an impact in children lives such as developing positive attitudes towards physical activity which leads to active healthy lives? It therefore becomes imperative to evaluate physical activity programmes to establish their relevance, effectiveness, efficiency, sustainability and impact.

This study evaluates how the pre-school programme was being implemented in Nairobi and Nyeri pre-schools to determine whether the components identified as critical to the success of the programme were being implemented. The study further comparatively evaluates the implementation of the pre-school PE programme in Nairobi pre-schools which represents urban Kenya and Nyeri pre-schools which represents rural Kenya.

1.3. Purpose of the Study

The purpose of this study was to conduct a comparative evaluation of the implementation of the PE curriculum in Nairobi and Nyeri pre-schools.

1.4 Research Objectives

The specific objectives of the study were to:

i) Assess the relevance of the implementation of the pre-school PE curriculum in Nairobi and Nyeri pre-schools.
ii) Examine the efficiency of the implementation of the PE curriculum in Nairobi and Nyeri pre-schools.

iii) Examine the effectiveness of the implementation of the PE curriculum in Nairobi and Nyeri pre-schools.

iv) Establish what is the impact of the implementation of the PE curriculum in Nairobi and Nyeri pre-schools.

v) Examine how sustainable is the implementation of the PE curriculum in Nairobi and Nyeri pre-schools.

1.5 Research Questions

The following research questions guided this study:

i) How relevant is the implementation of the PE curriculum in Nairobi and Nyeri pre-schools?

ii) How efficient is the implementation of the PE curriculum in the Nairobi and Nyeri pre-schools?

iii) How effective is the implementation of the PE curriculum in Nairobi and Nyeri pre-schools?

iv) What is the impact of the implementation of the PE curriculum in Nairobi and Nyeri pre-schools?

v) How sustainable is the implementation of the PE curriculum in Nairobi and Nyeri pre-schools?

1.6 Significance of the Study

This study used Stufflebeam's CIPP evaluation model which is a management-oriented evaluation model. It is recommended that professionals as well as educational institutions use evaluation continuously and systematically in their efforts to plan and implement services that meet the client's needs. This will go a long way in enhancing management of programmes, assist the decision making process and improve service delivery.

The findings of this study provide valuable data to various education stakeholders such as policy makers and curriculum developers in ECE on the implementation of the PE curriculum in pre-schools. This will assist in future policy and curriculum reviews on play as they strive to guard and advocate for the right of children to play (United Nations, 1989). School administrators and sponsors will also appreciate the need to set up school policies and provide enabling learning environment in order to enhance the implementation of the PE curriculum and learning of movement skills. Parents who are key stakeholders in ECE, will understand the importance of PE in the total development of children and play a positive role in the contribution of the implementation of the PE curriculum. The study also highlights on the professional preparation of teachers with an aim to draw the attention of teacher trainers on areas that need to be addressed in the training. The findings of the study are also beneficial to pre-school teachers as they will highlight the right of children to play and the importance of PE in improving the health status of the learners. The findings of this study provide an insight to PE professionals at higher levels such as primary, secondary and tertiary levels on the implementation of PE at pre-school level.

1.7 Limitations of the Study

This study used the cross-sectional survey design to explore how the PE curriculum was being implemented in pre-schools. A longitudinal study could have been the most appropriate in this study based on the variables under investigation. Time constraints could not have allowed for a longitudinal study. The researcher also had no control of the different characteristics of children during the observation of their participation, learning and acquisition of skills.

1.8 Delimitations of the Study

The study investigated the implementation of the PE curriculum in Nairobi and Nyeri pre-schools.Consequently, the results of the study can not be generalized to other areas in the country. Children from the pre-unit class were used in the study as it is the senior level at the pre-school system. This research involved pre-school headteachers, pre-school teachers, parents, pre-schoolchildren and DICECE personnel.

1.9 Basic Assumptions

In this study, it was assumed that the guidelines and policy for pre-schools from the Ministry of Science and Techonology were adhered to in all the pre-schools in Nairobi and Nyeri counties.

1.10 Definition of the Key Terms

Curriculum: Refers to a programme of courses or units to be covered in a particular activity area.

Early Childhood Education: A programme of education for children between three and six years preceding primary school.

Effectiveness: Refers to the extent to which the programme objectives have been achieved. Also refers to when the outputs produce the desired outcomes.

Impact: Refers to what has happened as a result of a programme. Looks at the difference the programme has made to the beneficiaries.

Efficiency: A measure of the relationship between the outputs and the inputs of a programme. Measures how economically resources have been converted into results.

Evaluation: Refers to the collection and use of information to make decisions about an educational programme.

Implementation: Refers to the execution/teaching or the carrying out of the curriculum by teachers.

Movement skills: Refers to body movements which are divided into: locomotor, non-locomotor and manipulative skills such as running, skipping, hopping, climbing, rolling, jumping, racing, swinging, throwing, kicking, batting and striking.

Outdoor activities: Refers to an activity area in ECE which is involved in outdoor play and physical activities.

Physical activity: Refers to any bodily movement produced by the contraction of the skeletal muscles that increases energy expenditure above the baseline level.

Physical Education: A structured programme of education in which physical activity is the medium of instruction.

Pre-unit class: Refers to the senior level of ECE catering for 5 year olds.

Pre-school: An institution that offers educational experience to children age three to five years before joining primary school education.

Relevance: Refers to the extent to which the objectives of the programme correspond with the requirements and needs of the child. Also refers to the usefulness of a programme.

Sustainability: Refers to the persistence of a programme. It addresses the long- term effects of a programme and it is concerned with the maintenance, financial and economic viability of keeping a programme running.

1.11 Organisation of the Study

This study is organized into five chapters. Chapter one includes the background to the study, statement of the problem, purpose of the study, research objectives and questions, significance of the study, limitations and delimitations of the study, basic assumptions and the definition of significant terms. A review of

related literature, the theoretical framework and the conceptual framework are presented in chapter two. Chapter three consists of the research design, the target population, the sample and sampling procedure, the research instruments, validity and reliability of the instruments, procedure for data collection and data analysis techniques. Presentation, analysis and discussion of the findings of the study are dealt with in chapter four. Chapter five presents the summary, conclusions and recommendations for practice, policy and further research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This section deals with a review of the literature on the various aspects related to the study. The major aspects covered are; PE in the pre-school, evaluation of programmes, relevance, efficiency, effectiveness, impact, and sustainability of the implementation of PE programmes, the theoretical and the conceptual frameworks.

2.2 Physical Education in the Pre-school

Historically, involvement in physical activity has been considered an important part of human activity (Hardman, 1995) and this explains why physical activity continues to be present in school curricula in the formal education, physical education. Indeed for centuries, pioneers of ECE such as Johann Pestalozzic (1764-1827) and Friedrich Froebel (1782-1852) have recognized the benefits of PE and validated the need for outdoor play and learning (Wellhousen, 2002).

Physical Education is a structured activity area in the pre-school curriculum which gives children opportunities to learn about their environment through the medium of physical activities. The activity area is referred to as outdoor and physical activities in the KICD curriculum (KICD, 2008). Physical Education has been part of the pre-schools activities as children are always engaged in various forms of play such as singing games, dancing and playing games such as football, hit the dodger and hide and seek.

The first pre-school in Kenya dates back to the early 1940s when pre-schools were concentrated in the urban centres and catered for the Europeans and Asians. After independence in 1963, pre-schools were set up throughout the country by self-

help groups, religious and welfare organizations. Parents were responsible for building constructions and recruitment of teachers for the pre-schools. Young children from the age of two years gathered in the pre-schools and with the teachers sang songs, played games and listened to stories. By the end of the 1960s, there was no viable training programme for teachers, nor supervision or clear set programme of activities. In 1966, the Ministry of Co-operatives and Social Services began to register and supervise virtually all private and self-help day care centres and courses for nursery teachers' training in several parts of the country were established (Kipkorir & Mwaura, 1988).

Soon after Kenya became politically independent, there was no organized curriculum or other support materials for use in the pre-schools. To address these challenges, the Government of Kenya with the assistance from Bernard Van Leer Foundation created the Pre-school Education Project based at KICD between 1972 and 1982. The objectives of the project were to improve the quality of the pre-school education through the development of viable training and the creation of curriculum and other support materials for use by the trainers, teachers and children. When the project was evaluated in 1982, it was recommended that the activities of the project should continue especially outdoor activities. This was done through the creation of National Centre for Early Childhood Education (NACECE), which was established in 1984, followed by the implementation of District Centres for Early Childhood Education (DICECE) in 1985 to facilitate decentralization of ECDE programmes (Kipkorir & Njenga, 1993).

The ECE guidelines were derived from the pre-school project of 1972-1982, they were revised in 2000 and are used in most pre-schools in Kenya with the aim of promoting children's holistic development. The Physical Education curriculum content includes: body movement without apparatus, body movement with

apparatus, games, dances and swimming (Republic of Kenya, 2005, KICD, 2008). PE as an activity area can be conducted either indoors or outdoors. Indoor play varies depending on the amount of space available and the setting in which the physical activity is taking place. On the other hand, outdoor play is conducted in the outside environment which may have different surfaces such as grassy, sandy, water and soil areas (Robsinson et al., 1998).

Physical activity, which is the core of PE, positively impacts the growth and development of children. According to Pangrazi (1998) and Wetton (1988), research supports the value of an active lifestyle for optimum growth and development. The World Bank (1989) confirms that the child's fastest growth in physical, mental and socio-emotional characteristics takes place during the age of 0-5 years. UNICEF/UNEP (1990) further points out that, the child is most vulnerable to environmental influences during this period, and growth deficiencies occurring during this period are difficult and sometimes impossible to reverse.

Robinson et al., (1998) highlight the various benefits of PE to the growth and development of children. Physically, it strengthens muscles, helps to develop the lungs by deep breathing, improves coordination, body awareness, balance and body awareness. It enhances good posture, helps to prevent the buildup of body fat, promotes sleep, improves appetite and digestion of food. It also improves circulation by strengthening the heart muscles, develops manipulative skills, spatial awareness and eye-hand coordination. Socially, emotionally and cognitively, it encourages achievements and a sense of purpose which raises self-concept, encourages self expression and self-control. It encourages cooperative behaviour such as sharing and taking turns, gives an opportunity for adventure and for learning how to cope with fears and anxieties. When at play, children have been found to persevere longer in seeking solutions to problems in the tasks they engaged in (Bruce, 1991). There is

also a relationship between motor experience, creativity and cognitive development as PE helps to develop conceptualization. It stimulates mental development as children play with others, with objects around them and as they explore more of the world around them (Drewe, 2001; Galloway, 2007; Macfadyen & Bailey, 2002).

Studies by National Association for the Education of Young Children (NAEYC) (1988) and National Council of Teacher of Mathematics (NCTM) (1989) indicated that children use play to explore, imitate, test and construct reality from the world around them. Play activities have also been found to result in concentration, mental effort, motivation, innovativeness and achievement (Whitebread, 1996). Other studies by Moyles (1989), Seefeldt and Barbour (1994) indicate that creativity and cognitive development are strongly linked to play process in children's learning. The extent to which young children in the pre-schools were engaged in PE in order to acquire these benefits of play needed to be established.

The PE curriculum in ECE involves the teaching of fundamental movement skills, games, dances and swimming. Fundamental movement skills are the foundation for the development of more complex and specialized skills used in games, dance and fitness activities. Fundamental movement skills are basic movements that are divided into locomotor, non-locomotor and manipulative skills. Locomotor activities include running, hopping, and skipping. Non-locomotor activities includes curling, swinging, and turning while manipulative skills include striking, kicking, and dribbling (Graham, Holt/Hale, & Parker, 2004; KICD, 2008).

Galluhe and Ozmun (1996) point out that some educators believe that young children will automatically develop their movement skills when they are ready. This belief is partially true as maturation allows children to perform certain movement skills at a very low level of performance. In addition to maturation, the development of movement skills is also influenced by environmental conditions such as

opportunities for practice, encouragement and instruction. As Seefelt and Barbour (1994) put it, it is only with continuous regular instruction and practice that a child's level of performance will increase to proficiency. Learning these fundamental skills will facilitate the maintenance and improvement of physical fitness not only during children's school years but also in their adult years (Sallis & McKenzie, 1991). It is therefore, imperative to conduct evaluation studies to ascertain whether physical activity programmes are effectively implemented or learning is left to take a natural course. This study examined the implementation of the PE programme in Nairobi and Nyeri pre-schools to establish its relevance, effectiveness, efficiency, impact and sustainability.

2.3 Evaluation of Programmes

Alkin (1972) defines evaluation as the process of ascertaining the decision areas of concern, selecting appropriate information, collecting and analyzing information in order to report summary data useful to decision makers. In addition, Rutman (1977) points out that, evaluation research is a useful input for planning and policy making. The purposes of an evaluation research as outlined by Rossi, Lipsey and Freeman (2004) are: aiding in decisions concerning whether programmes should be continued, improved, expanded or curtailed, assessing the utility of new programmes and initiatives, increasing the effectiveness of programme management and administration, and satisfying the accountability requirements of programme sponsors. They further explain that evaluation involves assessment of one or more of five programme domains; the need, the design, the implementation and service delivery, the impact or outcomes and the efficiency.

Patton (2002) defines programme evaluation as the systemic collection of information about the activities, characteristics and outcomes of programmes to

make judgments about the programme, improve programme effectiveness and to make decisions about future programmeming. Originally, programme evaluation focused on measuring attainment of objectives (summative evaluation) but in recent years, programme improvement (formative evaluation) has also become important as it can be used to monitor the fidelity of a programme delivery. This study focused on both formative and summative evaluation.

Formative evaluation emphasizes on programme processes, implementation issues and qualitative data. Patton (2002) points out that whereas it is important to establish the extent to which a programme is effective after it is fully implemented, it is important to learn the extent to which the programme was implemented. A decision maker can use implementation information to make sure that a policy is being put into operation according to the design or to test the feasibility of the policy. Unless one knows that a programme is operating according to design, there is little reason to expect it to produce the desired outcomes. Furthermore, until the programme is implemented and a treatment is believed to be in operation, there may be little reason even to bother evaluating outcomes. Where outcomes are evaluated without knowledge of implementation, the results seldom provide a direction for action because the decision makers lack information about what produced the observed outcomes.

According to Stufflebeam and Shinkfield (1985), Tyler is acknowledged to be the pioneer in the objective-oriented evaluation approach. This approach has been the most dominant type of study used in evaluation studies. The methods used in these studies essentially involve the collection and analysis of performance data relative to specified objectives. Many people have extended the work of Tyler by developing variations of his objective-oriented evaluation approach such as Hammond (1973) and Provous (1971). These objective-oriented approaches have

been criticized that they mainly yield terminal information that is delivered too late to be used in improving services and that this information is often too narrow to constitute a sound basis for judging the value of a service (Worthen & Sanders, 1987).

Management-oriented evaluation approaches are alternative evaluation approaches, which emphasize that, evaluation should be used proactively to help improve a programme as well as retroactively judge its value. The purpose of this evaluation is to provide knowledge and value base for making and defending decisions (Stufflebeam & Shikfield, 1985).

Developers of these approaches relied on a systems approach to education in which decisions are made about inputs, process and outputs. Stufflebeam et al., (1971) developed the CIPP Evaluation Model to serve managers and administrators facing four different kinds of educational decisions; Context evaluation; to serve planning decisions, Input evaluation; to serve structuring decisions, Process evaluation; to serve implementing decisions, and Product evaluation; to serve recycling decisions. Context evaluation helps in determining needs that are to be addressed in an educational programme and in defining objectives for the programme. Input evaluation helps in identifying and assessing system capabilities, alternative programme strategies, procedural designs for implementing the strategies, budgets and schedules. Process evaluation is an ongoing check on the implementation of a programme. Its objectives are; to provide feedback to managers and staff about the extent to which the programme activities are on schedule, to provide guidance for modifying the programme as needed, to assess periodically the extent to which programme participants accept and are able to carry out their roles, and to provide an extensive record of the programme that was actually implemented, how it compares to what was intended and overall, how observers and participants

judged the quality of the effort. Product evaluation helps to collect descriptions and judgments of outcomes and relate them to objectives and to context, input and process information. It helps to interpret the worth and value of a programme (Stufflebeam & Shinkfield, 1985; Worthen & Sanders, 1987).

The CIPP model was relevant to this study as the research evaluated the implementation of the PE curriculum to find out whether what was actually implemented was comparable with what was initially intended. The findings will provide feedback and guidance on the PE programme. To carry out the evaluation, this study was guided by the Development Assistant Committee (DAC) programme evaluation criteria which consist of relevance, efficiency, effectiveness, impact, and sustainability to evaluate the implementation of the PE curriculum in the pre-schools. Relevance focuses on the extent to which the objectives of a programme are consistent with the beneficiaries' requirements, country needs, global priorities, partners and donor policies. Efficiency measures how economically resources are converted to results while effectiveness examines the extent to which the programme objectives were achieved. The impact criterion assesses the positive and negative, primary and secondary long-term effects produced by a programme, directly or indirectly, intended or unintended. Sustainability establishes the continuation of benefits or the probability of long term benefits of a programme (OECD/DAC, 2008).

The DAC evaluation criteria are consistent with the CIPP Model as each criterion guides in the evaluation of the different phases of the model. The relevance criterion which focuses on the extent which objectives of a programme address the client's need aids in the context evaluation. The efficiency criterion which measures the relationship between inputs and outputs aids in the input and process evaluation. The effectiveness, impact and sustainability criteria which look at the outputs, the

difference that the programme has made on the client and the financial viability of the programme aids in the product evaluation.

According to Anderson and Arsenault (2002), the logical framework is one of the most powerful frameworks for investigating educational processes as it provides a structure for project planning and evaluation research. The framework shows what is expected and by monitoring and evaluation, one can observe whether these expectations are achieved. The assumption is that when certain inputs are contributed, certain outputs are expected and thus, there is a relationship between inputs and their corresponding outputs. If outputs are achieved, it is assumed that the purpose is achieved and thus, the goal of the programme is also achieved.

Studies have been done to evaluate the implementation of PE programmes at different levels and categories of education in Kenya and in other countries. Madeje (1981) conducted an evaluation study on the implementation of the PE programme in Dar-es-salaam city primary schools which reavealed that the unavailability of PE teachers, the negative attitude of some teachers, city education administrators and parents contributed a lot towards poor implementation of PE programmes. Muniu (1986) conducted an evaluation of the implementation of the PE curriculum in Kenya's Teachers Diploma Training Colleges. The study sample comprised of five diploma colleges which were randomly selected. The research instruments used to collect data were questionnaires and interview schedules. The study revealed that all the topics in the PE curriculum were relevant to the secondary schools. However, there was content that was not catered for in the curriculum such as outdoor activities, dance, adapted PE, research and improvisation. Instruction of PE was affected by inadequate time allocation, large classes, inadequate facilities, equipment and materials, and shortage of staff. Similar findings on inadequacy of facilities, equipment and materials were revealed by a study carried out to evaluate the

implementation of the PE curriculum in Kenya's Teachers Primary Training Colleges (Kiganjo, 1987). However, the study on the evaluation of the implementation of the PE curriculum in Kenya Teachers Primary Training colleges found that implementation was also affected by inadequate financial allocation to the PE department.

Okoko (1998) carried out an evaluation on the implementation of PE to the mentally retarded to examine the constraints encountered by teachers in Nairobi. The study found that, majority of the teachers were not specially trained to handle mentally retarded learners, the objectives of the PE syllabus were difficult to interpret and achieve, there was inadequate teaching facilities and equipment, time allocations were varied, negative attitude by administrators and teachers and difficulties in dealing with the learners' handicapping conditions. Akiiki (2010) also carried out a study on a comparative assessment of syllabi and implementation of PE and Sport programmes in primary and secondary schools in Kenya. The study used the ex post facto research design and involved teachers and headteachers from 384 schools from 23 districts in Kenya and 25 districts in Uganda. Structured questionnaires and documentary analysis were used to collect data for the study. The study revealed that the PE syllabi used in Kenya and Uganda were different but the structure of the PE programmes, time allocation, content and objectives were closely similar.

The aforementioned evaluation studies have been carried out at the primary (Madeje, 1981; Akiiki, 2010), secondary (Akiiki, 2010) and college (Muniu, 1986; Kiganjo, 1987) tiers of the education system while Okoko (1998) carried out an evaluation study in special schools. A gap exists as no study has been carried out to evaluate the implementation of the PE curriculum at pre-school level and with children. This study intended to fill that gap by carrying out a comparative

evaluation of the implementation of the PE curriculum in Nairobi and Nyeri pre-schools. None of the evaluation studies had used the DAC programme evaluation criteria which were used in this study.

2.4 Relevance of the Implementation of the PE Programme

According to OECD/DAC (2008), the relevance criterion focuses on the usefulness of the programme. It examines whether the agreed upon objectives are still valid and whether they represent sufficient rationale for continuation of the programme. The Early Childhood Development Education syllabus (KICD, 2008) stipulates the objectives of outdoor activities/PE which include: to explore and develop personal talents and skills, to develop large and small motor skills, to control and co-ordinate body parts, to develop co-operation and socialization skills.

Robinson et al., (1998) highlight the contribution of a PE programme to the physical, social, mental and emotional growth and development of children. PE improves fitness, coordination, balance, body awareness, and develops manipulative skills. It also encourages achievements, a sense of purpose which raises self-concept, develops conceptualization, encourages self-expression, self-control, cooperative behavior and releases tension (Bailey, 2006). Studies by NAEYC (1988) and NCTM (1978) indicated that children use play to explore, imitate, test and construct reality from the world around them. Although there is mixed evidences on whether established health-related behaviours at childhood influence maintenance of physical activity patterns overtime, Bailey (2006) affirms evidence that there is a relationship between physical activity and a host of factors affecting children's physical health, including diabetes, blood pressure and obesity.

Stewart and Van der Mars (2010) posit that the issue of children's sedentary lifestyle is of great concern yet school-based PE is often sacrificed in the name of providing more time for academics. There should be advocacy for school-based PE

programmes as they engage children in regular physical activity, help them acquire skills and habits necessary for pursuing active lifestyles. These programmes are relevant and should not be sacrificed as they help children maintain their physical fitness and curb lifestyle diseases such as obesity. Studies have shown that learners' achievement levels remained unchanged when schools increased or reduced instructional time for PE. Researchers in Australia studied 350 fifth graders in seven schools throughout the country. The instructional time for PE for the experimental group was increased by 210 minutes per week while the control participated in the standard PE lessons. After 14 weeks, there were no significant differences in mathematics or reading skills between students who received additional PE instruction and those who engaged in the standard three 30 minutes periods of PE per week (Dwyer, Coonan, Leitch, Hetzel & Baghurst, 1983). A study involving more than 500 Virginia elementary schools examined the effect of decreasing time for PE, music and art on academic performance. The study found that reducing or eliminating the time learners spent on the three subjects did not increase academic achievement (Wilkins et al., 2003).

The Gallup National Omnibus Physical Activity Study on the relevance of school-based PE revealed that 94% adult Canadians said that PE in schools was important while 67% thought it was very important. Over half (51.8%) felt that the subject was important such as mathematics and reading (Gallop National Omnibus, 1998). A study carried out on the status of PE in Butere Division secondary schools revealed that PE was a valued subject among the students and the teachers. The study used the survey research design and used stratified random sampling to select 6 schools. The sample comprised of 186 participants, 150 students and 6 PE teachers. Questionnaires and observation checklists were used to collect data for the

study. Majority of the learners (96%) responded that PE was an important subject in the school curriculum (Onwonga, 2005).

A study to evaluate the health related levels of secondary school students in Kenya revealed that participation in school-based PE programmes was beneficial to learners. The study sample comprised of 100 subjects aged between 14-17 years. The experimental group consisted of 25 boys and 25 girls who were exposed to three lessons of PE per week for a period of ten weeks. The control group consisting of 25 boys and 25 girls did not participate in PE lessons. The subjects were finally compared in fitness levels of the following components: cardiovascular endurance, abdominal muscular endurance, trunk flexion and the sum of skin fold. The findings indicated that participants in the PE programme performed better in cardiovascular endurance, abdominal muscular endurance and trunk flexion than those who did not participate in the PE programme (Esmail, 1983).

Kinoti (1998) carried out a study aimed at establishing health related fitness levels of the teacher trainees at Kenya Science Teachers College (KSTC). The sample comprised of 40 first year, 40 second year and 40 third year male and female trainees. An experimental research design was used. Pre-tests were done and all the subjects were exposed to PE lessons which were taught by KSTC PE lecturers. After 8 weeks, the post-tests were conducted and the subjects were tested on the following variables; cardiovascular endurance, muscular endurance, body composition and flexibility. The findings indicated that the participants had improved in all the variables. It was concluded that, PE programmes are capable of improving health related fitness of learners.

A study on the factors that influence the quality and relevance of ECE in Kenya was carried out in Machakos and Nairobi district. The study was carried out due to the concern among Kenyan pre-school education practitioners that the current

approach to ECE that emphasize the academic component at the expense of other areas of development could be curtailing the provision of quality and relevance experiences to children. The study purposively selected 26 sample schools in Nairobi and Machakos and used informant interviews schedules, focused group discussions, document analysis and classroom observation to collect data. The study found that the quality and relevant of ECE was affected by inadequate government policy framework, parents' expectation of pre-schools education, inadequate state of learning materials and supervision, poor terms and conditions of service, and motivation of teachers (Wawire, 2006).

Empirical studies have revealed the relevance of PE in schools (Esmail, 1983; Kinoti, 1998) and others have shown that PE does not affect the academic performance of learners (Dwyer, Coonan, Leitch, Hetzel & Baghurst, 1983; Wilkins et al., 2003). These studies have employed experimental design and have not been conducted at the pre-school level inNairobi and Nyeri counties. The survey studies (Gallop National Omnibus, 1998, Onwonga, 2005) addressing the relevance of PE were also not carried out at the pre-school level. The study on the factors influencing the quality and relevance of ECE has been carried out in Kenyan pre-schools but it has not addressed the area of PE and neither has it been carried out in Nairobi and Nyeri counties. No empirical study has been done in Kenya and especially in Nairobi and Nyeri counties to examine the relevance of the implementation of the pre-school PE curriculum. This current study intended to fill this gap.

2.5 Efficiency of the Implementation of Programmes

According to Anderson and Arsenault (2002), efficiency measures the relationship between the outputs (the products) of a programme and the inputs (the resources). A programme is said to be efficient if it uses the least costly resources

that are appropriate and available to achieve the desired outputs (OECD/DAC, 2008). To evaluate the efficiency of a programme, the focus is on the management of the programme. This involves addressing issues concerning: policy, administrators, teachers, parents, educational officers, funding, time and learning resources (Ministry of Foreign Affairs of Denmark, 2006). For the pre-school PE curriculum to achieve the intended objectives, a clear policy on matters such as time allotments and scheduling, class size, child/ teacher ratio, teaching space, and teaching patterns should be considered to guide the implementation.

Policies are guides that reflect procedures which when adhered to, fulfill the best interest of the organization and the purposes for which it exists (CARICOM, 2011). Policies are necessary in any organization as they provide structure and direction. An educational system provides policies which guide the implementation of educational activities at every level. At the school level, policies are also formulated to ensure the implementation process is well coordinated as lack of policies lead to poor implementation of pre-school's programmes. Dowda et al., (2004) carried out a study to determine if moderate to vigorous physical activity (MVPA) of 3-5 year olds pre-school children varied with differences in policies and overall quality of pre-schools. A total of 266 children from 9 pre-schools were observed for 1 hour on three different days. Physical activity of children was observed twice per minute and scored as 1-5 with 1 for stationary/motionless and 5 for fast movement. Summary MVPA was calculated over the 3 days as percent of times observed at levels of 4 or 5, and percent of time at levels 1 or 2 as sedentary activity. A structured interview about physical activity policies was conducted with an administrator at each school and overall quality of the pre-school was assessed using EC Environment Rating Scale=Revised Edition (ECERS-R). Pre-schools were divided into groups according to whether a specific policy present in a pre-school

was assumed to promote physical activity. MVPA differences between groups of children were assessed. The findings revealed that when pre-school offered more field trips and more college educated teachers, the children participated in more MVPA. Children who attended pre-schools with lower quality spent more time in sedentary activity.

Hardman and Marshall (2000) did a survey about the status of PE in African countries and 75% of schools in Africa were reported not to meet the legal policy requirements for PE. The gaps included poor curriculum policies, low curriculum time allocation for PE, low perceived importance of PE, poor attitudes towards PE by school administrators, parents, teachers, lack of formal monitoring control, diversion of resources for PE to other projects, insufficient financial and material resources, deficiencies in number of properly trained and qualified teachers.

A study by Gatumu (2010) on the tasks of headteachers in the implementation of pre-school curriculum in Kenya's public pre-schools points at a lack of a clear ECE policy. Some of the 33 headteachers interviewed indicated that they work under unavailable and unclear government policies and this made it difficult for the implementation of the pre-school curriculum to be effective. The Policy Review Report (2005) on ECE notes a problem of implementation of ECE principles as many pre-schools placed so much emphasis on the literacy and numeracy skills (Republic of Kenya, 2005). This has an impact on other ECE activity areas as observed by Wawire (2006) and Ng'asike (2004). This was also observed in a study by Muindi (1998) on the relationship between performance in physical skill and academic achievement in primary schools which found that PE was timetabled but the time for PE was used to teach other subjects. Similar findings were reported from a study carried out to assess teachers' participation in PE programmes in public primary schools in Westlands divison (Nyonje, 2004).

Hardman and Marshall (2000) report show that the problem of time allocation is not only a Kenyan issue as in 50% of African countries studied, PE was reported not to have attained equal status with other subjects. Consequently, in 93% of the African countries, PE lessons were cancelled or replaced from the timetable by academic subjects such as English language and mathematics.

Studies on factors affecting children's outdoor play and pre-school PE programmes in Langat division in Nairobi and Sagana zone in Kirinyaga district revealed that, time allocated was inadequate and PE lessons were on the time table but they were not taught in some pre-schools (Njoki, 2007; Gaceri, 2010).The study carried out in Nairobi only covered Langata division and not all the divisons in Nairobi. An empirical comparative study has not been done to examine the implementation of the pre-school PE curriculum in Nairobi and other counties. This study intended to provide information on these existing gaps.

The partnership policy in the provision of ECE services has attracted the participation of other partners creating variations in the modes of provision of ECE and this situation makes it hard for the government to reinforce any set standards. This different modes of provision of ECE leads to poor implementation of the PE programmes as pre-schools follow different policies in the teaching of PE.A study was carried out by Pate, Pfeiffer, Trost, Ziegler and Dowda (2004) to determine the extent to which children's physical activity varied among pre-schools. A total of 281 children from nine pre-schools wore an Actigraph accelerometer for an average of 4.4 hours per day for an average of 6.6 days. Each child's height and weight were measured. The findings revealed that pre-school policies and practices have an important influence on the overall physical activity of children.

A study on the teachers' use of play as a medium for bridging pre-school children's mathematical experiences in Kasarani found that, it was challenging to translate the pre-school curriculum in the varied environments. Pre-schools offered

different variations of the pre-school curriculum depending on the sponsorship in terms of time allocation and scheduling, teaching patterns and approaches (Ng'asike, 2004). Ngasike (2004) examined the use of play as a medium for bridging pre-school children's mathematical experiences and found that, the varied provision of ECE affected the implementation of the pre-school curriculum. The study was carried out with a focus on the mathematics activity area. It would be interesting to examine whether the varied provision of ECE had an effect on the implementation of the PE curriculum. Given these concerns on ECE and PE policies matters, this study was intended to provide information on the nature of policies governing the teaching of PE in Nairobi and Nyeri pre-schools.

Provision of learning resources is a key teaching issue in ECE as the facilities of a pre-school available for the conduct of a PE programme determine to a considerable extent the type of programme that can be offered. Wetton (1988) points out that, PE objectives can be achieved if the programme presents a wide variety of activities as any limitation of facilities creates difficulties in presenting the desired variety of activities. Harrison (1983) argues that, well organized and imaginative use of space and facilities however limited can lead to a realization of the desired objectives. A creative teacher will make the best use of available space both within the school and the community.

Studies carried out at various tiers of the Kenyan educational system reveal a problem of inadequate PE facilities and equipment (Muniu, 1986; Kiganjo, 1987, Muindi, 1998; Simiyu, 1990; Wawire, 2006, Njoki, 2007; Giceri, 2010). Maina (2011) carried out a study to establish the challenges facing the provision of pre-school education in North Kinangop division. The study used a descriptive survey design and had a sample of 12 pre-schools. Questionnaires and observation guides were used to collect data for the study. The findings of the study revealed pre-

schools had inadequate PE facilities and equipment. Among the randomly selected pre-schools, some did not have playgrounds for children to play on.

Simiyu (1990) carried out a study to assess the PE learning resources in selected secondary schools in Uasin Gishu district. The study had a sample of 40 secondary schools which were randomly selected on a stratified basis from all secondary schools in Uasin Gichu district. Questionnaires were used to collect data from the heads of the PE department and from the head teachers. The findings of the study revealed that factors of location, financial allocation, school enrollment, school age and level of emphasis on PE in the school had a significant relationship with the availability of a wider variety of outdoor facilities, equipment and maintenance of the outdoor facilities. However, school sponsorship, gender and nature of the school had no significant relationship with resource provision.

The aforementioned studies reveal that schools in Kenya face a challenge of inadequate facilities and equipment and this affects the implementation of the PE programmes. These studies have been conducted at various tiers of education of Kenya. However, none of the studies have examined the status of the availability of PE learning facilities and equipment in all the divisions of Nairobi county and in Nyeri county. It would be interesting to examine whether Nairobi and Nyeri counties have pre-schools with no playground as found in North Kinanop division (Maina, 2011). It would also be of interest to find out if school sponsorship and nature of the school has a relationship with resource provision in Nairobi and Nyeri pre-schools as the study carried out by Simiyu (1990) in secondary schools found that there was no significant relationship between school sponsorship and nature of the school has a relationship with resource provision.

Wawire (2006) posits that the problem of inadequate PE facilities and equipment is heightened by the exclusion of ECE from the Education Act (Republic

of Kenya, 2006). The exclusion renders ECE a non- priority area for government funding leading to low government budgetary allocation to the pre-school sector. This makes it hard for the pre-schools especially the public pre-schools to provide the necessary facilities, equipment and materials for teaching and learning as the pre-schools have to rely on the minimal schools fees paid by the parents. Studies carried out in various educational institutions in Kenya affirm that the major challenge in the provision of PE learning facilities and equipment is lack of finances (Muniu, 1986; Kiganjo, 1987; Simiyu, 1990; Muindi, 1998, Abagi, 2008; Akiiki, 2009). This study intended to establish whether this was the major challenge in the provision of PE learning facilities in Nairobi and Nyeri pre-schools.

Despite the importance of learning resources, Ndwiga (2005) in a study on resource management in schools indicated that teachers in most pre-schools did not improvise learning materials, yet the pre-schools had a challenge of providing enough materials. However, Wawire (2006) noted in a study on factors that influence the quality and relevance of ECE in Nairobi and Machakos districts that pre-school teachers used locally available materials in their teaching. These findings from Ndwiga (2005) and Wawire (2006) give different observations on teachers' use of improvised learning materials. This study was sought to find out whether teachers from Nairobi and Nyeri pre-schools made use of improvisation as a strategy to complement PE learning facilities and equipment.

According to Sifuna (1975), the strength of any educational system largely depends upon the quality of its teachers. He argues that, however progressive its aims, modern and abundant its equipment and efficient its administration, the success of any educational enterprise is determined by teachers. Makatiani (2008) in a study on policy implementation in Early Childhood Teacher Education institutions further points out that, the effectiveness of teaching depends with the teacher as the

teacher plays a key role in the learning process. In support, Gorgan (1993) further stresses that, a trained teacher is more important than the curriculum as an untrained teacher will teach poorly while a trained teacher will be able to overcome the deficiencies in any curriculum.

Kivuva (1997) did a study to compare the professional qualities of teachers in urban pre-schools under the different sponsorship. The sample consisted of 20 pre-schools in Nairobi ECE, 5 from each school category; City council (CC), church sponsored (CS), private (P) and self help (SH). Questionnaires, interviews, observation guides and documentary analysis were used to collect data. The findings from the study revealed that majority of pre-school teachers are Kenya Certificate of Secondary Education (KCSE) holders. Holders of Kenya Certificate of Primary Education (KCPE) holders had joined the profession much earlier and had taught for ten years or more. They were prevalent in church and self help pre-schools. The teachers had varied types of training. The largest number of teachers was trained by City Centre for Early Childhood Education (CICECE) while the others were trained by Montessori and KHA. This study was carried out only in Nairobi county and compared the professional qualities of teachers under the different pre-school sponsorship. There was need to establish the professional qualities of teachers in Nairobi and Nyeri pre-schools and to examine whether they were professionally qualified to implement the PE curriculum.

Apart from the professional training, there is also need for teachers to have a positive predisposition towards PE as beliefs may determine what a teacher teaches as well as the factors that may be preventing the teacher from teaching (Coon, 1997). As Faucette and Patterson (1989) found out in their study, elementary school teachers' negative attitudes about teaching PE were congruent with their teaching behaviours while teaching PE. In a study on the attitudes of primary school pre-

school teachers towards social studies in Machakos, Wasanga (1987) also points out that, pre-school teachers' attitude affect the behaviour and subsequent performance of the children. Studies on the impact of teachers' attitude towards teaching also assert that teachers' attitude affects not only the manner of teaching but also the way they handle the children (Omwenga, 1992).

Studies carried out at the pre-school, primary and secondary school levels have revealed that PE implementation is affected by the poor attitudes of teachers towards the subject (Madeje, 1981; Muindi, 1998, Njoki, 2007; Akiiki, 2009, Gicheri, 2010). None of these studies were carried out in all the divisions of Nairobi or in Nyeri pre-schools. This study intended to find out whether the teachers' attitudes influenced the teaching of PE in Nairobi and Nyeri pre-schools.

PE programmes are also influenced by the instruction from the teacher as the teacher has the responsibility of tailoring the PE content, the teaching methods and materials around suitable learning activities (Galluhe, 1993). The KIE handbook for ECE (2008) recommends free play and directed play while the guidelines for pre-schools in Kenya (1984) recommend that free play should be given more time than directed play as they favour child-centred teaching methods.

A study by Ndegwa (2005) on factors influencing pre-school teachers' attitudes towards child-centred teaching methods in Nairobi found that teachers' choice of method is influenced by their academic level and training, where the higher the level of teachers' education, the more favourable they are towards child-centred methods. She noted that as the teachers' age advance, teachers' attitude also changes from teacher-centred to child-centred methods. This study examined the factors influencing pre-school teachers' attitudes towards child-centred teaching methods only in Nairobi and this was not related to a specific activity area. This study intended to establish the teaching methods used to teach PE in Nairobi and

Nyeri pre-schools and to establish the factors that influenced their choice of teaching method.

ECE in Kenya has remained a responsibility of parents, community, organizations, NGOs and local government authorities. Their role includes: provision of funds, labour, facilities, feeding programmes, learning and playing materials, employment of the teachers and management of the pre-schools (Kwenya, 2003). Being stakeholders of pre-schools, parents' expectation of pre-school affects the quality of ECE as most parents want their children to perform well in literacy and numerical skills. This pressure from parents makes teachers concentrate on academics at the expense of the other aspects such as play (Wawire, 2006). This is bound to have an effect on pre-schools children's play as parents socialize their children into sports and their participation in PE and sport is determined by attitudes, values and beliefs of those closely associated with them (Rintaugu, 2005). Muindi (1998) and Nyonje (2004) affirmed that pressure from parents made teachers in primary schools concentrate on academics at the expense of other 'non-academic' subjects. Wawire (2006) findings were from Nairobi and Machakos districts. This study intended to establish whether Nyeri and Nairobi pre-school teachers were facing the same pressure from parents and whether this affected the implementation of the PE curriculum.

2.6 Effectiveness of the Implementation of Physical Education Programmes

Anderson and Arsenault (2002) point out that a programme is considered to be effective when its outputs produce the desired outcomes. Effectiveness focuses on the extent to which the objectives of a programme are achieved or are likely to be achieved. It examines factors that influence the achievement or non-achievement of the objectives (OECD/DAC, 2008).

Objectives are brief statements that articulate the knowledge and skills the teacher expects the learner to acquire at the end of the course. The pre-school curriculum stipulates the general objectives of PE. The objectives include; to explore and develop personal talents and skills, to develop large and small motor skills and strengthen body muscles, to relax and enjoy and to control and coordinate different parts of the body (KICD, 2004). Schools must assess how well learners have achieved the general objectives.

Various studies reveal that well planned and presented PE programmes can achieve the intended objectives of the programmes. McKenzie et al., (2004) developed, implemented and assessed a PE intervention meant to increase physical activity during middle school PE classes. The evaluation of the two year PE intervention involved 24 middle schools in Southern California The schools were randomly selected and assigned to intervention (n= 12) or control (n=12) conditions. The control school continued with the usual programmes. Students' activity and lesson context were observed in 1849 PE lessons using a validated instrument during baseline and intervention years 1 and 2. The intervention significantly improved student moderate to vigorous physical activity in PE by approximately three minutes per lesson. This was achieved without increasing the frequency or the duration of PE lessons. Similarly, Martin, Martin and Rosengard (2010) evaluated the PE2GO progamme, a self-contained PE programme that provides classroom teachers with the tools they need to lead developmentally appropriate PE lessons. The physical activity programme was evaluated in 6 school districts across the United States. Paper and pencil surveys were used at pre intervention (n=114) and mid intervention (n=94) while an electronic survey was used at post intervention (n=65). An electronic survey was also sent to administrators (n=18) at pre intervention while focus groups were conducted with teachers at mid intervention. Teachers were

satisfied with the effects it had on their students as it increased their physical activity time.

An evaluation of the secondary school PE programme in Kenya carried out by Esmail (1983) found that participants in the PE programme performed better in cardiovascular endurance, abdominal muscular endurance and trunk flexion than those who did not participate in the PE programme. A study on the effectiveness of a regular PE programme as compared to a proposed physical fitness programme was also carried out in a secondary school in Kenya. The study comprised of 80 subjects. The experimental group had 20 boys and 20 girls. It was exposed to the proposed physical fitness programme while the control group engaged in regular PE lesson for 9 weeks. A pre-test and post-test design was used to test the subjects in cardiovascular endurance, sum of skin fold fat, abdominal muscular endurance, lower back and hamstring flexion and strength. The experimental group performed better in cardiovascular endurance, sum of skin fold fat, abdominal muscular endurance, lower back and hamstring flexion and strength (Wasonga, 1989).

These experimental studies show that PE objectives can be achieved if PE programmes are well implemented. None of the aforementioned studies have been carried out at the pre-school level at Nairobi and Nyeri pre-schools. This study intended to examine whether PE objectives were achieved in Nairobi and Nyeri pre-schools. This study examined the implementation of the pre-school PE curriculum in Nairobi and Nyeri to ascertain whether it led to movement skills learning as acquisition of movement skills is one of the learning outcomes of PE. The learning of movement skills was an indicator of effective teaching and learning, which can assist in decision making concerning the effectiveness of the PE programme (Wasonga, 1989).

2.7 Impact of the Implementation of the Physical Education Programmes

According to OECD/DAC (2008), the impact criterion measure what has happened as a result of the programme. The criterion also looks at the difference that the programme has made to the beneficiaries (Anderson &Arsenault, 2002).

Sallis and Mckenzie (1991) point out that a pre-school child can derive physical, health, socio-emotional and intellectual benefits from participation in physical activities.They further point out that, children who learn a myriad of movement skills at an early age are most likely to be physically active throughout school which facilitates the development of lifetime patterns of physical activity. Bailey (2006) further points out that, there is evidence that PE enhances children's self-esteem, reduces stress, anxiety and depression. Studies also suggest that, high quality structured physical activity can positively impact on academic performance by helping children improve their ability to learn, their ability to concentrate, to regulate their emotions, to persevere in the face of failure, to set goals, manage time, take initiative and work in teams (Tomporowski et al., 2008, Rosewater, 2009).

Wasonga (1989) carried out a study to evaluate the effectiveness of a regular PE programme on secondary school students in a Kenyan school, and found that physical fitness activities help in improving the fitness of the students. An evaluation of a two year middle school PE intervention also revealed that, the PE programme improved student moderate to vigorous physical activity in PE (McKenzie et al., 2004). The Child and Adolescent Trial for Cardiovascular Health (CATCH) programme which was instituted in third grade PE classes in four El Paso elementary schools to attempt to decrease the risk of overweight and obesity for children also posted positive results. The results concluded that children in the CATCH programme were less likely to be at risk for being overweight by fifth grade and PE

classes were more likely to engage children in vigorous activity through the fifth grade (Coleman et al., 2005).

Other studies also show that participation in PE has positive benefits in the life of a child. California schools with more active students experienced higher subsequent gains in SAT-9 test scores than schools with a high percentage of students who did not participate (Etnier et al, 1999). Schools offering intense physical activity programmes recorded positive effects on test scores in mathematics, reading and writing in addition to less disruptive classroom behaviour (Symons, Cinelli, James & Groff, 1997). A Canadian study examined the effects on 546 elementary students' academic performance of one additional hour per day of PE. Students in Grades 2 through 6 who received additional PE earned better grades in French, Mathematics, English and Science than students who received the standard one period of PE per week (Shephard, 1996). A study conducted in North Carolina evaluated the effects of a classroom-based programme that for 12 weeks gave students daily 10 minutes breaks of organized physical activity. The students were observed in grades K through 5 for 30 minutes before and after each break. The findings revealed that the activity breaks increased on-task bebavoiur by 8 percent. Among students who tended to be least focused in class, the breaks improved on-task behaviour by 20 percent (Mahar, 2006).

A study on the influence of play on the development of pre-school children's social skills in Kabete zone found that, children acquired social skills such as co-operation, sharing and turn-taking when they participated in play (Mahindu, 2011). Besides the study carried out in Kabete zone (Mahindu, 2011), the other studies have not been conducted at pre-school level and thus the need to carry out a study in Nairobi and Nyeri pre-schools to assess the impact of the implementation of PE. Mahindu (2011) focused on the development on social skills and thus the need for

this current study. This study examined whether children participated in physical activities which in turn would lead to physical, social, mental and emotional benefits.

2.8 Sustainability of the Implementation of Physical Education Programmes

OECD/DAC (2008) point out that the sustainability criterion focuses on the effects of the programme over the long term. It is concerned with the maintenance, financial and economic viability of keeping the programme going despite the challenges.PE in schools is a subject under threat and faces a lot of challenges. There has been concern of the decline of PE and this has been raised in various global forums such as the World Summit on PE held in November in Berlin. PE experiences a low prolife and status in African schools compared to other subjects. It has to compete for time and resources yet it requires high initial capital costs for facilities, recurrent maintenance, purchase and replacement of equipment in the schools (Hardman & Green, 2011).

Muniu (1986) carried out an evaluation on the effectiveness of the curriculum in diploma colleges and noted that there are many factors opposed to the achievement of the curriculum objectives. Although the objectives were not fully achieved, Muniu (1986) points out that the attempt to achieve the objectives is not in vain. What is required is an effort to reduce the gap between the actual and the ideal. This could be achieved through the use of improvisation which enables teachers to make maximum use of the available resources.

Modification of physical activities can also be used as a strategy geared towards the sustenance of PE programmes. Ngumo (1995) evaluated the effect of a small area games programme on the health-related fitness levels of secondary school students and found that games can be modified to suit the needs of each school. This creates an opportunity for learners to participate in PE, thus enhancing their physical fitness.

Challenges facing the achievement of the PE curriculum objectives are varied. Madeje (1981) found that factors such as unavailability of PE teachers, the negative attitude of some teachers, city education administrators and parents contributed a lot towards poor implementation of PE programmes. As noted in the Policy Review Report of 2005, it was hard to convince parents as well as teachers that play is the best medium in which young children develop, learn and prepare for their future. This was found to be the case particularly among illiterate poor parents, as mothers interviewed in Machakos District were vehemently opposed to sending their children to a pre-school if it did not teach how to read and write (Republic of Kenya, 2005).

Alwar (1995) and National Centre for Early Childhood Education (NACECE) (1993) emphasize the importance of strong community participation levels and other stakeholders in enhancing the quality and relevance of ECE in Kenya. However, Katana (2005) points out that communities did not play their role adequately and thus the management of pre-school centres was entirely left to the primary school managements that were not adequately provided with adequate finances.

Govender et al., (2009) contend that educational institutions and community settings should provide the infrastructure for promoting physical activity. Indeed, a study on the sustainability of a health-related PE programme reported that, schools using Sports, Play, and Active Recreation for Kids (SPARK) programme had more frequent PE classes. The sustainability of the PE programme was related to support from the principal, not previously having a standard PE programme, having adequate equipment and teachers being physically active (Dowda et al., 2005). An evaluation of the impact and sustainability of the 'Young Heroes Programme', a physical education intervention for public primary schools serving marginalized communities

in Kwazulu-Natal and Gauteng, found that principals provided adequate support to the programme while stakeholders were committed to ensuring the sustainability of the programme. The programme developers and sponsors were found not to fully understand learners' needs while stakeholders did not understand the strength and weaknesses of the programme. It was found that the funding was insufficient for programme operation. Some staff indicated that they did not have enough time to devote to the programme while educators were said to be in organizing sporting activities and events in their schools (Govender et al., 2009).

Studies carried out in Kenya and in other countries have revealed that PE programmes do not receive full support from school administrators and parents (Madeje, 1981; Muindi, 1998; Nyonge, 2004; Wawire, 2006; Hardman & Green, 2011). This affects the implementation of the PE programmes as its sustenance depend on school's stakeholders. This study intended to examine the sustainability of the implementation of the pre-school PE curriculum in Nairobi and Nyeri pre-schools. It examined the factors which influenced the achievement and non-achievement of the sustainability of the PE programme in Nairobi and Nyeri pre-schools.

2.9 Theoretical Framework

This study used the management-oriented evaluation approach, which emphasizes that evaluation should be used proactively to help improve a programme as well as retroactively to judge its value. Developers of this approach relied on a systems approach to education in which decisions are made about inputs, process and outputs (Worthen & Sanders, 1987).

Stufflebeam (1983) using the management-oriented evaluation theory developed the Context, Input, Process and Product - CIPP Evaluation Model to serve managers and administrators facing four different kinds of educational decisions;

Context evaluation; to serve planning decisions, Input evaluation; to serve structuring decisions, Process evaluation; to serve implementing decisions, and Product evaluation:- to serve recycling decisions (Stufflebeam & Shinkfield, 1985). The CIPP model was relevant to this study as it evaluated the implementation of the PE curriculum to find out whether what has actually been implemented is comparable with what was initially intended. The input was the resources, the process was the implementation of the curriculum and the output was the acquisition of movement skills. The study used the evaluation criteria of relevancy, efficiency, effectiveness, sustainability,mpact to examine the implementation of the curriculum in pre-schools as postulated by Anderson and Arsenault (2002).

The CIPP evaluation model is an evaluation model based on decision-making and has been used in evaluation studies (Boulmetis & Dutwin, 2005). Chen (2009) conducted a case study in the evaluation of English training courses using a version of the CIPP model as an evaluative tool and observed that, the evaluation model was a positive programme enhancing exercise designed to develop rather close existing programmes. Tokmak, Bauturay and Fadde (2013) also used the CIPP evaluation model to evaluate and redesign an online Master's programme consisting of twelve courses from the informatics field. A CIPP survey was initially used and it indicated that the Fuzzy Logic course did not fully meet the needs of students. Based on these findings, the programme managers decided to improve the course and they organized a focus group discussion with the students im order to obtain more information to help in redesigining the course. The modifications were implementated and the students were pleased with the new version of the course.

2.10 Conceptual Framework

According to Nasibi (2005), the school has an obligation to implement the curriculum in order for the intended objectives to be achieved. The teacher is the dominant agent that delivers the curriculum content. The teacher interacts with the curriculum and the child through the teaching and learning activities. The teacher selects the content, defines the objectives and selects the teaching methods and materials. Kwenya (2003) points out that the administration is responsible of procuring learning resources and creating an enabling learning environment. The community partners with the pre-schools while the DICECE officers supervise the pre-schools to assist in the achievement of the desired goals. For the desired programme outcomes to be achieved, the content, methodology and resources must be carefully designed and implemented to suit the needs and interest of the children (Nasibi, 2005). This study used the DAC programme evaluation criteria consisting of relevance, efficiency, effectiveness, impact and sustainability to evaluate the implementation of the pre-school PE curriculum as shown in Figure 2.1.

The relevance criterion looked at the pre-school PE syllabus content, its appropriateness and the clarity and achievement of the PE objectives. This addressed the context evaluation phase of the CIPP evaluation model. The efficiency criterion addressed issues of administrators, parents and DICECE officers' support in the running of the PE programme. It looked at the teachers' involvement and the status of the availability and adequacy of learning facilities and equipment. This addressed the input and process evaluation phases of the CIPP evaluation model. The effectiveness criterion focused on the learning and acquisition of movement skills by the children while the impact criterion looked at the impact of PE on the physical, social, mental and emotional development of children. The sustainability criterion focused on the administrators, teachers, DICECE officers, parents and communities

support towards the sustenance of the PE programme, Effectiveness, impact and sustainability criteria addressed the product evaluation phase of the CIPP evaluation model which receives the feedback of the implementation and judges the attainments of the programme. The process of the implementation of the PE programme is influenced by various factors such as; government policies, the socio-economic status of different pre-schools, beliefs, attitudes and values of school administrators, teachers' educational officers, parents and the communities. These factors influence the effectiveness, efficiency, impact and sustainability of the PE programme. Efficient and effective implementation of the PE programme lead to physical, social, mental and emotional development of child.

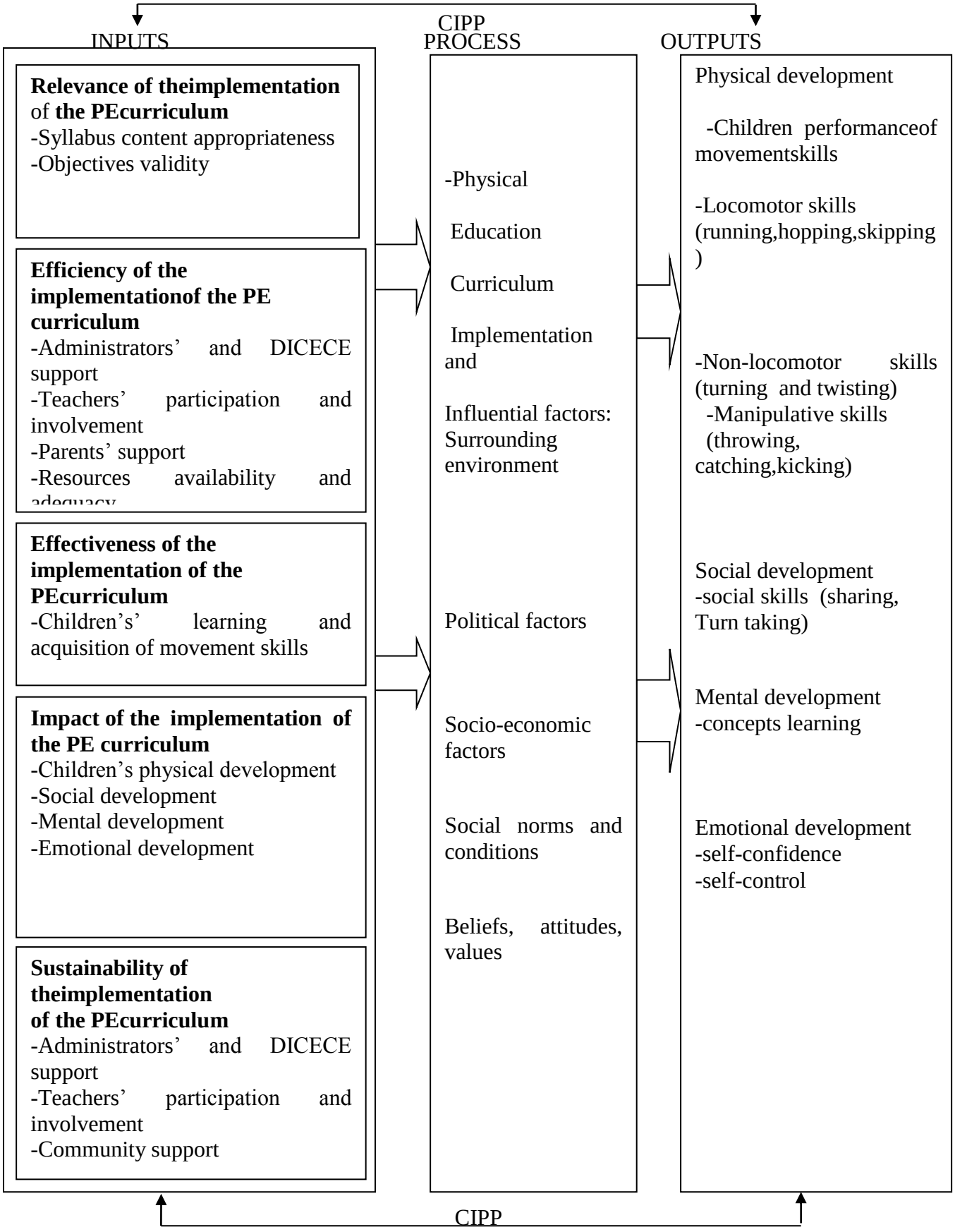


Figure 2.1: Conceptual framework on an evaluation of the implementation of the pre-school PE curriculum

2.11 Summary of the Literature Reviewed

The literature review highlights the need to evaluate a programme in order to establish whether what was actually intended is what is being achieved. The logical framework assumes that when certain inputs are contributed, certain outputs are expected (Anderson &Arsenault, 2002). Studies have shown the need for physical activities for young children (NAEYC, 1988; NCTM, 1978) and there was need for a study to establish whether the pre-school PE programme was meeting these needs. For a pre-school curriculum to achieve the intended objectives, a clear policy on matters such as time allotments and scheduling, class size, child/teacher ratio, teaching space and teaching pattern should be in place to guide the implementation. Gatumu (2010) indicates a lack of clear policy in ECE which may hinder the implementation of the ECE curriculum. Ndwiga (2005) notes a lack of improvisation of play materials while Wawire (2006) indicates a presence of improvisation of materials. This study evaluated the policy on the teaching of PE in ECE and the provision of play materials in Nairobi and Nyeri pre-schools.

Faucette and Patterson (1989) point out that a teacher's negative attitude about teaching PE is congruent with his/her teaching behaviour while Ndegwa (2005) indicates that teachers' choice of teaching method is influenced by their academic level and training. This study evaluated how the teacher's attitude, academic level and training affect the implementation of the pre-school PE curriculum in Nairobi and Nyeri pre-schools. The support and involvement of the parents was also evaluated as Wawire (2006) notes that, the pressure from the parents makes teachers concentrate on academics at the expense of the other aspects of learning. Esmail (1983) and Wasonga (1989) indicate the effectiveness of PE programmes on the physical fitness level of students. This study evaluated the effectiveness of the pre-school PE programme in Nairobi and Nyeri pre-schools by

examining whether children acquired movement skills which is one of the objectives of PE.

Sallis and McKenzie (1991) point out that, participation in physical activities enhances physical, mental, social and emotional development of children. It was the researcher's interest to investigate whether pre-school children from Nairobi and Nyeri counties acquired these benefits. To sustain the running of the pre-school PE programme, administration and parental support is crucial. This study examined the measures taken by Nairobi and Nyeri pre-schools to ensure the PE programme was implemented to achieve its intended objectives.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section deals with the methods and procedures which were used in carrying out this study. These include; research design, target population, sample and sampling procedures, research instruments, data collection procedures, data analysis and ethical concerns.

3.2 Research Design

This study employed a cross-sectional survey design. A cross-sectional study is a one-time research or a study confined to a single time-period (Kothari, 2004). The design was considered appropriate for this study as it involves collecting data at one point in time and the researcher does not manipulate the variables or arrange the events that follow. The study involved a systematic collection and analysis of data in order to evaluate the implementation of the PE curriculum in Nairobi and Nyeri pre-schools (Kothari, 2004). The evaluation criteria consisting of relevance, efficiency, effectiveness, sustainability, impact was used in this study (OECD/DAC, 2008).

3.3 Target Population

Target population or universe of a study is all the members or objects involved in the study (Kothari, 2004). This study involved all registered pre-schools in Nairobi and Nyeri counties. The total number of pre-schools was 1798 in both counties. In Nairobi county, there were 207 public pre-schools, 21 city council pre-schools, 236 private pre-schools and 547 informal pre-schools (City Council of Nairobi: Education Department, 2012). In Nyeri county, there were 451 public pre-

schools, 5 council pre-schools and331 private pre-schools (Nyeri DICECE offices, 2012). The study targeted the headteachers, teachers, parents, pre-school pre-unit children and DICECE officers in Nairobi and Nyeri counties.

3.4 Study Area

Nairobi the capital city of Kenya is a cosmopolitan city and lies in the south region of Kenya. It is mainly a commercial and industrial area. The city and its surrounding areas form Nairobi county which represents a purely urban setting with diverse features. Nairobi county has up market suburbs situated to the west and north central of Nairobi though there are lower income areas close to these up market suburbs. There are lower middle and upper middle income areas in the north-central of Nairobi while the lower income areas are mainly located in the far eastern side of Nairobi city. There are also slum areas within the Nairobi county. This diversity presents a variety of pre-schools catering for children from different social economic backgrounds under different sponsorship. Besides the diverse nature of pre-schools in Nairobi county, the county also houses the Ministry of Education with a section of ECDE and the NACECE under the KICD. The educational divisions in Nairobi county are; Central, Dagoretti, Embakasi, Kasarani, Kibera, Makadara, Pumwani and Westlands (Wikipedia, 2013).

Nyeri county has a rural setting and is situated in the central region of Kenya which boarders Nairobi to the north. The largest town in the county is Nyeri town, which is a commercial as well as an industrial town. The county lies between the eastern base of the Aberdare range which forms part of the eastern end of the Great Rift Valley and the western slopes of Mount Kenya. The county has rich agricultural land that combines both large scale commercial and subsistence farming. There are also areas that are semi arid. Nyeri county is also diverse in several ways as some

regions are urban, rural while others are peri-urban. This diversity also presents a variety of pre-schools based on different sponsorship. The educational divisions in Nyeri are; Kieni east, Kieni West, Mathira, Mukurweini, Nyeri municipality, Othaya and Tetu (Wikipedia, 2013).

3.5 The Sample and Sampling Procedures

Stratified random sampling and simple random sampling were used to obtain a sample of 120 pre-schools for this study. Fraenkel and Wallen (2002) recommend a minimum of 100 subjects for descriptive studies. This recommendation was used as a guide for the sample size of this study as the quantitative and qualitative nature of the study warranted an in-depth examination of a varied presentation of pre-schools' characteristics. Stratified random sampling allows the subdivision of the population into smaller homogenous groups in order to get more accurate representation while simple random sampling allows individuals to be chosen in such a way that each has an equal and independent chance of being selected (Best & Khan, 2010).

Stratified sampling was used to select pre-schools from public, private and council categories from all the educational zones in Nairobi and Nyeri counties. Stratified sampling was also used to select welfare pre-schools in Nairobi county. Simple random sampling using the lottery method was then used to select 20 publicpre-schools, 30 private pre-schools, 5 council pre-schools and 10 welfare pre-schools from Nairobi county, and 20 public pre-schools, 5 council pre-schools and 30 private pre-schools from Nyeri county. A similar proportion was used for both counties with a higher proportion given to the private pre-schools as it included both private religious and private individual pre-schools. A sample of welfare pre-schools in Nairobi was also included to provide a varied presentation of pre-schools and to enrich the findings of the study. The sample comprised of 120 pre-schools. To

accord an objective evaluation of the implementation of the pre-school PE curriculum, only pre-schools using the KICD syllabus were sampled.

Stratified and simple random sampling was used to pick headteachers and parents from half of the selected pre-school. One pre-school teacher was randomly selected from each pre-school and systematic random sampling was used to select 2 pre-school children (a boy and a girl) from half of the selected pre-schools. Two DICECE officers from each county were randomly selected. One observation was made in the pre-unit class in half of the selected pre-schools and stratified and simple random sampling were used to select the pre-schools. In total, the sample comprised of 60headteachers, 120 teachers, 60 parents, 120 pre-school children and 4 DICECE officers.

Table 3.1 Sampling Frame of the Study

	NAIROBI COUNTY	**NYERI COUNTY**
Pre-schools	60	60
Headteachers	30	30
Teachers	60	60
Children	60	60
Parents	30	30
DICECE Officers	02	02

Table 3.2 Research Pre-school Sample

County	Public Schools	Private individual schools	Private religious schools	Council schools	Welfare schools	Total
Nairobi	20	15	15	5	10	65
Nyeri	20	15	15	5	-	55
Total	40	30	30	10	10	120

The sample was comprised of different categories of pre-schools. The public pre-schools are run by local communities and the government; the private individual pre-schools are run by individuals or groups while the private religious schools are run by Christian or Muslim institutions. The council schools are run by the local authority while welfare schools are run by communities assisted by NGO's.

3.6 Research Instruments

The data for this study were collected using questionnaires, interviews, observation guides, document analysis guide and resource checklists.

3.6.1 Questionnaires

The questionnaire for pre-school teachers (Appendix I) was constructed by the researcher and it had open-ended and close-ended items. It was structured to attract the information required to carry out an evaluation on the relevance, efficiency, effectiveness, sustainability, impacts of the implementation of the PE curriculum in pre-schools.

The questionnaire was divided into two sections: Section A captured the demographic information of the teachers; the teachers' gender, age, academic background, professional training, teaching experience, seminars and workshop attendance to evaluate whether it affected the implementation of the PE curriculum. Section B addressed the teaching and learning of PE in pre-school: the teaching

policy on PE such as time allocation, availability, adequacy and utilization of learning resources and the type of teaching approaches used in teaching PE. It also captured information on the challenges facing teachers in the implementation of PE and suggestions on how to address the challenges.

3.6.2 The Interview Schedules

The interview schedules for headteachers, parents and DICECE Officers included open-ended questions, which enabled the interviewer to probe the participants for more information and also make the interview less formal. Best and Khan (1998) points out that through the interview technique, the researcher may stimulate the subject to greater insight and thereby, explore significant areas not anticipated in the original plan of investigation.

The headteachers' interview schedule (Appendix II) provided data on the relevance, efficiency, effectiveness, sustainability, impacts of the implementation of the PE curriculum as it sought information regarding training of teachers, in-services courses attended by teachers, teaching methods used in the teaching of PE, availability of PE learning resources in the pre-schools, administrative support given to enhance the teaching and learning of PE as well as constraints that are encountered in the teaching of PE in pre-schools.

The interview schedule for the parents (Appendix III) solicited responses regarding their perceptions, beliefs, values and attitudes towards PE, their contribution and involvement in the provision of resources for PE in the pre-schools and this enabled the researcher to collect data on the relevance, efficiency, effectiveness, sustainability, impacts of the implementation of the PE programme.

The DICECE officers' interview schedule (Appendix IV) solicited responses regarding the relationship between the DICECE offices and the pre-school PE curriculum implementation: its functions, policies and their implementation, quality

assurance services, challenges faced in the teaching of PE and suggestions on how to deal with those challenges. These responses provided data on the relevance, efficiency, effectiveness, sustainability, impacts of the implementation of the PE programme.

3.6.3 Observation Guide

An observation guide for a PE lesson (Appendix V) adapted from the University of Nairobi Teaching Practice Assessment Guide (2012) was used for this study. The observation guide adapted the key elements observed during a lesson and was modified to suit a pre-school lesson setup. The observation guide focused on the preparation for teaching which included the schemes of work and lesson plans, the instructional methods and resources used by the teachers, mastery and sequence of content, children involvement and participation, movement skills learning and acquisition, classroom management and teacher personality. An observation guide adapted from the APM Inventory (Numminen, 1995) was used to assess the pre-school children's fundamental motor skills. The children were observed in static balance, dynamic balance, running, standing board-jump, throwing and catching ball, throwing and kicking ball at a target. This enabled the researcher to collect data on the efficiency and effectiveness of the implementation of the PE programme.

3.6.4 Resource Checklist Guide

A resource checklist guide (Appendix VI) was prepared by the researcher to collect data on the efficiency of the implementation of the PE programme as the checklist was used to ascertain the availability and adequacy of learning resources for teaching PE in the sampled pre-schools. The use of a resource checklist ensures a more complete consideration of all aspects of the objects or items (Kothari, 2004).

3.6.5 Document Analysis Guide

A document analysis guide (Appendix VII) constructed by the researcher was used to collect data on the relevance, efficiency and effectiveness of the PE programme. It was used to examine the teachers' preparedness, the content being taught and the coverage. To identify teachers' preparedness and lessons attendance, the researcher perused through official documents like timetables, schemes of work, lesson plans and records of work. Best and Khan (1998) point out that, document analysis helps to explain the status of some phenomenon at a particular time or its development over a period of time.

3.7 Validity and Reliability of the Research Instruments

3.7.1 Validity

Validity indicates the degree to which an instrument measures what it is supposed to measure. It is the extent to which differences found with a measuring instrument reflects true differences among those being tested (Kothari, 2004). In this study, triangulation was used to enhance data validation.

The researcher used the supervisors, departmental lecturers and three experts from the field of study in verifying the content validity of the questionnaires, document analysis guide, resource checklist, observation guide and the interview schedules. The supervisors, departmental lecturers and the experts assessed the relevance of the content used in the research instruments and necessary modifications were made based on their feedback.

The researcher also administered a pilot study to ensure that the instruments to be used in the study were valid and collected required data. Based on the results and observations from the pilot study, the instruments were refined by modifying or eliminating inappropriate items or by adding more items to capture more

information. The actual pilot study was conducted in 10 randomly selected pre-schools in Kiambu county, a county outside the designated main area of the study. Mulusa (1988) recommends the use of 10 cases which represents the target population in all the major aspects for a pre-test. The pilot sample comprised of 10 headteachers, 20 pre-school teachers, 20 parents, 20 children and 2 DICECE officers.

During the pilot study, the researcher and the research assistants visited the selected schools and reported to the headteachers' offices to seek authority to conduct the study. Appointments with the headteachers were booked and authority to administer the research instruments on the teachers, children and parents was sought. Appointments with DICECE officers were also sought. All the research instruments for this study were administered to the subjects and the results of the pilot study indicated that the research instruments could be used to solicit information for the study.

3.7.2 Reliability

A measuring instrument is reliable if it provides consistent results (Kothari, 2004). To determine the reliability of the questionnaire, the researcher used the test-retest method. The questionnaires were administered to the pre-school teachers on two different occasions with an interval of two weeks (Muijs, 2004). The results were scored and a comparison was made on the scores of the first test and the scores of the second test to provide a reliability coefficient. The Pearson product-moment correlation coefficient was used to compute the reliability coefficient of the questionnaire. It is a number ranging from +1 (a perfect positive correlation) through 0 (no relationship) to -1 (a perfect negative relationship). The coefficient for the questionnaire was found to be 0.844. This was accepted as a good indicative of

reliability. According to Frankel and Wallen (2002), an alpha value of 0.7 is considered suitable to make group inferences that are accurate enough.

To determine reliability for the interviews, the questions were restated in slightly different forms at a later time during the interview to evaluate the consistency of the responses. There was consistency in the responses given and this was a good indication of reliability. For the lessons and pre-school children's skills performance observation guide, document analysis guide and resources' checklist, inter-rater reliability was used. Intraclass correlation coefficient which assesses the consistency of measurements made by multiple observers measuring the same quantity was also used. The statistical package for the social sciences (SPSS) was used to calculate the correlation coefficient where the value 1 represented perfect agreement and 0 no agreement at all. The coefficient for the lessons' and pre-schoolchildren's skills performance observation guide were found to be 0.820 and 0.835 for the document analysis guide and the resources checklist. These were accepted as good indicatives of reliability. According to Frankel and Wallen (2002), an alpha value of 0.7 is considered suitable to make group inferences that are accurate enough.

3.8 Procedure for Data Collection

A permit to conduct the study was obtained from the National Council for Science and Technology (NCST) before the actual fieldwork began. A visit was made to the City Council of Nairobi Education Department and the Nyeri DICECE office and the researcher was allowed to carry out the research in Nairobi and Nyeri counties. The researcher was provided with lists of ECE centres in the two counties. It was noted that census data on ECE centres were not regularly updated as there was no adequate followup for ECE centres to forward their centres' return to the ECE

offices. The sampled pre-schools were also visited and the headteachers were briefed on the nature of the research and its importance.

Two research assistants were trained on how to use the research tools. They were trained on the procedures to be followed in data collection and demonstration was done by the researcher. Practice was done on the lessons observation and filling in the resources checklist to compare the collected data. Feedback on the performance during the training was discussed. The pilot study was particularly useful in training the research assistants since they accompanied the researcher in the visits to the pre-schools. A discussion was held with the research assistants on how to behave professionally and appropriately when interviewing or observing other people. The training of the research assistants helped to standardize the data collection procedure as it strengthened the consistency of the procedure (Muijs, 2004).

Data collection was done by the researcher and the trained research assistants. An appointment was booked with each of the headteachers and the DICECE officers to conduct the interviews. Interviews with the selected parents were conducted during the week days and weekends to enable the researcher to interview both the employed and non-employed parents. Tape recording and note taking were taking down notes used to capture interview data. Tape recording helped the researcher to record responses accurately and unobtrusively. However, taking down notes was used for respondents who were uncomfortable with tape recording. Sometimes the appointment dates were not honoured and new appointments were rescheduled. The questionnaires for the teachers were given during the pre-schools visits and the completed ones were collected immediately and this ensured a high return rate. The incomplete ones were collected on an agreed upon date with the teachers to enhance the return rate. The observation of lessons was guided by the

pre-schools time-tables and was mainly done by the principal researcher in order to use her skills in finding out the situation on the ground. The skill performance of the children was done after the lesson. However, the researcher made several visits to some pre-schools as guided by the timetable but found PE timetable was not followed. The research team did not make scheduled lessons observation in order to observe lessons in their natural settings. The resources checklists were filled by the researcher and the assistants with the aid of the pre-school teachers who guided the researcher and the assistants to the play facilities and storage area. The pre-school teachers were also requested to avail the necessary documents including the syllabus, schemes of work, lesson plans, records of work, progress records and reference books. Regular meetings were held with the research assistants to monitor the progress and get feedback on the data collection.

3.9 Data Analysis

Both quantitative and qualitative data were generated by the study. Before analyzing the data, the data were ordered and numbered such that teachers were coded as [T], headteachers [H], parents [P] and DICECE officers [D]. Quantitative data from the questionnaire were edited and coded. Responses were assigned numerical values; 1 for yes and 2 for no. Descriptive statistics such as frequencies and percentages were then computed and the Statistical Package for the Social Sciences (SPSS) programme was used to analyze the data.

Content analysis was employed to analyze the core content of the qualitative data from the open-ended questions, transcripts from interview schedules, observation of lessons and pre-school children's skills performance, document analysis guide and resources checklists. The analysis involved identifying, coding, categorizing, classifying and labelling the patterns in the data as per the themes and

objectives of the study (Patton, 2002). Analysis of transcribed data from the interviews was done immediately after the interviews sessions. After the data were ordered, the analysis involved viewing the data which called for reading and re-reading the data; identifying patterns and themes guided by the research objectives and coding the data according to the identified themes. The themes were then connected together in the form of key relationships and related to the research objectives. These findings were presented in narrative form. However, some of the coded categories were assigned numerical values that were used when the data were entered. This made it possible for descriptive statistics to be generated even for some of the open-responses. This was found necessary due to the nature of the research questions as factual as well as opinions and reasons were sought in some questions. The data were analyzed to address the research objectives of the study and the results are presented in descriptive and qualitative form. The results of the quantitative data analysis are presented in frequency tables and the qualitative data analysis results from the interviews and the lesson observations are used to support the quantitative data in the data results discussion.

3.10 Ethical Concerns

Ethical standards were upheld during the research as the principles of confidentiality; anonymity and informed consent were applied. Permission was sought from the headteachers and the parents of the selected pre-school children who were involved in the study. This was after the researcher explained the purpose of the study and the methods to be used to carry out the study. Confidentiality of the respondents' identities and the protection of private information given during the study were adhered to.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

This chapter focuses on the presentation of the findings of this study, data analysis, interpretation and discussion of the findings. The presentation of the findings is done based on the research objectives which were to:

i. Assess the relevance of the implementation of the pre-school PE curriculum in Nairobi and Nyeri pre-schools.
ii. Examine the efficiency of the implementation of the PE curriculum in Nairobi and Nyeri pre-schools.
iii. Examine the effectiveness of the implementation of the PE curriculum in Nairobi and Nyeri pre-schools.
iv. Establish what is the impact of the implementation of the PE curriculum in Nairobi and Nyeri pre-schools.
v. Examine how sustainable is the implementation of the PE curriculum in Nairobi and Nyeri pre-schools.

4.2 Demographic Information of Pre-school Teachers

This section presents the demographic information of the pre-school teachers. The study found it necessary to gather this information as it offered relevant data on the pre-school teachers. The information enabled the researcher to gather data on the efficiency of the implementation of the PE curriculum. According to Butera et al., (2009), teachers characteristics have an impact on curriculum implementation. Teachers who are characterized as motivated, responsible, organized and open to new learning opportunities were found to be high curriculum implementers as opposed to unmotivated and unorganized teachers. The demographic information of

the pre-school teachers' includes the gender, age, teaching experience, academic and professional qualification, and training of the pre-school teachers. The gender of the pre-school teachers is presented in Table 4.1.

Table 4.1: Pre-school Teachers' Gender

Gender	Nairobi Schools	Nyeri schools	Frequency	Percentage
Female	49	48	97	97.98%
Male	2	-	2	2.02%
Total	51	48	99	100.00%

The data in Table 4.1 on the gender of the pre-school teachers show that, majority of the pre-school teachers 97 (97.98%) were females while the minority 2(2.02%) were males. The two male pre-school teachers were from Nairobi pre-schools while Nyeri pre-schools had none. This is an indication that, most of the teachers for pre-schools in both Nairobi and Nyeri pre-schools were females. This finding concurs with earlier studies in Kenya which established that teaching in pre-schools was dominated by female teachers (Mweru, 2000; Waithaka, 2005; Makoti, 2005; Abagi, 2008; Kinuthia, 2009; Rutomoi & Too, 2012).This may be attributed to the fact that the teaching profession internationally, with the exception of a few countries, is dominated by women (Cubillo & Brown, 2003). According to OECD (2004), the three occupations with the highest proportion of women workers are teaching in pre-school and primary education, nursing and secretarial work. Neugebauer (1999) and Sanders (2002) point out that many people believe that women are naturally predisposed to caring for young children. This is because in most cultures, women have been charged with the responsibility of raising children (Wardle, 2004).The age of the pre-school teachers is presented in Table 4.2.

Table 4.2: Pre-school Teachers' Age

	NAIROBI SCHOOLS					NYERI SCHOOLS				Total %
AGE YEARS	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total%**	
21-30	2	12	0	2	16	1	10	1	12	28
	2.02	12.12	0.00	2.02	16.16	1.01	10.10	1.01	12.12	28.29
31-40	5	13	2	3	23	11	12	0	23	46
	5.05	13.13	2.02	3.03	23.23	11.11	12.12	00	23.23	46.46
ABOVE	9	1	1	1	12	5	6	2	13	25
40	9.09	1.O1	1.01	1.01	12.12	5.05	6.06	2.02	13.13	25.25
Total	**16**	**26**	**3**	**6**	**51**	**17**	**28**	**3**	**48**	**99**
	16.16	**26.26**	**3.03**	**6.06**	**51.51**	**17.17**	**28.28**	**3.03**	**48.48**	**100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

Table 4.2 shows that majority of the pre-schoolteachers 46 (46.46%), 23 (23.23%) from Nairobi and 23 (23.23%) from Nyeri pre-schools were in the age bracket of 31-40 years, followed by 28 (28.29%) in the age bracket of 21-30 years, 25 (25.25%) in the age bracket of above 40 years. The table further shows that 30 (90.91%) of the teachers from public pre-schools in Nairobi and Nyeri pre-schools were in the age bracket of 30years and above, 32 (59.26%) from private pre-schools were also in the same age bracket, so were 5 (83.33%)from council pre-schools and 4 (66.67%)from welfare pre-schools in Nairobi. From the results, it can be deduced that majority of the teachers from Nairobi and Nyeri pre-schools were in their youthful age and therefore energetic to fully participate in PE curriculum activities. This would positively influence the efficiency of the implementation of the PE programme. Abagi (2008), Rutomoi and Too (2012), in a study on factors influencing the choice of approaches used by pre-school teachers in Baringo county in Kenya also found that majority of pre-school teachers were relatively young as they were below 35 years.

The study further sought the status of the teachers' teaching experience. The results of the teachers' experience are presented in Table 4.3.

Table 4.3: Teaching Experience of Pre-school Teachers

	NAIROBI SCHOOLS					NYERI SCHOOLS				
Teaching experience	**F % PB**	**F % PR**	**F % CC**	**F % WF**	**Total %**	**F % PB**	**F % PR**	**F % CC**	**Total %**	**Total %**
Less than 12 month	0 0.00	0 0.00	0 0.00	1 1.01	1 1.01	0 0.00	0 0.00	0 0.00	0 0.00	1 1.01
1-2 years	0 0.00	3 3.03	0 0.00	1 1.01	4 4.04	1 1.01	1 1.01	0 0.00	2 2.02	6 6.06
3-4 years	0 0.00	6 6.06	0 0.00	1 1.01	7 7.07	0 0.00	4 4.04	1 1.01	5 5.05	12 12.12
5-6 and above	16 16.16	17 17.17	3 3.03	3 3.03	39 39.39	16 16.16	23 23.23	2 2.02	41 41.41	80 80.81
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

The data in Table 4.3 show that majority of the teachers 80 (80.81%), 39 (39.39%) from Nairobi and 41 (41.41%) from Nyeri pre-schools had teaching experience of 5 years and above, 12 (12.12%) had 3-4 years' experience, 6 (6.06%) had 1-2 years' experience and 1 (1.01%) had less than 12 months experience. Nyeri pre-schools had more teachers with teaching experience of 5 years and above than Nairobi pre-schools. The results in Table 4.3 reveal that majority of the teachers from Nairobi and Nyeri pre-schools had five and more years teaching experience which would enable them to implement the PE programme efficiently. Figure 4.1 shows a distribution of the pre-school teachers' level of teaching experience. The results on Nairobi and Nyeri pre-school teachers' experience differ from earlier studies in Kenya which established that most of pre-school teachers had comparatively few years of experience (Mweru, 2000; Ndegwa, 2005; Makoti, 2005, Kinuthia, 2009). Howes (1997) points out that experience is a positive teacher factor as teachers who are more experienced in early childhood education have positive relationships with their pre-school children as compared to their colleagues who are less experienced. Branyon (2002) and Ng'asike (2004) further observed that, with

the number of teaching years, teachers acquire positive attitudes and a higher self-efficacy.

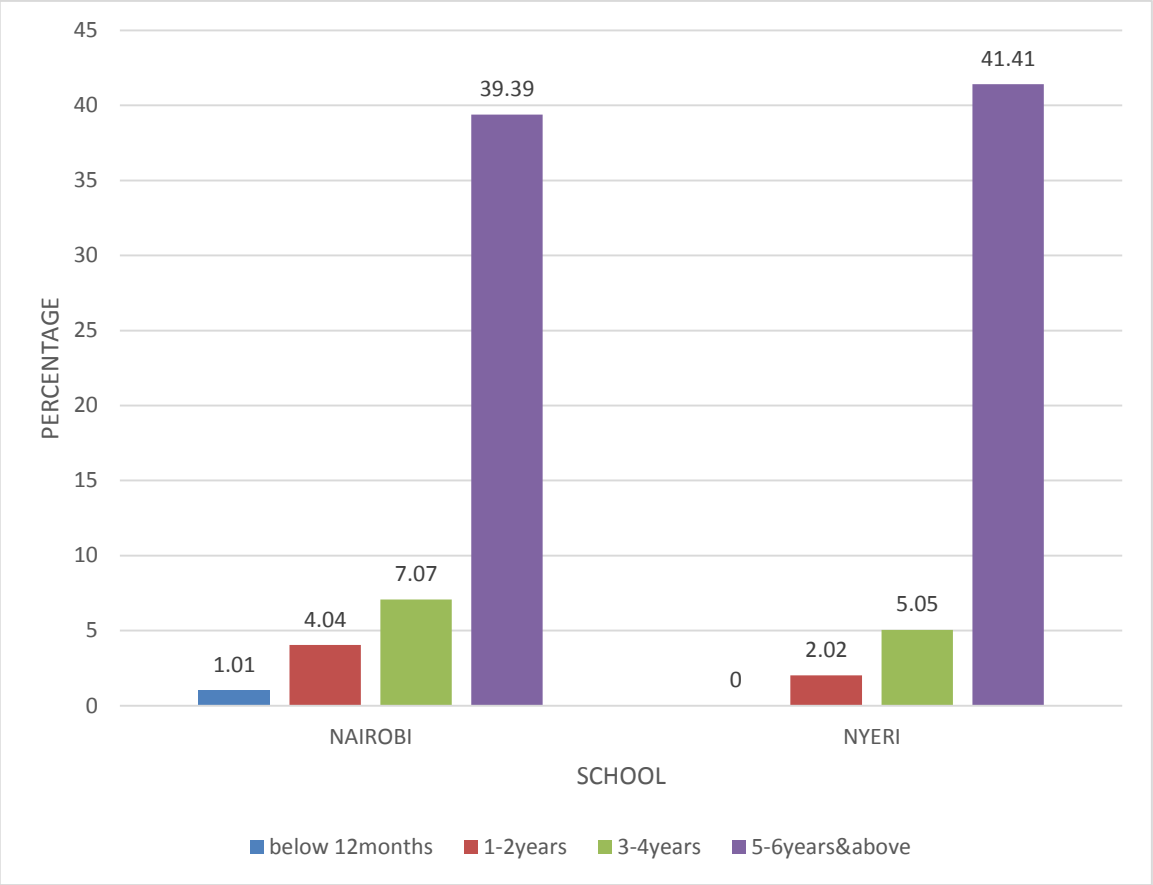


Figure 4.1 Levels of Pre-school Teachers' Experience

Besides teachers' teaching experience, the study sought to find the status of the academic qualifications of the teachers. The findings on teachers' academic qualifications are presented in Table 4.4.

Table 4.4: Pre-school Teachers' Academic Qualifications

	NAIROBI SCHOOLS					NYERI SCHOOLS				Total
Academic	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**
Qualification	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
	PB	PR	CC	WF	Total	PB	PR	CC	Total	
KCSE/	16	25	3	6	50	16	27	3	46	96
KCE	16.16	25.25	3.03	6.06	50.50	16.16	27.27	3.03	46.46	96.97
KACE/	0	0	0	0	0	0	1	0	1	1
A-LEVEL	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	1.01	1.01
FORM 3	0	1	0	0	1	1	0	0	1	2
	0.00	1.01	0.00	0.00	1.01	1.01	0.00	0.00	1.01	2.02
TOTAL	**16**	**26**	**3**	**6**	**51**	**17**	**28**	**3**	**48**	**99**
	16.16	**26.26**	**3.03**	**6.06**	**51.51**	**17.17**	**28.28**	**3.03**	**48.48**	**100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

From Table 4.4, majority of the teachers both from Nairobi and Nyeri pre-schools 96 (96.97%) had attained KCSE/KCE, 2 (2.02%) had reached up to Form 3 while 1 (1.01%) had attained KACE/A-Level. This implies that majority of the teachers had attained the required academic qualifications to train for ECE and this would positively influence the implementation of the PE curriculum. Similar results were reported by Kivuva (1997) who found that majority of the pre-school teachers in Nairobi pre-schools were KCSE/KCE holders. As Moyles (1989) points out, teachers need sufficient academic background to give them the intellectual and personal moral strength needed to articulate issues related to early childhood education. Besides the academic qualifications of the teachers, the study further sought to look at the teachers' professional qualifications. The teachers' professional qualifications are presented in Table 4.5.

Table 4.5: Pre-school Teachers' Professional Qualifications

	NAIROBI SCHOOLS					NYERI SCHOOLS				Total
Professional	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**
Qualifications	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
	PB	PR	CC	WF	Total	PB	PR	CC	Total	
Certificate	2	11	0	4	17	13	15	2	30	47
	2.02	11.11	0.00	4.04	17.17	13.13	15.15	2.02	30.30	47.47
Diploma	14	13	3	1	31	4	12	1	17	48
	14.14	13.13	3.03	1.01	31.31	4.04	12.12	1.01	17.17	48.49
Degree	0	1	0	0	1	0	1	0	1	2
	0.00	1.01	0.00	0.00	1.01	0.00	1.01	1.01	1.01	2.02
In-service	0	1	0	0	1	0	0	0	0	1
	0.00	1.01	0.00	0.00	1.01	0.00	0.00	0.00	0.00	1.01
Untrained	0	0	0	1	1	0	0	0	0	1
	0.00	0.00	0.00	1.01	1.01	0.00	0.00	0.00	0.00	1.01
Total	**16**	**26**	**3**	**6**	**51**	**17**	**28**	**3**	**48**	**99**
	16.16	**26.26**	**3.03**	**6.06**	**51.51**	**17.17**	**28.28**	**3.03**	**48.48**	**100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

From Table 4.5, 48 (48.49%) of the teachers had attained a diploma, 47 (47.47%) a certificate, 2 (2.02%) a degree, 1 (1.01%) had undergone through an in-service course while 1 (1.01%) was untrained. This implies that apart from the untrained teacher, the teachers in all the varied categories of pre-schools in Nairobi and Nyeri were professionally qualified to efficiently implement the pre-school programme. Table 4.5 further shows that majority of the teachers 31 (31.31%) from Nairobi pre-schools had attained diploma level of education while majority of Nyeri teachers 30 (30.30%) had attained certificate level of education. This implies that

teachers from Nairobi pre-schools had higher professional qualifications than teachers from Nyeri pre-schools. All pre-school trained teachers study units in PE during their course and this enables them to efficiently implement the PE curriculum. The 4 (100%) DICECE officers from Nairobi and Nyeri counties interviewed in the study affirmed that all trained pre-school teachers are trained on how to teach PE.

Ngome (2002) stresses on the value of training teachers as it is reflected on the knowledge, skills and practice acquired. Moyles (1989) also points out that, besides being knowledgeable in child development, trained teachers also demonstrated an understanding on how children develop concepts at the early childhood level. Indeed, Grogan (1993) argues that, a trained teacher is more important than the curriculum as an untrained teacher will teach poorly while a trained teacher will be able to overcome the deficiencies of any curriculum. The teachers had also undergone through various types of pre-school training at different training institutions. The types of pre-school training undertaken by the teachers at different institutions are presented in Table 4.6.

Table 4.6: Types of ECE Training of Pre-school Teachers

	NAIROBI SCHOOLS					NYERI SCHOOLS				Total
Type of Training	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**F %** Total	**F %** PB	**F %** PR	**F %** CC	**F %** Total	**F %**
DICECE	13	22	2	5	42	17	27	3	47	89
	13.13	22.22	2.02	5.05	42.42	17.17	27.27	3.03	47.47	89.89
PUEA	1	1	1	0	3	0	0	0	0	3
	1.01	1.01	1.01	0.00	3.03	0.00	0.00	0.00	0.00	3.03
Montessori	2	1	0	0	3	0	0	0	0	3
	2.02	1.01	0.00	0.00	3.03	0.00	0.00	0.00	0.00	3.03
KHA	0	2	0	0	2	0	0	0	0	2
	0.00	2.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.02
KEMU	0	0	0	0	0	0	1	0	1	1
	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	1.01	1.01
TOTAL	**16**	**26**	**3**	**5**	**50**	**17**	**28**	**3**	**48**	**98**
	16.16	**26.26**	**3.03**	**5.05**	**50.50**	**17.17**	**28.28**	**3.03**	**48.48**	**98.98**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

According to the results in Table 4.6, majority of the teachers 89 (89.90%) both from Nairobi and Nyeri pre-schools had under gone through DICECE training, 3 (3.03%) Presbyterian University of East Africa training, 3 (3.03%) Montessori training, 2 (2.02%) Kindergarten Headmistress Association training, and 1 (1.01%) through Kenya Methodist University training. Apart from the 1 (1.01%) teacher from Nyeri pre-school who trained at KEMU, the 3 (3.03%) who trained in Montessori, 2 (2.02%) who trained in K.H.A and the 3 (3.03%) who trained in PUEA from Nairobi pre-schools, majority of the teachers were trained under the DICECE programme. Wawire (2006) also observed that majority of pre-school teachers in Nairobi and

Machakos pre-schools were DICECE trained. Kivuva (1997) established that majority of the pre-schools teachers in Nairobi were CICECE trained while others were Montessori and KHA trained. The DICECE training is coordinated nationally by NACECE. The KHA and Montessori training programmes are mainly based in Nairobi and cater for pre-schools mainly in Nairobi county. This is reflected in Table 4.6 as the 3(3.03%) Montessori and the 2(2.02%) KHA trained pre-school teachers are from Nairobi pre-schools. Apart from DICECE, Montessori centres, and KHA, KEMU and PUEA also offer teacher training programmes in ECE.

4.3 Findings on the Relevance of the Implementation of the Pre-school PE Curriculum

The first objective of the study sought to establish the relevance of the implementation of the pre-school PE curriculum in pre-schools. According to OECD/DAC (2008), the relevance criterion focuses on the usefulness of the programme. The criterion examines whether the agreed upon objectives of the programme are still valid and whether they represent sufficient rationale for the continuation of the programme. The investigation into the relevance of the implementation of the PE pre-school curriculum in this study sought the opinions of the pre-school curriculum implementers and stakeholders and dealt with the following areas: the need for the PE programme in the ECE curriculum, the PE curriculum, the PE objectives, the PE syllabus content and the instruction of the PE curriculum.

4.3.1 The Need for the PE Programme in the Pre-school Curriculum

The need for PE as an essential component of the pre-school curriculum cannot be underscored as it is one of the activity areas that contributes to the total growth and development of a child. Indeed, the Guidelines for the Pre-school

Education in Kenya (KICD, 1984) acknowledge the need for play in pre-school by stating that it should form the core of the pre-school activities.

This study sought the opinion of the pre-school curriculum implementers and stakeholders on the need for the PE programme in the pre-school curriculum to establish the relevance of the PE programme. The pre-schoolteachers' views are presented in Table 4.7.

Table 4.7: Teachers' Views on the Need for the PE Programmes

	NAIROBI SCHOOLS					**NYERI SCHOOLS**				**Total**
Response	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**
	%	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
	PB	PR	CC	WF	Total	PB	PR	CC	Total	
PE	16	26	3	6	51	17	28	3	48	99
necessary	16.16	26.26	3.03	6.06	51.51	17.17	28.28	3.03	48.48	100
PE not	0	0	0	0	0	0	0	0	0	0
necessary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**16**	**26**	**3**	**6**	**51**	**17**	**28**	**3**	**48**	**99**
	16.16	**26.26**	**3.03**	**6.06**	**51.51**	**17.17**	**28.28**	**3.03**	**48.48**	**100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

From Table 4.7, it can be noted that 99 (100%) of the teachers indicated that it was necessary to have PE as one of the activity areas in the ECE curriculum. This implies that all the teachers both from Nairobi and Nyeri pre-schools indicated that it was necessary to have the PE programme in the ECE curriculum. All pre-schools teachers are taught PE during their training and currently, there is a lot of talk on the importance of physical fitness. Awareness of the need for PE in the curriculum would positively influence the implementation of the PE curriculum. Robinson et al., (1998) posit that PE plays a major role in the growth and development of children. It

strengthens their muscles, encourages self-expression, self-control, co-operative behaviour and creativity. Pica (2008) further asserts that early childhood is the ideal time for acquiring fundamental movement skills because it is during this unique period that children build the basic movement that are the foundations for learning more complex movement skills later in life. In addition, Wellhousen (2002) points out that for centuries, pioneers of ECE such as Johann Pestalozzic (1764-1827) and Friedrich Froebel (1782-1852) have recognized the benefits of PE and validated the need for outdoor play and learning.

The teachers gave various reasons as to why they thought it was necessary and relevant to have the PE programme in the ECE curriculum. The reasons for the need of the PE programme in the ECE curriculum are presented in Table 4.8.

Table 4.8: Reasons for the Need of the PE Programme in the ECE Curriculum

Response	F	%
Play promotes physical growth and development, good health, physical fitness e.g. muscular strength, flexibility	58	58.6
Children interact and socialize during play	45	45.5
Children explore, discover and learn through play	32	32.3
Children relax and refresh during play	19	19.2
Play is fun, enjoyable and breaks the monotony of the classroom	18	18.2
Play enhances emotional growth e.g. self esteem	15	15.2
Play promotes the development of fine and gross motor skills	12	12.1
Play enhances language development	11	11.1
Play enhances control and coordination of body parts e.g. eye-hand coordination	6	6.1
Children discover and develop their talents during play	5	5.1
Play links all the ECE activity areas	3	3
Play promotes creativity	2	2
Play enhances moral development	1	1
Children learn the essence of winning and losing through play	1	1

Table 4.8 shows that 58 (58.6%) of the teachers indicated that PE was necessary because it promotes a child growth and development, enhances good health and physical fitness, followed by 45 (45.5%) children interact and socialize during play, 32 (32.3%) children explore, discover and learn through play, 19 (19.2%) children refresh and relax during play, 18 (18.2%) play is fun, enjoyable and breaks the classroom monotony. Play was said to be necessary as it helps children discover and develop their talents 5 (5.1%), it links all the ECE activity areas 3 (3%), and it promotes creativity 2 (2%), enhances moral development 1 (1%) and teaches children the essence of winning and losing 1 (1%). Some of the teachers expressed these reasons for the need for the PE programme in the ECE curriculum as follows:

> "There are children who do not perform well in class but perform well outside the class in co-curricular activities. During free play as children play and socialize, teachers are able to discover and nurture their talents." [T 4; T17; T38]

> "Play gives children a good start as they learn through play. As children play and sing, singing games, counting songs,

> songs about the environment, they are learning. PE is a natural way of learning and through it, children learn and acquire knowledge."[T 43; T 69]
>
> "Apart from academics, the child also needs a break to go out and play in order to enhance the child's total growth and development. A growing child needs to be active and healthy and this will eventually lead to having a healthy nation."[T 53; T55]

The study also sought the headteachers' views for the need for the PE programme in the pre-school curriculum. Majority of the headteachers 60 (100%) interviewed said that it was necessary to have the PE programme in the ECE curriculum. This implies that their views concurred with the teachers' views that it was necessary to have the PE activity area in the ECE curriculum. The following quote from one of the headteachers from Nairobi pre-schools summarized the headteachers' views on the need for the PE programme in the ECE programme:

> "PE is necessary because any activity area that does not include play is incomplete as play is essential for the growth and development of young children." [H 46]

Another head teacher from Nyeri pre-schools also commented that:

> "Play is very important in the life of young children as it Improves their physical growth, body fitness, mental development and development of social skills such as team work." [H 10]

The study further sought the parents' views on the need for the PE programme in the pre-school curriculum. Among the sixty parents interviewed, 46 (77%) indicated that PE was an important activity area and should be included in the ECE curriculum. Majority of the parents with this view were from the Nairobi pre-schools 28 (47%) as compared to those from the Nyeri pre-schools 18 (30%). Majority of the parents from the Nyeri pre-schools were not aware that PE was offered in pre-school as part of the ECE curriculum. However, one of the parents

from Nyeri pre-schools commenting on the need of the PE programme in the ECE said the following:

> "Children should be allowed to play and discover their talents as some of them are gifted with physical skills. Some of my other older children are good in sports and I have seen it is good." [P 3]

In addition, other parents had this to say on the need for PE in the ECE curriculum:

> "Physical education is relevant in ECE and it should be taught to young children because pre-school is mostly about play and just a bit of learning. More emphasis should be put on play as it is vital for the physical and mental growth of children." [P 2; P 31; P36]

> "PE is fun and it should be taught to young children in pre-school because it makes them happy, they enjoy it, it makes them relax and it helps them to keep fit. Play allows children to be children and it helps them in their mental development." [P 32; P 34; P 41; P 43]

The reasons given by the teachers, as well as the responses given by the headteachers and the parents imply that PE is an important activity area that should be included in the ECE curriculum. This would positively influence the implementation of the PE curriculum. The results from the study on the need for the PE programme in the ECE curriculum affirm Robinson et al., (1998) assertions that it is necessary to have PE in pre-schools as it addresses the needs of the child and contributes to the holistic growth and development of a child**.** The findings are also supported by studies done by NAEYC (1988) and NCTM (1978) which reveal that play is relevant for young children as they use it to explore, imitate, test and construct reality from the world. PE programmes in pre-schools also help young children to acquire and refine their movement skills which facilitate the maintenance and improvement of physical fitness (Sallis & McKenzie, 1991; Ignico, 1992a; Ignico, 1992b).

In regard to parents' educational level and their views towards the need for PE in the pre-school curriculum, parents with higher levels of education had an understanding of the role of PE in the lives of children. A parent from Nairobi pre-schools who was a graduate had this to say on the need for the PE programme in the pre-school curriculum:

> "PE is relevant in pre-school as it plays a vital role in the life of young children. Physically, it improves their body systems such as the respiratory system; mentally, dull children get lively; socially they interact and emotionally, they improve their self-esteem." [P 37]

On the other hand, a parent from a Nairobi pre-school who had attained KCPE academic qualifications and worked as a farm hand had this to say:

> "I do not know whether PE is relevant in ECE or not. The teaching of PE depends with the pre-school teacher who knows what is best for the children." [P 40]

These sentiments were also echoed by a parent from a Nyeri pre-school who had attained KSCE academic qualification and was a housewife:

> "I am not sure about the teaching of PE in pre-school. The teachers should teach PE if they know it is important for the children." [P 1]

The study observed that parents from Nairobi and Nyeri pre-schools with higher levels of education had an understanding of the role of PE in the lives of children. However, Wawire (2006) noted that parents from Nairobi were better informed about the aspects of pre-school than parents from Machakos. Abagi (2008) on the other hand, observed that parents who took their children to high cost pre-school were aware about the benefit of ECE.

The findings on the need for the PE programme in the ECE curriculum show that majority of the pre-school teachers, headteachers and the parents views pointed towards the need for the PE programme in the ECE curriculum. However, it was

noted that, majority of the parents who viewed PE as an important activity in the ECE curriculum were from Nairobi county 28 (47%) and not from Nyeri county 18 (30%). It was noted that some parents from Nyeri pre-schools were not aware that PE was offered in the pre-school as part of the curriculum. This may be because of the presence of sports day activities in Nairobi county pre-schools that sensitise Nairobi county parents of the learning of PE and its role in the lives of children. It was also observed that parents with higher levels of education both from Nairobi and Nyeri counties had an understanding of the role of PE in the lives of children. This may be due to a varied range of opportunities expounding on the role of PE in the lives of children that the parents with higher levels of education both from Nairobi and Nyeri counties may have been exposed to.

4.3.2 The Pre-school PE Curriculum

The Guidelines for Pre-school Education in Kenya (KICD, 1984) point out that, pre-schools should offer activities geared towards developing the wholeness of the child and promoting healthy development, physically, socially, emotionally, mentally, morally and spiritually.

The study sought the teachers' views on the PE curriculum on whether the curriculum addressed the needs of the child. That is the physical, mental, social and emotional needs of the child. The findings are presented in Table 4.9.

Table 4.9: The PE Curriculum and the Needs of the Child

	NAIROBI SCHOOLS					NYERI SCHOOLS				Total
Response	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**
	%	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
	PB	PR	CC	WF	Total	PB	PR	CC	Total	
PE addresses child's needs	16	26	3	6	51	17	28	3	48	99
	16.16	26.26	3.03	6.06	51.51	17.17	28.28	3.03	48.48	100
PE does not address child's needs	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**16**	**26**	**3**	**6**	**51**	**17**	**28**	**3**	**48**	**99**
	16.16	**26.26**	**3.03**	**6.06**	**51.51**	**17.17**	**28.28**	**3.03**	**48.48**	**100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

Table 4.9 shows that 99 (100%) of the teachers both from Nairobi and Nyeri pre-schools indicated that the PE curriculum addressed the needs of the child (physical, mental, social and emotional). None of the teachers indicated that the PE curriculum does not address the needs of the child. This implies that all the teachers were of the view that, the PE curriculum addressed the needs of the child and therefore, was relevant in the ECE curriculum.

The study also sought the headteachers' views on the PE curriculum on whether the curriculum addressed the needs of the child. From the headteachers' interviews, 60 (100%) of the headteachers also said that the PE curriculum addressed

the needs of the child. This implies that, all the headteachers were of the view that, the PE curriculum addressed the needs of the child and was therefore relevant in the ECE curriculum. The headteachers indicated that PE helped in identifying and developing talents of the children, it enhanced the acquisition of motor skills, fitness and social skills, it improved appreciation of cultural diversity, it enhanced learning through interaction and it helped the child to develop holistically that is physically, socially and mentally. One of the headteachers commenting on whether the PE curriculum addressed the needs of the child stated that:

> "The experiences provided at this stage of a child's development are very important because they either enhance or hinder the realization of the child's full potential." [H 58]

The study further sought the DICECE officers' views on the PE curriculum on whether the curriculum addressed the needs of the child. The 4 (100%) DICECE officers interviewed from Nairobi and Nyeri counties supported further the views of the teachers and headteachers by indicating that the pre-school PE curriculum addressed the needs of the child. They pointed out that the activities in the PE curriculum and the teaching of PE were geared towards the total development of the child. One of the DICECE officers commenting on whether the PE curriculum addressed the needs of the child stated that:

> "Play is very important to the total growth of a child. It helps a child to grow in a healthy manner, to socialize with others and to acquire moral values." [D 2]

In addition, another DICECE officer said that:

> "A child is not living his/her childhood life if there is no play. Play is part of a child's life and it helps a child develop holistically. Play is fun for children and it helps them learn and stay healthy." [D 4]

The study found that the ECE curriculum addressed the needs of the child. This has been demonstrated by research which shows that, PE programmes exhibiting the characteristics of quality PE lead to increased physical activity levels (Dale, Corbin & Dale, 2000), improved basic motor skills performance (Ignico, 1992a, 1992b), improved self-esteem and prosocial behaviour (Bailey, 2006) and improved academic performance (Sallis et al., 1999). PE is also an integral part of the total education of any child and it is closely linked to other creative and learning experiences and skill acquisition. It makes a significant contribution to the all-round harmonious development of the mind and the body (CARICOM, 2011).

4.3.3 The Pre-school PE Objectives in the Pre-school Syllabus

For effective teaching and learning to take place, teachers need to be guided by the activity area objectives. These objectives need to be clear, relevant and achievable. The study sought to find out whether the PE objectives in the pre-school syllabus are clear, relevant and achievable. The teachers' responses on whether the PE objectives in the pre-school syllabus are clear, relevant and achievable are presented in Table 4.10.

Table 4.10: Teachers' Views on the Pre-school PE Objectives in Pre-school Syllabus

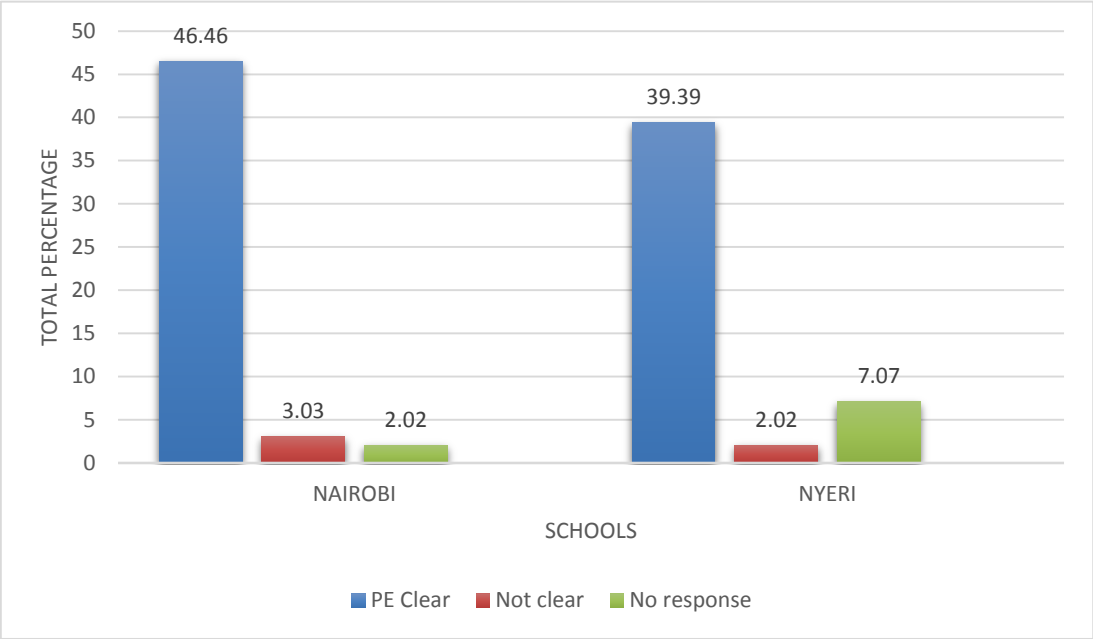
	NAIROBI SCHOOLS					NYERI SCHOOLS				
Teaching experience	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
PE objectives clear, relevant and achievable	16 16.16	21 21.21	3 3.03	6 6.06	46 46.46 (90%)	15 15.15	21 21.21	3 3.03	39 39.39 (81.3%)	85 85.85
Not clear, relevant and achievable	0 0.00	3 3.03	0 0.00	0 0.00	3 3.03	0 0.00	2 2.02	0 0.00	2 2.02	5 5.05
No Response	0 0.00	2 2.02	0 0.00	0 0.00	2 2,02	2 2.02	5 5.05	0 0.00	7 7.07	9 9.09
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

According to the results in Table 4.10, 85 (85.86%) of the teachers 46 (46.46%) from Nairobi and 39 (39.39%) from Nyeri pre-schools indicated that the PE objectives were clear, relevant and achievable, while 5 (5.05%) of the teachers indicated that the PE objectives were not clear, relevant and achievable. Of the 5 (5.05%) teachers, 3 (3.03%) were from Nairobi private pre-schools and 2 (2.02%) from Nyeri private pre-schools. Some of the teachers 9 (9.09%) did not give a responseto the item on the pre-school PE objectives in the ECE syllabus and majority 7 (7.07%) of the teachers were from Nyeri pre-schools. These comprised of 5 (5.05%) from Nyeri private pre-schools, 2 (2.02%)) from Nairobi private pre-schools and 2 (2.02%) from Nyeri public pre-schools. Out of the 14 (14.14%) teachers, 9 (9.09%) who did not respond and 5 (5.05%) who indicated that the PE objectives in the ECE syllabus were not clear, relevant and achievable, 12 (12.12%) were from Nairobi and Nyeri private pre-schools. The results imply that, a higher

percentage of teachers (90%) from Nairobi pre-schools reported that the PE objectives were clear, relevant and achievable than teachers (81.3%) from Nyeri pre-schools. This also implies that the PE objectives were a challenge to some teachers from private schools. This may be as a result of not using the syllabus as a reference point when planning for teaching PE or a lack of teaching PE lessons. Objectives guide a teacher as they state what should be achieved at the end of a course. They facilitate the implementation of a curriculum. Figure 4.2 shows the percentages of the pre-school teachers' views on whether the PE objectives in the pre-school syllabus are clear, relevant and achievable.

Figure 4.2: Percentages on the Teachers' Views on PE Objectives in the Syllabus



The 85 (85.86%) teachers who indicated that the objectives were clear, relevant and achievable supported their views by indicating that the objectives were relevant as they were in line with the age and the developmental stages of the children. The objectives were clear, straightforward, specific and understandable. The teachers also indicated that, the objectives were achievable since during play,

the children relaxed, enjoyed, explored, and acquired various physical skills and social skills. One of the teachers from Nairobi pre-schools commented on the PE objectives and stated that:

> "I understand the PE objectives because they are clear and they guide me when teaching the outdoor activities."[T 66]

In addition, other pre-school teachers reported that:

> "The PE outdoor objectives are clearly spelt out and understandable." [T 49]

> "The PE objectives are achievable as they relate to the level and developmental stage of the children." [T 3]

> "The PE objectives are clear and relevant as they state what is expected to be achieved at the end of learning such as development of fine and motor skills." [T 18]

The teachers' comments show that the PE objectives in the pre-school curriculum were clear, understandable, relevant and appropriate for the age and developmental stages of the children. This implies that the teacher were able to plan their lessons guided by the PE objectives in the pre-school curriculum. This enhanced the implementation of the PE curriculum.

The 5 (5.05%) teachers, who indicated that the objectives were not clear and achievable, felt that, the objectives were not based on the age level of the children. However, 6 (6.06%) of the teachers indicated that PE was not taught in their pre-schools and therefore, they could not tell whether the objectives were achievable or not. Indeed, 3 (3.03%) of the teachers indicated that they last referred to the objectives when they were teacher trainees and this implies that they did not refer to the objectives when planning to teach PE. Although the syllabus was available, they did not plan but taught without referring to the syllabus. This may also imply that the teachers who did not give responses did not refer to the objectives when planning for PE and therefore could not state whether the objectives were clear and achievable.

This could have a negative on impact on the teaching of PE as this may mean that some teachers teach PE without relating it to the objectives. Teaching without referring to the syllabus means that some teachers teach PE without planning for it.

The DICECE officers from Nairobi and Nyeri counties were also asked whether the PE objectives in the pre-school syllabus were clear, relevant and achievable. The 4 (100%) DICECE officers said that the PE objectives in the pre-school syllabus were clear, relevant and achievable. They said that the objectives were precise and understandable and with good planning and implementation, these PE objectives were achievable. A DICECE officer from Nairobi county commenting on the PE objectives said:

> "The objectives are very clear and achievable as they expect the child to be able to relax, enjoy, explore the world around them, develop large and small motor skills and co-ordinate different body parts among others." [D 2]

However, one DICECE officer commented:

> "Teachers plan schemes of work and lesson plans to comply with educational authorities and for endorsement. Sometimes they do not take time to reflect on the objectives to be achieved at the end of the pre-school course. This may be as a result of the academic pressure to prepare children for Standard one." [D 1]

The comments from the DICECE officers show that the PE objectives in the pre-school curriculum are clear, relevant and achievable. However, due to academic pressure, the teachers did not reflect on the PE objectives to be achieved. This implies that, though the PE objectives are clear, relevant and achievable, teachers did not give them the necessary attention. This may be as a result of lack of monitoring and supervision of the teaching of PE. Due to the pressure on academic performance, much attention is given to the other activity areas as PE is sidelined.

The findings on the pre-school PE objectives in the pre-school syllabus show that 85 (85.86%) of the pre-school teachers and 4 (100%) DICECE officers indicated that the PE objectives were clear, relevant and achievable. However, it was noted that, a higher percentage (46.46%) of teachers who indicated that the PE objectives were clear, relevant and achievable were from Nairobi and not from Nyeri pre-schools. The findings reveal that the 5 (5.05%) teachers who indicated that the PE objectives were not clear, relevant and achievable were from Nairobi and Nyeri private pre-schools. It was observed that 6 (6.06%) of the teachers who did not respond to the item indicated that PE was not taught in their pre-schools and they could not tell whether PE objectives were clear, relevant and achievable. Some of the teachers also indicated that they did not refer to the syllabus as a reference to their planning for PE lessons.

The results that the PE objectives in the ECE syllabus are clear, relevant and achievable concur with Wawire's (2006) observation that ECE objectives were well-stated and emphasized on the total development of the child. The Organization for Economic Co-operation and Development (2006) asserts that a clear view and articulation of goals help foster programmes that will promote the well-being of young children and respond adequately to children's needs. Despite the fact that goals and objectives provide a guideline to learning activities and constitute the background of any endeavour, this study noted that some pre-school teachers did not refer to the objectives when planning for PE lessons.

4.3.4 The Pre-school PE Syllabus Content

The PE content in the pre-school syllabus should be comprise of varied physical activities that are geared towards the achievement of the PE objectives. The study sought to establish whether the PE content in the pre-school syllabus was geared towards the achievement of the PE objectives. The teachers' views on

whether the activities provided in the PE syllabus are geared towards the achievement of the PE objectives are presented in Table 4.11.

Table 4.11: PE Syllabus Activities and the Achievement of the PE Objectives

	NAIROBI SCHOOLS					NYERI SCHOOLS				Total
Response	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**
	%	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
	PB	PR	CC	WF	Total	PB	PR	CC	Total	
PE activities achievement-oriented	16 16.16	24 24.24	3 3.03	5 5.05	48 48.48 (94%)*	15 15.15	23 23.23	3 3.03	41 41,41 *(85%)	89 89.89
PE activities not achievement oriented	0 0.00	1 1.01	0 0.00	0 0.00	1 1.01	0 0.00	0 0.00	0 0.00	0 0.00	1 1.01
No response	0 0.00	1 1.01	0 0.00	1 1.01	2 2.02	2 2.02	5 5.05	0 0.00	7 7.07	9 9.09
Total	16 16.16	26 26.26	3 3.03	6 6.06	51 51.51	17 17.17	28 28.28	3 3.03	48 48.48	99 100

Note: PB (Public), PR (Private), CC (Council), WF (Welfare

*****percentage frequency

The results in Table 4.11 show that, 89 (89.90%) of the teachers, 48 (48.48%) from Nairobi and 41 (41.41%) from Nyeri pre-schools indicated that the activities provided in the PE syllabus were geared towards the achievement of the PE objectives while 1 (1.01%) of the teachers from a Nairobi private pre-school indicated that the activities were not geared towards the achievement of the objectives. Some 9 (9.09%) of the teachers gave no response and these were; 5

(5.05%) from Nyeri private pre-schools, 2 (2.02%) from Nyeri public pre-schools, 1 (1.01%) from a Nairobi private pre-school and 1 (1.01%) from a welfare pre-school. The 9 (9.09%) teachers who gave no response could comprise of 6 (6.06%) teachers who had earlier indicated that PE was not taught in their pre-schools and they therefore, could not tell whether the PE objectives were achievable or not and the 3 (3.03%) teachers who indicated that they last referred to the objectives when they were teacher trainees.

From the findings on the PE syllabus activities and the achievement of the PE objectives, it can be observed that majority of the teachers 89 (89.90%) indicated that the activities provided in the PE syllabus were geared towards the achievement of the PE objectives. A higher percentage (94%) of teachers from Nairobi pre-schools indicated that the activities provided in the PE syllabus were geared towards the achievement of the PE objectives than (85%) teachers from Nyeri pre-schools.

The results in Table 4.11 also show that, out of 10 (10.10%) teachers, 1(1.01%) of the teachers who indicated that PE syllabus activities were not geared towards the achievement of the PE objectives and the 9 (9.09%) teachers who did not respond to the item, 7 (7.07%) were from private pre-schools in Nairobi and Nyeri. This again implies that some private pre-schools in Nairobi and Nyeri counties had a challenge with the PE syllabus and objectives. The findings also revealed that some pre-school teachers do not relate the pre-school PE syllabus content with the PE objectives. When teachers do not refer to the PE syllabus as a guide, it implies that they may not be aware of the intended outcome of their teaching and they may not tailor the learning activities towards the achievement of the PE objectives. This affects the implementation of the PE curriculum as teachers teach without adhering to the syllabus.

The results from the documentary analysis indicated that 94 (94.94%) Nairobi and Nyeri pre-schools had copies of the syllabus while 5 (5.05%) pre-schools did not have. These were 3 (3.03%) pre-schools from Nairobi county and 2 (2.02%) from Nyeri county. One of the Nyeri teachers from a private pre-school reported that they borrowed the syllabus from a neighbouring public pre-school. Another teacher from Nairobi welfare pre-school reported that they used the syllabus which belonged to a teacher who was on training. Yet another teacher from a Nyeri private pre-school did not have access to the syllabus as it was kept by the head teacher. It was observed that 76 (76.77%) teachers from Nairobi and Nyeri pre-schools prepared schemes of work while 23 (23.23%) did not; 14 (14.14%) from Nyeri and 9 (9.09%) from Nairobi pre-schools. The schemes of work as reported by some teachers 8 (8.08%) were prepared as they had to be checked and endorsed by the headteachers. It was also noted that 67 (67.68%) of the teachers prepared lesson plans while 32 (32.32%) did not; 17 (17.17%) from Nyeri and 15 (15.15%) from Nairobi pre-schools. These results imply that some pre-schools did not have essential school references such as the syllabus, and some did not prepare professional documents such as schemes of work and lesson plans. This means that teaching of PE was done without any professional planning and it was not guided by the objectives leading to poor implementation of the PE curriculum. There is need for teachers to use the syllabus as learning activities derived from the PE content in the syllabus has to be geared towards the achievement of the objectives.

An analysis of the pre-school PE syllabus content reveals that most 89 (89.90%) of the teachers both from Nairobi and Nyeri said that the content in the PE syllabus was geared towards the achievement of the PE objectives. However, a higher percentage (94%) of teachers who indicated that the PE content was geared towards the achievement of the PE objectives was from Nairobi pre-schools. Private

pre-schools both from Nairobi and Nyeri counties had a higher percentage 7 (7.07%) of pre-schools where the teachers indicated that the PE content was not geared towards the achievement of PE objectives and those who did not respond to the item. The findings also revealed that, some pre-school teachers did not relate the pre-school syllabus content with the PE objectives. Some pre-schools 5 (5.05%) both from Nairobi and Nyeri counties did not have copies of the PE syllabus though most 76 (76.77%) of the pre-school teachers prepared schemes of work and 67 (67.68%) lessons plans.

The results of the study on PE syllabus activities and the achievement of the objectives of PE show that the PE syllabus activities were geared towards the achievement of the PE objectives. Empirical research on physical activities has demonstrated that fundamental movement skills such as running, throwing, skipping, hopping, jumping are associated with higher levels of physical activity in young children (Fisher et al., 2005). According to Bailey (2006), well planned and presented PE programmes contribute to the improvement of psychological health of young children which is one of the PE objectives. Fairclough and Stratton (2006) further observed that, when attention is directed to curriculum design, content and pedagogy, PE programmes make valuable contribution to the achievement of recommendations relating to children's physical activity while also delivering on other educational objectives. Further, Annario, Cowell and Hazelon (1980) point out that, the primary function of a curriculum is to translate educational philosophies and theories into a series of progressive meaningful and guided experiences for children to attain long-range goals.

The Guidelines for Pre-school Education in Kenya (KICD, 1984) point out that, pre-school programmes should be carefully organized and should be based on the needs, interests and abilities of the children. This study sought the teachers'

views on whether the physical activities in the PE syllabus were age appropriate and relevant. The teachers' views are presented in Table 4.12.

Table 4.12: Age Appropriateness and Relevance of Physical Activities in the PE Syllabus.

	NAIROBI SCHOOLS					**NYERI SCHOOLS**				**Total**
Response	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**
	%	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
	PB	PR	CC	WF	Total	PB	PR	CC	Total	
Appropriate	16	21	3	6	46	14	23	3	40	86
and relevant	16.16	21.21	3.03	6.06	46.46	14.14	23.23	3.03	40.40	86.87
					(90%)				(83%)	
Not	0	3	0	0	3	1	0	0	1	4
appropriate	0.00	3.03	0.00	0.00	3.03	1.01	0.00	0.00	1.01	4.04
and relevent										
No response	0	2	0	0	2	2	5	0	7	9
	0.00	2.02	0.00	0.00	2.02	2.02	5.05	0.00	7.07	9.09
Total	**16**	**26**	**3**	**6**	**51**	**17**	**28**	**3**	**48**	**99**
	16.16	**26.26**	**3.03**	**6.06**	**51.51**	**17.17**	**28.28**	**3.03**	**48.48**	**100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare

According to the results in Table 4.12, 86 (86.87%) of the teachers, 46 (46.46%) from Nairobi and 40 (40.40%) from Nyeri pre-schools indicated that physical activities provided in the PE syllabus were age appropriate and they addressed the interest of the child. The results show that Nairobi pre-schools had a higher percentage (90%) of teachers who indicated that physical activities provided

in the PE syllabus were age appropriate and they addressed the interest of the child than (83%) teachers from Nyeri pre-schools.

The physical activities were indicated not to be age appropriate and that they did not address the interest of the child by 4 (4.04%) of the teachers, 3 (3.03%) from Nairobi private schools and 1 (1.01%) from a Nyeri public pre-school. Some of the teachers 9 (9.09%) did not respond to the item and most 7 (7.07%) were from Nyeri pre-schools. This may imply that some teachers from Nyeri pre-schools had a challenge with the PE syllabus. Out of the 13 (13.13%) of the teachers who indicated that the physical activities in the PE syllabus were not age appropriate and relevant and the teachers who did not respond to the item, 5 (5.05%) were from Nairobi private pre-schools and 5 (5.05%) were also from Nyeri private pre-schools. This implies that some teachers from private pre-schools faced challenges in the usage of the PE syllabus.

The 4 (4.04%) teachers who indicated that the physical activities provided in the PE syllabus were not age appropriate felt that, some of the physical activities were challenging for the children while some were not challenging at all. The teachers indicated that some children were not able to perform skills such as jumping, throwing or kicking. Accuracy and balancing skills were noted to be very challenging though with enough practice, the children were able to acquire them. However, some 6 (6.06%) teachers could not comment on this item as PE was hardly taught in their pre-schools.

The findings on the age appropriateness and relevance of the physical activities in the PE syllabus show that, majority of the teachers 86 (86.87%) said that the physical activities were age appropriate and relevant. However, the findings show that a higher percentage (90%) of teachers from Nairobi pre-schools indicated that the physical activities in the PE syllabus were age appropriate and relevant than

(83%) teachers from Nyeri pre-schools. It was noted that, out of the 9 (9.09%) teachers who said that the physical activities in the PE syllabus were not appropriate and relevant, 7 (7.07%) were from Nyeri pre-schools. It was also observed that, 10 (10.10%) out 13 (13.13%) teachers who indicated that the physical activities in the PE syllabus were not appropriate and relevant, and those who did not respond to the item were from private pre-schools both in Nairobi and Nyeri counties.

The results on the age appropriateness and relevance of the physical activities in the PE syllabus show that majority of the teachers 86 (86.87%) indicated that the physical activities in the PE syllabus were age-appropriate and relevant to the pre-school children. This conforms to the Council on Physical Education for Children (COPEC) (2003) guidelines that children should participate each day in a variety of age-appropriate physical activities designed to achieve optimal health, wellness, fitness and performance benefits. Brotherson (2009) stresses that developmentally appropriate educational programmes respond to the age, developmental level and uniqueness of a child. Kinoo (1999) further stresses that, appropriate learning activities are the key to success in the learning of PE.

4.3.5 The Instruction of the Pre-school PE Curriculum

To further establish the relevance of the implementation of the PE pre-school curriculum, the study sought to find out the teachers' views on whether there was need to teach PE like the other activity areas. The teachers' views on whether PE needed to be taught like other activity areas are presented in Table 4.13.

Table 4.13: Teachers' Responses on Whether PE Needed to be Taught like Other Activity areas.

	NAIROBI SCHOOLS					NYERI SCHOOLS				Total
Response	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**
	%	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
	PB	PR	CC	WF	Total	PB	PR	CC	Total	
PE needs to be taught	16	26	3	6	51	17	25	3	45	96
	16.16	26.26	3.03	6.06	51.51	17.17	25.25	3.03	45.45	96.97
PE does not need to be taught	0	0	0	0	0	0	3	0	3	3
	0.00	0.00	0.00	0.00	0.00	0.00	3.03	0.00	3.03	3.03
Total	**16**	**26**	**3**	**6**	**51**	**17**	**28**	**3**	**48**	**99**
	16.16	**26.26**	**3.03**	**6.06**	**51.51**	**17.17**	**28.28**	**3.03**	**48.48**	**100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

From Table 4.13, it can be observed that majority of the teachers 96 (96.97%) from Nairobi and Nyeri pre-schools indicated that children needed to be taught PE like other activity areas for them to acquire physical skills. This may be an indication that majority of the pre-school teachers viewed PE as an important activity area like the other activity areas. However, 3 (3.03%) teachers from Nyeri private pre-schools indicated that children did not need to be taught PE like other activity areas. The response of the 3 (3.03%) teachers from Nyeri private pre-schools implies that some of the teachers from private pre-schools and from Nyeri countydid not see the need for teaching PE in pre-schools.

The 96 (96.97%) teachers who indicated that PE should be taught pointed out that, teachers needed to teach PE in order to demonstrate skills, guide, supervise and assist children. PE instructions would enable children acquire the skills correctly. The teachers could also help the children discover and develop their talents. The children also needed to be guided on the importance of PE for them to develop interest in PE activities. The 3 (3.03%) teachers who indicated that PE should not be taught like other activity areas stated that children can acquire the skills on their own.

Some of the teachers who indicated that PE should be taught had the following comments:

> "There are certain things that are supposed to be directed. For example, if you tell children to walk like a frog, there are some who do not know how a frogwalks and therefore a demonstration is necessary. A PE teacher needs to use the right approach for lesson objectives to be achieved." [T 1; T 88]

> "PE lessons that are planned, taught and supervised by the teachers are more enjoyable for young children. Children need proper instructions and guidance to acquire certain skills." [T 45; T 53; T 77; T 85]

> "PE should be taught since the abilities of the children need to be discovered, acquired or improved. It is during PE lessons that teachers are able to learn more about children." [T39; T 79; T 87]

The DICECE officers were also asked whether there was need for PE to be taught like all the other activity areas. The 4 (100%) DICECE officers interviewed from Nairobi and Nyeri counties affirmed the need for PE to be taught like all other activity areas in the pre-schools. They affirmed the need of teaching PE in pre-schools as they pointed out the important role it played in the total growth and development of a child. One DICECE officer commenting on the need to teach PE said that:

> "Physical Education is a learning activity like any other and children should be given opportunities to learn through movement. Just like numeracy and literacy skills are taught, motor skills should also be taught and should not be ignored."[D 3]

Another DICECE officer added:

> " Teachers teach reading, writing, addition, counting but assume kicking, skipping, and balancing will be acquired naturally." [D 4]

The DICECE officers pointed out that motor skill needed to be taught just like numeracy and literacy skills. Teaching of motor skills provides children with opportunities to learn and develop the skills. The study further sought the headteachers' view on the need to teach PE just like the other activity areas. Majority 59 (98.33%) of the interviewed headteachers also indicated that there was need for PE to be taught just like the other activity areas while 1 (1.67 %) indicated that there was no need. The headteachers pointed out that there was need to teach PE for proper acquisition of skills, for skills demonstration, for assistance and guidance to the children and for the teacher to discover and nurture children's talents. However, 15 (25%) of the headteachers said that although it was important to teach PE, it was not taught in their pre-schools. They pointed out that children played during break time. One of the headteachers said that, children can acquire the skills on their own. Some of the headteachers made the following comments on the need for PE to be taught:

> "Children play during their free time. I thought the morning, lunch and evening breaks were enough play time for children." [H 3]

> "PE must be taught like any other activity area in the pre-school. It is not an issue of whether the teachers like teaching it or not, it is a duty for the teachers to teach." [H 19]

> "Children in pre-school need to be taught physical skills. Learning of skills can only be taught like the other activity areas." [H 14]

> PE should be taught but it is not taught due to competition with other schools in academic performance. The school management checks the standards constantly and the work covered. Therefore, we do not teach children PE but allow them to play during break time and have games on Thursdays because if the children fail in
>
> the examinations, the teachers and the head teacher are blamed." [H 22]

These headteachers' comments indicate that some of the headteachers advocated for the teaching of PE to enable children to acquire physical skills. However, some headteachers thought that break time was enough for children's play while some headteachers highlighted the challenges encountered in the teaching of PE such as pressure for more time for academic work.

The parents were also asked whether there was need to teach PE like the other activity areas. From the parents' interview schedule, 48 (80%) of the parents indicated that there was need to teach PE in pre-school for children to be properly guided by the teacher, to learn through play, to refresh their minds, to discover their talents, to be physically active and to develop mentally and socially. Some parents 12 (20%) indicated that the decision to teach PE in the pre-schools was the duty of the pre-schools administrators and the teachers as they knew what was best for the children. However, some of the parents insisted that even if PE was taught in the pre-schools, it should be allocated less time to give more time to the academic subjects. Some of the parents had the following to say on whether there was need to teach PE:

> "PE should not be given more than 30 minutes,
> if it is given less than 30 minutes, the better". [P 6]

> "Schools should have less play time and more time to
> learn English. Children have all the time to play at home.
> At school, they should learn more and play less." [P 38]

Other parents had this to say:

> "Children love movement and PE should be taught as it makes them happy, gives them vital exercises and makes them mentally alert." [P36]

> "What happened to play? There was plenty of time for play and games in our childhood but today, children no longer play. Children should be given the opportunity to learn and enjoy performing physical skills and games." [P 50]

These parents' comments indicate that some parents viewed PE as a waste of learning time and it should be allocated less time in pre-school. However, some parents lamented about the lack of opportunities for child play at school as schools denied children time to engage in play activities or games. The parents pointed out that children need play opportunities to learn, relax and enjoy.

The findings on the instruction of pre-school PE curriculum show that most 96 (96.97%) of the teachers indicated that children needed to be taught PE like other activity areas for them to acquire physical skills. The headteachers also supported the teaching of PE like other activity areas but 15 (25%) of the headteachers said that, although PE was important, it was not taught in their pre-schools due to competition in academic performance. Parents also supported the teaching of PE but some said that PE should be given less time than other activity areas.

The need for PE to be taught like other activity areas as established in this study is supported by Seefelt (1984) who points out that it is only with continuous regular instruction and practice that a child's level of performance will increase to proficiency. Galluhe and Ozmun (1996) further stress that, despite the belief by some educators that young children will automatically develop their movement skills when they are ready, environmental conditions such as opportunities for practice, encouragement and instruction are essential for skill learning. Indeed Pica (2008) and CARICOM (2011) add that motor skills are not acquired and refined without instruction and practice.

The study further sought to establish the relevance of the implementation of the PE curriculum by assessing whether the teaching and acquisition of movement skills ensured the achievement of the PE and ECE objectives. The teachers' responses are presented in Table 4.14.

Table 4.14: Acquisition of Movement skills and the Achievements of the PE and ECE Objectives

	NAIROBI SCHOOLS					**NYERI SCHOOLS**				**Total**
Response	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**
	%	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
	PB	PR	CC	WF	Total	PB	PR	CC	Total	
PE and ECE objectives achieved	15	25	3	6	49	15	25	3	43	92
	15.15	25.25	3.03	6.06	49.49 (96%)	15.15	25.25	3.03	43.43 (89.6%)	92.93
Objectives not achieved	1	0	0	0	1	0	0	0	0	1
	1.01	0.00	0.00	0.00	1.01	0.00	0.00	0.00	0.00	1.01
No response	0	1	0	0	1	2	3	0	5	6
	0.00	1.01	0.00	0.00	1.01	2.02	3.03	0.00	5.05	6.06
Total	**16**	**26**	**3**	**6**	**51**	**17**	**28**	**3**	**48**	**99**
	16.16	**26.26**	**3.03**	**6.06**	**51.51**	**17.17**	**28.28**	**3.03**	**48.48**	**100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

As shown in Table 4.14, 92 (92.93%) of the teachers, 49 (49.49%) from Nairobi and 43 (43.43%) from Nyeri pre-schools indicated that the acquisition of movement skills ensured the achievement of the PE and ECE objectives. The results show that Nairobi pre-schools had a higher percentage (96%) of teachers who

indicated that the acquisition of movement skills ensured the achievement of the PE and ECE objectives than (89.6%) teachers from Nyeri pre-schools. From Table 4.14, only 1 (1.01%) of the teachers from a Nairobi public pre-school indicated that the acquisition of movement skills did not ensure the achievement of the PE and ECE objectives while 6 (6.06%)did not respond to the item. Out of the 6 (6.06%) teachers who did not respond to the item on acquisition of movement skills and the achievement of the PE and ECE objectives, 3 (3.03%) were from Nyeri private pre-schools, 2 (2.02%) were from Nyeri public pre-schools, while 1(1.01%) was from a Nairobi private pre-school. This indicates that most of the teachers 5 (5.05%) who did not respond to the item were from Nyeri pre-schools. This implies that the teachers did not relate the acquisition of movement skills to the achievement of PE and ECE objectives. Out of the 7 (7.07%) teachers who indicated that the acquisition of movement skills did not ensure the achievement of the PE and ECE objectives and the teachers who did not respond to the item, 3 (3.03%) were from public pre-schools while 4 (4.04%) were from private pre-schools. This displays a response shared both by some public and private pre-schools.

The findings on the acquisition of movement skills and the achievement of the PE and ECE objectives show that, 92 (92.93%) teachers agreed that the acquisition of movement skills ensured the achievement of the PE and ECE objectives. A higher percentage (96%) of teachers from Nairobi pre-schools supported that acquisition of movement skills ensured the achievement of PE and ECE objectives than (89.6%) teachers from Nyeri pre-schools. Indeed, 5 (5.05%) out of 6 (6.06%) of teachers who did not respond to the item were from Nyeri pre-schools. This implies that some teachers do not relate the PE content with the achievement of the activity area and course objectives.

Majority of pre-school teachers 92 (92.93%) indicated that acquisition of movement skills ensured the achievement of the PE and ECE objectives. This is supported by Sallis and McKenzie (1991) who assert that PE programmes in pre-schools help young children to acquire and refine their movement skills. Learning of these movement skills facilitates the maintenance and improvement of good health which is one of the objectives of PE and ECE (Ignico, 1992a, Ignico 1992b). Acquisition of fundamental skills is also associated with higher levels of physical activity in young children which leads to development of motor skills, body control and coordination and development of physical capabilities (Fisher et al., 2005). In addition, acquisition of movement skills improves body posture, balance and body awareness, develops manipulative skills, encourages achievements and a sense of purpose which raises self-concept, encourages cooperative behaviour, stimulates mental and creativity development, and stimulates exploration (NAEYC, 1988; NCTM, 1989; Bruce, 1991; Whitebread, 1996; Seefeldt & Barbour, 1994; Robinson et al., 1998).

The relevance criterion focuses on the usefulness of the programme. It examines whether the agreed upon objectives of the programme are still valid and whether they represent sufficient rationale for the continuation of the programme (OECD/DAC, 2008). The findings of the first objective on the relevance of the implementation of the pre-school PE curriculum tend to show that, the implementation of the PE curriculum was relevant as majority of the teachers, headteachers, parents and DICECE officers from Nairobi and Nyeri pre-schools and counties indicated that; there was need for the PE programme in the pre-school curriculum, the PE objectives in the pre-school syllabus were clear, relevant and achievable, the PE content was geared towards the achievement of the objectives, the PE content was age appropriate and relevant, there was need for PE being taught like

other activity areas and that the acquisition of movement skills ensured the achievement of the PE and ECE objectives.

The findings on the relevance of the implementation of the pre-school PE curriculum show that more parents from Nairobi county 28 (47%) viewed PE as an important activity area in the pre-school curriculum than parents 18 (30%) from Nyeri county. It was noted that some parents from Nyeri county were not aware that PE was offered in pre-school as part of the curriculum. This may be due to media sensitization on the importance of play in children's lives and sports days organization in Nairobi pre-schools. Parents with higher levels of education both in Nairobi and Nyeri counties were found to have an understanding of the role of PE in the lives of children.

The findings on the relevance of the implementation of the pre-school PE curriculum also tend to show that private Nairobi and Nyeri pre-schools had a challenge in the teaching of PE as some indicated that the PE objectives were not clear, relevant and achievable. Some private pre-schools did not teach PE while others did not have copies of the syllabus. Some teachers did not use the syllabus as a reference and did not relate the PE syllabus content and the achievement of PE and ECE objectives. This may negatively affect the learning outcomes of PE. It was also noted that 3 (3.03%) teachers from Nyeri pre-schools said that children did not need to be taught PE like other activity areas as children can acquire physical skills on their own. Some headteachers also said that despite the importance of PE, it was not taught in their pre-schools due to competition in academic performance. Some parents on the other hand indicated that, even if PE was taught, it should be given less time than the other activity areas.

The relevance of the implementation of the PE curriculum in both Nairobi and Nyeri pre-schools is affirmed by Robinson et al., (1998) as a PE programme

contributes to the physical, social, mental and emotional growth and development of a child. Bailey (2006) posits that there is evidence of a relationship between physical activity and a host of factors affecting children's physical health, including diabetes, blood pressure and obesity. Haskell (1994) contends that, within the school context, incorporating physical activity is a likely means to improve the physical health status of children. Taras (2005) posits that PE improves children's attention and concentration while Sibley and Etneir (2005) point out that, PE improves their cognitive performance. The relevance criterion helped to address the context component of the CIPP model used in this study which examines whether the important needs of the client are addressed (Stufflbeam, 1983).

4.4 Findings on the Efficiency of the Implementation of the Pre-school PE Curriculum

The second objective of the study sought to examine the efficiency of the implementation of the pre-school PE programme in pre-schools. According to Anderson and Arsenault (2002), efficiency measures the relationship between the outputs (the products) of a programme and the inputs (the resources). The efficiency criterion focuses on the management of the programme and examines issues concerning policy, administrators, teachers, parents, educational officers, funding, time and learning resources. To examine the efficiency of the implementation of the PE curriculum, this study sought to assess the management of the PE programme and it dealt with issues concerning policy, time, scheduling, learning facilities and equipment, teachers, teaching approaches, administrators, parents and assessment.

4.4.1 Pre-school PE Teaching Policy

To examine the efficiency of the implementation of the pre-school PE curriculum, the study sought to find out whether PE was taught in the selected

schools, the frequency and the duration of the teaching. The teachers' responses on the teaching of PE in pre-schools are presented in Table 4.15.

Table 4.15: PE Teaching in Pre-schools.

	NAIROBI SCHOOLS					**NYERI SCHOOLS**				**Total**
Response	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**
	%	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
	PB	PR	CC	WF	Total	PB	PR	CC	Total	
PE taught in the school	16	25	3	5	49	16	25	3	44	93
	16.16	25.25	3.03	5.05	49.49	16.16	25.25	3.03	44.44	93.94
PE not taught in the school	0	1	0	1	2	1	3	0	4	6
	0.00	1.01	0.00	1.01	2.02	1.01	3.03	0.00	4.04	6.06
Total	**16**	**26**	**3**	**6**	**51**	**17**	**28**	**3**	**48**	**99**
	16.16	**26.26**	**3.03**	**6.06**	**51.51**	**17.17**	**28.28**	**3.03**	**48.48**	**100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

From Table 4.15, it is noted that 93 (93.94%) of teachers indicated that PE was taught in their pre-schools while 6 (6.06%) indicated that PE was not taught in their pre-schools. Those who indicated PE was not taught in their school were 3 (3.03%) teachers from Nyeri private pre-schools, 1 (1.01%) from a Nairobi private pre-school, 1(1.01%) from a Nairobi welfare pre-school and 1(1.01%) from a Nyeri public pre-school. Out of the 6 (6.06%) teachers who indicated that they did not teach PE in their pre-schools, 4 (4.04%) were from Nyeripre-schools, and 2 (2.02%) from Naiobipre-schools. This implies that a higher percentage of pre-schools which did not teach PE were from Nyeri county and from private pre-schools.

Majority 93 (93.93%) of the teachers reported that PE was taught in their pre-schools and out of the 6 (6.06%) which did not teach PE, 4 (4.04%) were from private pre-schools. However, the observation schedules portrayed different results as some 18 (18.18%) of the public pre-schools which claimed to teach PE did not while some 6 (6.06%) of the private pre-schools were very keen on the teaching of PE. Public pre-schools follow the NACECE guidelines which state that PE should be taught daily but the actual practice on the ground is where children are allowed to go to the playground and the teacher stands at the corner of the field. One head teacher from a Nyeri public pre-school commenting on why some pre-schools did not teach PE said:

> "The disparity between public and private pre-schools is too great and unless this is addressed, public pre-schools may not teach PE as they try to compete with the private pre-schools. Things seem to have changed because the emphasis that used to be there on playing games is no more. Nobody bothers about PE and it is not taught because of the pressure from parents for their children to perform well academically." [H 25]

This quote from another head teacher gives a view of the teaching of PE in pre-schools:

> " Teachers do not teach PE in the right way and thus, they do not engage the children in the right activities as they are required to be active participants which rarely happens." [H 46]

As the headteachers pointed out, there were challenges in the teaching of PE in pre-schools. Some of the pre-schools which did not teach PE had no facilities such as playgrounds while others had the facilities but did not teach PE so that they could teach children how to read and write or prepare the children for standard one examination. There was a lot of competition among public and private pre-schools and pressure from parents for academic performance. This led to the sidelining of PE teaching. Some pre-schools also assumed that PE is what children played during

break and lunch time while others assumed children would acquire motor skills on their own.

The study sought to find out from the headteachers whether there was a government policy on the teaching of PE in pre-schools. Out of the 60 headteachers interviewed, 47 (78.33%) reported that there was a government policy on the teaching of PE in pre-school while 13 (21.67%) reported that they were not aware of the policy. Indeed, one of the headteachers said that he had never heard of the policy while another head teacher who heads both the public primary and pre-school sections said that he did not know what happens in the pre-school. The headteachers further indicated that, although they were aware of the PE teaching policy, some did not follow it. This was supported by the 4 (100%) DICECE officers from Nairobi and Nyeri counties who indicated that the PE teaching policy from the Ministry of Education Science and Technology was spelt out in the ECDE Teachers' Handbook (KICD, 2008), but most of the pre-schools did not adhere to it. The DICECE officers had this to say concerning the PE teaching policy:

> " The teaching of PE in pre-schools unlike the other activity areas has no standardized teaching as pre-schools allocate varied teaching time for it. Some pre-schools teach it once a week while others do not teach at all either because of lack of facilities and equipment or due to pressure to perform well academically.' [D 3]

> "There is a teaching policy for all activity areas in pre-school but due to the varied sponsorship of pre-schools, different pre-schools give emphasis on some activity areas than others. PE seems to be the most affected because of the poor attitude of school administrators' and teachers' towards it. PE is normally seen as a waste of time." [D 2]

The DICECE officers' comments indicated that some pre-schools flouted the PE teaching policy in pre-schools. There was no standardized teaching of PE in pre-schools as some did not teach at all while others taught once or twice a week. This

was influenced by the varied sponsorship of pre-schools and the pressure to perform well academically.

The study also sought to find out from the parents about the teaching of PE as one of the activity areas in pre-schools. Among the parents interviewed, 28 (47%) of the parents from Nairobi county were aware that PE was taught in pre-schools while only 18 (30%) of the parents from Nyeri county were aware. The parents who were not aware of the teaching of PE in pre-schools said that they did not know all the activity areas taught in pre-schools. Some of the parents said that the pre-schools' administrators and teachers were the ones who knew what should be taught in the pre-schools. One of the parents from Nyeri pre-schools commenting on the teaching of PE said:

> I am not sure whether they learn PE or not but I know that Friday is a games day for the school because the children are required to wear their PE attire on that day. [P 1]

The parents' comment shows that some parents did not fully get involved in their children learning but left the whole task to the school. This may imply that some parents do not contribute positively towards their children's learning in pre-school. The findings on the teaching of PE in pre-schools revealed that out of 6 (6.06%) teachers who said that PE was not taught in their pre-schools, a higher percentage 4 (4.04%) of the teachers were from Nyeri pre-schools. Similarly, private pre-schools had a higher percentage 4 (4.04%) of pre-schools that did not teach PE. The observation schedules revealed that though some pre-schools indicated PE was taught in their pre-schools, no actual PE instruction was done as the children were allowed to go to the playground but the teachers' role was to supervise. Some headteachers assumed what children did during break time was PE while some headteachers who headed both the primary and the pre-schools sections did not pay a

lot of attention to the learning activity areas in the pre-school section. This could negatively affect the efficiency of the teaching of the activity areas.

The results on the teaching of PE in pre-school reveal that PE is taught in some pre-schools and not in others. The results show a lack of a clear ECE policy which makes it hard for the headteachers to spearhead efficient implementation of the pre-school programmes. These results of a lack of a clear ECE policy are supported by Wawire (2006) and Gatumu (2010). This situation is compounded by the partnership policy in the provision of ECE services. These partners offer different modes of ECE and no set standards are enforced by the government. This eventually influences curriculum implementation in pre-schools (Ng'asike, 2004; Wawire, 2006) because as CARICOM (2011) points out, policies are guides that reflect procedures which when adhered to, fulfill the best interest of the organization and the purposes for which it exists.

The teachers' responses on the frequency and duration of the teaching of PE in pre-schools are presented in Table 4.16.

Table 4.16: Time Allocation for PE lessons in the Pre-schools

Response	Nairobi Schools				Nyeri Schools.			F %
	PB	PR	CC	WF	PB	PR	CC	
5 days x 30mins	12	11	2	2	9	10	0	46 (46.46
3 days x 30 mins	1	1	0	0	3	4	1	10(10.10)
2 days x 30mins	0	3	0	0	0	4	1	8 (8.08)
No PE lesson	0	1	0	1	1	3	0	6 (6.06)
1 day x 30mins	0	2	0	1	1	0	0	4 (4.04)
5 days x 20mins	0	1	0	0	0	1	0	2 (2.02)
1 day x 35mins	0	1	0	1	0	0	0	2 (2.02)
3 days x 40mins	0	0	0	0	0	1	0	1 (1.01)
2 days x 45mins	0	1	0	0	0	0	0	1 (1.01)
5 days x 40mins	0	1	0	0	0	0	0	1 (1.01)
2 days x 35mins	1	0	0	0	0	0	0	1 (1.01)
2 x 30mins breaks	0	0	0	0	0	1	0	1 (1.01)
5 days x 45mins	0	0	1	0	0	0	0	1 (1.01)
2 days x 40mins	0	1	0	0	0	0	0	1 (1.01)
3 days x 45mins	0	0	0	0	0	0	1	1 (1.01)
1 day x 4hrs	0	1	0	0	0	0	0	1 (1.01)
5 days x 15mins	0	1	0	0	0	0	0	1 (1.01)
2 days x 50mins	0	0	0	0	0	1	0	1(1.01)
1 day x 1hr30mins	0	0	0	0	0	1	0	1 (1.01)
3 days x1hr	0	0	0	0	0	1	0	1 (1.01)
Total	16	26	3	6	17	28	3	99
	16.16	26.26	3.03	6.06	17.17	28.28	3.03	100

According to the results in Table 4.16, there were varied time allocations for PE in the pre-schools both in Nairobi and in Nyeri; 46 (46.46%)of the teachers indicated that PE was taught daily for 30 minutes, followed by 10 (10.10%) 3 times a week for 30 minutes, 8 (8.08%) daily for 35 minutes, 8(8.08%) twice a week for 30minutes, 4 (4.04%)once a week for 30 minutes, 2(2.02%) daily for 20 minutes, 2 (2.02%) once a week for 35 minutes, 1 (1.01%) 3 times a week for one hour, 1 (1.01%) one day a week for one and half hours, 1 (1.01%) twice a week for fifty minutes and 1 (1.01%) one day for four hours. The Early Childhood Development

and Education Handbook (KICD, 2008) recommends an allocation of 30 minutes daily for PE. The varied time allocation as displayed in Table 4.16 is contributed by the various type of sponsorship in pre-school education in Kenya. The different time allocation is an indicator that some pre-schools do not distinguish between PE and games. They deny children the opportunity for PE instructions in a PE lesson but offer a block time of one afternoon e.g. Friday afternoon for games for the whole pre-school.

The findings of the study on the time allocation for PE lessons in the pre-schools revealed that pre-schools had different time allocation for PE lessons and this was due to the various types of sponsorship of pre-schools in Kenya. The results show that most of the pre-schools did not adhere to the KICD recommendations of daily PE lessons of 30 minutes each and therefore, did not offer enough time for PE.

The results of the study on time allocation for PE in pre-schools revealed that 46 (46.46%) of the pre-school teachers conformed to the KIE (2008) guidelines of 30 minutes of PE each day of the week while 53 (53.53%) did not conform. Other studies reveal the problem of time allocation for PE lessons at other levels of education in Kenya (Muniu, 1986; Kiganjo, 1987; Muindi, 1998). According to McWilliams et al, (2009), the amount of time allocated for physical activity, the teacher's training and instructions, and the appropriate physical settings for play influence physical activity levels.

To further assess the teaching of PE in pre-school, the study sought to establish whether the PE lesson was indicated in the timetable in the pre-schools. The findings from the teachers' responses are presented in Table 4.17.

Table 4.17: Indication of the PE lessons on the Timetable

	NAIROBI SCHOOLS					NYERI SCHOOLS				Total
Response	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**
	%	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
	PB	PR	CC	WF	Total	PB	PR	CC	Total	
PE lesson indicated on timetable	16	25	3	5	49	17	25	3	45	94
	16.16	25.25	3.03	5.05	49.49	17.17	25.25	3.03	45.45	94.94
PE lesson not indicated on timetable	0	1	0	1	2	0	3	0	3	5
	0.00	1.01	0.00	1.01	2.02	0.00	3.03	0.00	3.03	5.05
Total	**16**	**26**	**3**	**6**	**51**	**17**	**28**	**3**	**48**	**99**
	16.16	**26.26**	**3.03**	**6.06**	**51.51**	**17.17**	**28.28**	**3.03**	**48.48**	**100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

From Table 4.17, majority of the teachers 94 (94.95%) indicated that PE was included in the pre-school timetable while 5 (5.05%) of the teachers, indicated that PE was not indicated in the timetable. From those who indicated that PE was not timetabled; 3 (3.03%) teachers were from Nyeri private pre-schools, 1 (1.01%) from a Nairobi private pre-school and 1 (1.01%) from a Nairobi welfare pre-school. The results show that, out of the 5 (5.05%) of the teachers who indicated that PE was not included in their pre-schools timetable, 4 (4.04%) were from private pre-schools from Nairobi and Nyeri counties. This implies that some private pre-schools from

Nairobi and Nyeri counties did not include PE in the school time table and thus PE was not taught in these schools.

One teacher from Nyeri pre-schools commenting on the timetable stated:

> " PE is indicated in the time-table daily but it is taught only for three days in a week." [T 13]

This teacher's comment shows that, PE is indicated on the timetable as a formality. This implies that the PE lessons are used for other activity areas thus denying the children play time opportunities for learning and acquiring motor skills.

The results on the indication of the PE lessons on the timetable revealed that majority of the teachers 94 (94.95%) from Nairobi and Nyeri pre-schools reported that the PE lessons were indicated on the timetable. However, comments from the teachers indicated that, PE lessons were indicated on the timetable but they were not taught. These results at the pre-school level are similar with Muindi (1998) and Nyonje (2004) who also established that PE lessons were indicated on the primary schools timetables though not all primary schools taught PE as indicated in the time-table while others used the PE lesson to teach other subjects such as Mathematics and English.

To further examine the efficiency of the implementation of the PE curriculum, the study sought to find out if the PE lesson was used to teach other activity areas instead of PE. The teachers' responses on the use of PE lessons to teach other activity areas are presented in Table 4.18.

Table 4.18: Use of PE lessons to Teach other Activity Areas.

	NAIROBI SCHOOLS					NYERI SCHOOLS				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
PE lesson used to teach other areas	5 5.05	11 11.11	2 2.02	5 5.05	23 23.23 (45.09%)	13 13.13	16 16.16	3 3.03	32 32.32 (66.67%)	55 55.56
Lessons used not to teach other areas	11 11.11	15 15.15	1 1.01	1 1.01	28 28.28	4 4.04	12 12.12	0 0.00	16 16.16	44 44.44
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

From Table 4.18, it is observed that majority of the teachers 55 (55.56%) from Nairobi and Nyeri pre-schools reported that PE lessons were used to teach other activity areas while 44 (44.44%) reported that the PE lessons were not used to teach other activity areas. Nyeri pre-schools had a higher percentage of teachers 32 (66.67%) who reported that PE lessons were used to teach other activity areas than Nairobi pre-schools 23(45.09%).

The responses from the varied categories of pre-schools indicated that though the PE lessons were indicated in the timetable, other activities were conducted during the lessons. The PE lessons were used by teachers to cover work in other activity areas or to cover the syllabus. The main activity areas indicated were number work and language. Preparation of children for examinations and standard one interviews was done during the PE lessons. The time was also used to allow children to complete their class work and some teachers said that children had enough time to play during break time. One of the teachers from Nairobi pre-schools

commenting on the use of PE lessons to teach other activity areas summarized this situation by stating that:

> " The teacher is always under pressure to teach other activity areas and so does not follow the PE timetable." [T 14]

Another teacher from a Nyeri pre-school commented:

> " There have been no interviews for the last two years in our Public primary school for children joining standard one and therefore the situation has been better as we now allow the pre-school children to play. Previously, because of the pressure for the children to pass the standard one interview, we would not take them out for PE." [T 2]

These teachers' comments allude to a situation where PE was not taught in some pre-schools due to pressure for children to perform well academically and to pass interviews for standard one. In the absence of interviews for standard one, children were not denied the opportunity to play and thus a moment to enjoy and learn motor skills.

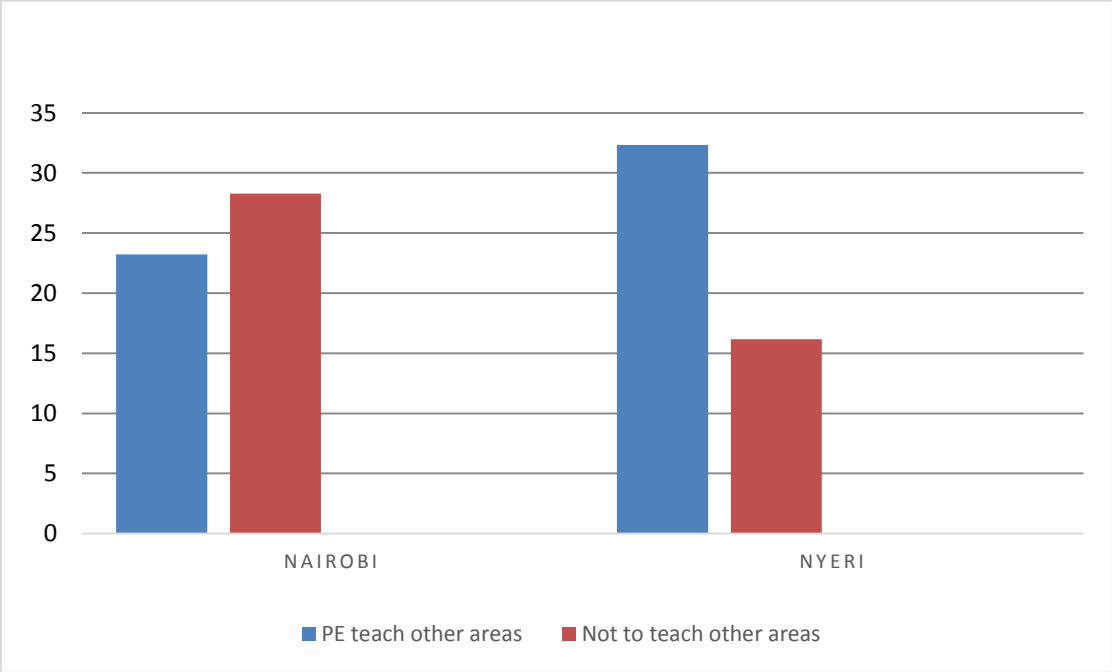
Other factors that caused PE lessons to be used for other activity areas are lack of PE facilities, equipment, resources and bad weather. Indeed one teacher from a private pre-school in Nyeri commenting on the use of PE to teach other activity areas stated:

> " The weather in this area is very cold and because of the cold weather, we rarely take the children for outdoor activities." [T 21]

Some of the other factors stated by the teachers that led to the lack of teaching of PE lessons can be minimized through the use of improvisation and creativity. Teachers could improvise play materials and use indoor activities in situations where the weather is bad instead of not teaching PE at all. The teacher's comment is an indication that teachers do not teach indoor PE lessons. The observation schedules also revealed that teachers used the PE lessons to teach other

activity areas as the researcher would visit a pre-school to observe a PE lesson during the PE scheduled time, only to find the children still in class learning other activity areas. Figure 4.3 shows the useage of PE lessons to teach other activity in Nairobi and Nyeri pre-schools.

Figure 4.3: Useage of PE Lessons to Teach Other Areas



The findings of the study on the use of PE lessons to teach other activity areas revealed that majority of the teachers used the PE lessons to teach other activity areas. A higher percentage (66.7%) of teachers from Nyeri pre-schools used the PE lessons to teach other activity areas than teachers from Nairobi pre-schools. Other teachers said that they used the PE lessons to teach other activity areas due to lack of facilities and equipment, and bad weather. This points to a situation where instead of improvising and using indoor activities, teachers do not teacher PE.

The results on the use of PE lessons in pre-schools to teach other activity areas are similar with those of Muindi (1998) and Nyonje (2004) who also observed that at the primary level of education in Kenya, PE was indicated in the timetable but other subjects especially English and Number work were taught during the PE

lessons. PE is a non- examinable subject, and the teachers charged with the responsibility of teaching the subject lack enthusiasm as emphasis is placed on the examinable subjects (Muindi, 1998). Indeed, one of the teachers commenting on the teaching of PE stated:

> "No one asks for mean scores in PE. Our teaching is all about mean scores and academic performance of the children. Sustaining a job is based on the academic performance of the children." [T 83]

4.4.2Pre-school PE Learning Facilities and Equipment

For a programme to be implemented efficiently, learning facilities, equipment and other resources are required. To examine the efficiency of the implementation of the PE programme, the study sought to establish the status of the PE learning facilities and equipment in the selected schools. The responses from the teachers on the status of the availability of learning facilities for PE are presented in Table 4.19.

Table 4.19: Availability of PE Learning Facilities (playground/play area)

	NAIROBI SCHOOLS					NYERI SCHOOLS				
RESPONSE	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
V.Adequate	6 6.06	2 2.02	1 1.01	0 0.00	9 9.09	2 2.02	0 0.00	0 0.00	2 2.02	11 11.11
Adequate	8 8.08	9 9.09	1 1.01	1 1.01	19 19.19	12 12.12	19 19.19	3 3.03	34 34.34	53 53.54
Inadequate	2 2.02	13 13.13	1 1.01	2 2.02	16 16.16	2 2.02	7 7.07	0 0.00	9 9.09	27 27.27
V. Inadequate	0 0.00	2 2.02	0 0.00	3 3.03	5 5.05	1 1.01	2 2.02	0 0.00	3 3.03	8 8.08
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

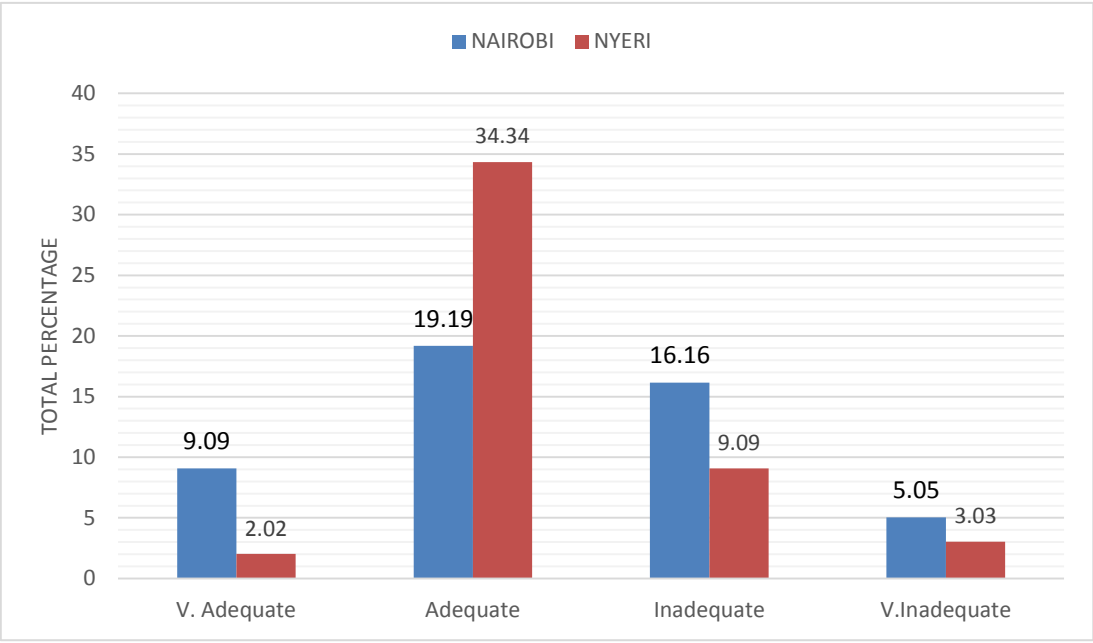
Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

According to the results in Table 4.19, 53 (53.54%) of the teachers indicated that learning facilities for PE in their pre-schools were adequate followed by27 (27.27%) inadequate, 11 (11.11%) very adequate and 8 (8.08%) very inadequate. Table 4.19 shows that more teachers 9 (17.65%) from Nairobi pre-schools indicated that learning facilities for PE in their pre-schools were very adequate than 2 (4.17%) teachers from Nyeri pre-schools while more teachers 34 (70.83%) from Nyeri pre-schools indicated that learning facilities in their pre-school were adequate than 19 (37.25%) teachers from Nairobi pre-schools. More teachers 18 (35.25%) and 5 (9.80%) from Nairobi pre-schools indicated that learning facilities in their pre-school were inadequate and very inadequate than teachers from Nyeri pre-schools who indicated that the learning facilities were inadequate 9 (18.75%) and very inadequate

3 (6.25%) respectively. This implies that though a higher percentage of teachers from Nairobi pre-schools indicated that their pre-schools had very adequate learning facilities than Nyeri pre-schools, a larger percentage of teachers from Nairobi indicated that their pre-schools had inadequate and very inadequate learning facilities. Nyeri pre-schools had more adequate PE learning facilities than Nairobi pre-schools.

Teachers from public pre-schools both in Nairobi and Nyeri 28 (84.85%) indicated that learning facilities in their pre-schools were very adequate and adequate while 30 (55.56%) of teachers from private pre-schools both in Nairobi and Nyeri also indicated the same. However, in Nairobi, the higher percentage of teachers 15 (27.78%) who indicated their pre-schools had inadequate and very inadequate learning facilities were from private pre-schools. The results also revealed that 3 (50%) of the teachers from Nairobi welfare pre-schools also indicated that their pre-schools had very inadequate learning facilities. Figure 4.4 shows the status of the availability of PE learning facilities in Nairobi and Nyeri pre-schools.

Figure 4.4: Status of PE Learning Facilities



The results in Table 4.19 and shown on Figure 4.4 are supported by the resources checklists used for the selected pre-schools. It was observed that majority of the public pre-schools 32 (32.32%) within public primary schools had adequate play space although these were fields that were also shared with the primary schools. This was the case especially in Nyeri public pre-schools and this could be due to the availability of land in rural settings. Majority of private pre-schools 34 (34.34%) also had adequate play space while others, especially those in urban centres had a big challenge of play space. Some 4 (4.04%) private and welfare pre-schools were situated in the estates or in commercial buildings and had no play space at all. This is despite the guidelines for the registration of pre-schools and the required amount of play space to be provided. The Ministry of Education, Science and Technology (MoEST) recommends that an adequate playground should not be less than a quarter acre and in cases where a playground is not available, a school should show where children will be playing, whether in a neighboring plot or other school's playground.

The available play space in majority of the pre-schools was not fenced and designed to look attractive for young children. In 10 (10.10%) of the pre-schools in Nairobi and Nyeri, the playgrounds were dusty, had no grass while others had long grass, and others had no play equipment. Besides the availability of PE facilities, the study also looked at the availability of PE learning materials and equipment. The teachers' responses on the status of the PE learning materials and equipment are presented in Table 4.20.

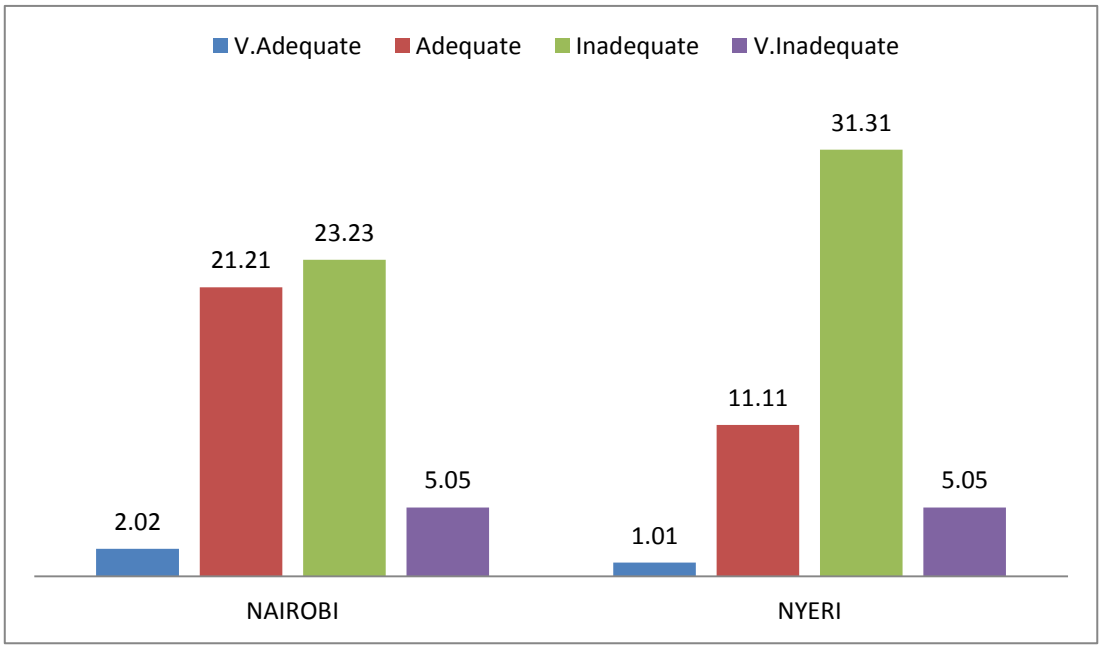
Table 4.20: Availability of PE Learning Materials/Equipment

	NAIROBI SCHOOLS					NYERI SCHOOLS				
RESPONSE	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
V.Adequate	0 0.00	2 2.02	0 0.00	0 0.00	2 2.02	1 1.01	0 0.00	0 0.00	1 1.01	3 3.03
Adequate	6 6.06	12 12.12	2 2.02	1 1.01	21 21.21	3 3.03	7 7.07	1 1.01	11 11.11	32 32.32
Inadequate	8 8.08	10 10.10	1 1.01	4 4.04	23 23.23	11 11.11	18 18.18	2 2.02	31 31.31	54 54.55
V.inadequate	2 2.02	2 2.02	0 0.00	1 1.01	5 5.05	2 2.02	3 3.03	0 0.00	5 5.05	10 10.10
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

From Table 4.20, it is noted that 54 (54.55%) of the teachers reported that play materials for PE in their pre-schools were inadequate followed by 32 (32.3%) adequate, 10 (10.10%) very inadequate and 3(3.03%) very adequate. Table 4.20 shows that more teachers, 2 (3.92%) and 21 (41.18%) from Nairobi pre-schools reported very adequate and adequate availability of PE learning materials than 1 (2.08%) and 11 (22.92%) from Nyeri pre-schools. More teachers 31 (64.58%) and 5 (10.42%) from Nyeri pre-schools reported inadequate and very inadequate availability of PE learning materials than 23 (45.10%) and 5 (9.80%) from Nairobi pre-schools. This may imply that availability of PE learning materials was a bigger challenge for Nyeri pre-schools than Nairobi pre-schools. Figure 4.5 shows the status of the availability of PE learning materials in Nairobi and Nyeri pre-schools.

Figure 4.5 Status of PE Learning Materials



The results on Table 4.20 and shown on Figure 4.5 concur with the results of the resources checklists and observation schedules which found that 39 (39.39%) pre-schools have adequate play space but had inadequate provision of play equipment and materials. Public pre-schools had large play areas but had no permanent and fixed play equipment such as swings, slides and climbing frames. The private pre-schools had more permanent and fixed play equipment than public pre-schools. The quantity of play equipment and materials did not match the number of children as it was not used as a measure to guide the provision. The researcher observed a lesson in a Nairobi private pre-school where the teacher was using only two balls for a class of fifty pre-school children. This did not provide maximum participation for the children.

In another lesson observation in a Nyeri private pre-school, the children were doing free play when the teacher brought two balls for the children to play with. All the children were excited and ran for the balls. This caused lack of class control as every child wanted to play with the ball. This was an indication that teachers did not

provide enough balls for meaningful play and practice for the large classes. It was observed that some pre-schools took all the classes out for PE at the same time and this caused a strain on the available play equipment. The researcher also observed a situation where over a hundred children were lining up to take turns at the swings. This does not provide maximum participation for children in physical activities during the PE lesson.

An interesting observation was made from the responses of 4 (4.04%) teachers both from Nairobi and Nyeri pre-schools concerning some of the play materials listed on the resources checklist. The teachers had no idea what a 'bladder' was and what kind of game is played with it. This is an indication that some of the games played by children will die out if the opportunities to play them are missed out in school. After a class observation in one of the pre-schools, the researcher engaged some children in a game situation. The game is popular among children and is known as "hit the dodger" or "kati". Surprisingly, the children did not dodge the ball but wanted to be hit by the ball. They called out to be hit by the ball. The children were not familiar with the game. This implies that in some pre-schools, teachers did not expose children to a variety of games.

Apart from the PE equipment and play materials, the documentary analysis revealed that the pre-schools did not have adequate reference books.The only reference books available in pre-schools as reported by the teachers 62 (62.63%) were the Kenya Pre-school Teachers' Activities Guide Series Book Two and 48 (48.48%) the Handbook for Early Childhood Development Syllabus.

This study also sought to find out from the headteachers about the availability of PE learning facilities and equipment in pre-schools. From the headteachers' interviews, 49 (81.67%) reported that PE learning facilities and equipment were not adequate while 11 (18.33%) reported that PE learning facilities

and equipment were adequate. They said that, apart from the learning facilities and equipment, most of the pre-schools had no reference books. Some pre-schools had very "small" play space while others had adequate play space but inadequate play equipment. The 4 (100%) DICECE officers from Nairobi and Nyeri counties also indicated that the pre-schools had a challenge in the provision of PE facilities and equipment. Apart from very few pre-schools that had adequate PE facilities and equipment, majority of the pre-schools had inadequate PE facilities and equipment. The officers pointed out that most public pre-schools had play space but had no PE equipment. One of the DICECE officers from Nairobi County said that some of the Nairobi County private pre-schools had limited play space or none at all. In addition, 32 (53.33%) of the parents interviewed said that the PE facilities and equipment were not adequate while 12 (20%) said the facilities and equipment were adequate. However, 16 (26.67%) of the parents said they were not sure of the status of the availability of PE facilities and equipment in their pre-schools. Indeed, one of the parents from Nyeri pre-schools commenting on the availability of PE facilities and equipment stated:

> "I hear that the field is small, but I do
> not know because I have not seen it." [P 9]

The parent's comment confirms that some parents do not know the status of the availability of PE facilities and equipment in the pre-schools. This may imply that some parents are not involved in the learning activities of their children. It may also imply that some pre-schools do not organize sports days which would provide opportunities for the parents to participate in PE activities with their children.

Figure 4.6: Pre-school Children Playing in the Playground

Figure 4.7: Children Playing With Play Materials and Equipments

The provision of PE facilities and equipment which is vital for efficient implementation of PE programmes was a challenge in some pre-schools as found in this study. Yet as Rutomoi and Too (2012) established, availability of play facilities was crucial as it determined children's socialization, coverage of activity areas and development of psychomotor skills. This study found a variety in the quality and quantity of facilities and equipment depending on the pre-schools' location and resource capacity of the sponsors. Studies have revealed that inadequate play facilities and equipment is a constraint affecting the pre-school, primary, secondary and college levels of education in Kenya (Muniu, 1986; Kiganjo, 1987; Simiyu, 1990; N'gasike, 2004; Nyonje, 2004; Wawire, 2006; Maina, 2011). Nyonje (2004) and Abagi (2008) observed that there was shortage of PE facilities and equipment and the facilities and equipment available were of poor quality. Wawire (2006) on the other hand observed that pre-schools in Nairobi where land is scarce and expensive had either no play ground at all or where it was available, it was small in size. She also observed that private sponsored pre-schools had a variety of outdoor fixed play equipment compared to public pre-schools and this concurs with the findings in this study. Kivuva (1997) further observed that the hardest hit category of pre-schools with inadequate facilities was the self help pre-schools. These results were similar with the results of this study as some private and welfare pre-schools indicated that they had inadequate and very inadequate facilities.

Wawire (2006) and Abagi (2008) pointed out that NACECE/KICD had produced national ECE guidelines, which were supposed to be implemented in ECE centres, yet the references were not readily accessible to ECE teachers especially those in small and remote pre-schools in rural communities. They observed that some pre-school managers and teachers argued that the references were a bit expensive and thus they were unable to buy them.

A study on the indigenous games of the Mt. Kenya region noted that many of the traditional games faced extinction as they were no longer played in the schools and in the communities. This study found the same may happen to some of the modern games that children play as some of the teachers were found unfamiliar with the play materials used in some of the modern games (Wanderi, (2001).

The results on the availability of PE learning facilities and materials revealed that there was a significant difference between Nairobi and Nyeri pre-schools on the availability of PE learning facilities. Nyeri pre-schools had more adequate PE learning facilities than Nairobi. Private Nairobi and Nyeri pre-schools had a challenge of provision of PE learning facilities than public pre-schools. Some pre-schools had no playground at all and this implies that some pre-schools had a challenge in the provision of play opportunities. PE learning materials were inadequate and did not match the number of children in the pre-school. Public pre-schools both in Nairobi and Nyeri counties were found to have large play spaces but very inadequate permanent and fixed play equipment while private pre-schools had more permanent and fixed play equipment.

Some teachers were found not to be familiar with some play items such as 'bladder' and this imply that children will not be exposed to some play activities which may face extinction. Some parents were also found to be unfamiliar with the status of the availability of PE learning facilities and equipment in the pre-schools.

In regard to the acquisition of play materials and equipment, majority of the teachers 72 (72.73%) stated that the PE learning materials and equipment were made by the teachers, 48 (48.48%) pre-schools bought the equipment, 14(14.14%) play materials were made by the parents, 11(11.11%) equipment were donated while2 (2.02%) stated that they were borrowed. These findings are presented in Table 4.21.

Table 4.21: Acquisition of PE Learning Resources in the Pre-schools

Response	Nairobi Schools	Nyeri Schools	Frequency (%)
Made by teachers	37	35	72 (72.73)
Bought by school	19	29	48 (48.48)
Made by parents	8	6	14 (14.14)
Donations	8	3	11 (11.11)
Borrowed	2	0	2 (2.02)
Hired	0	0	0 (0.00)

The teachers indicated that the donations were made by NGOs, parents, well-wishers, public and private institutions e.g. Kenya Commercial Bank, Kenya Tea Development Authority. The pre-schools also borrowed from community centres or used community play areas such fields at division and location administrative centres. Two Nyeri public pre-schools were observed to have benefitted from donations made from public institutions to the special units attached to their pre-schools.

Majority of the headteachers 41 (68.33%) said that they relied on the school fees to acquire play equipment and materials for their pre-schools. They said that the school fee was not adequate to cater for the purchase of play materials and equipment as it was also expected to pay teachers' salaries and run the pre-schools. This posed a challenge to the acquisition of PE learning resources in pre-schools. Two of the headteachers commented on the acquisition of PE learning resources and said:

> "We rely on part of the fees paid by parents which is grossly inadequate. Some parents do not pay the school fees and it becomes a big challenge to the schools." [H 2]

> "The parents pay school fees but it cannot be enough to buy all the PE learning equipment because it is the same fee that is expected to pay teachers' salaries and run the pre-schools." [H 30]

PE learning resources in pre-schools were also acquired from; 3 (5%) the local authority, 2 (3.33%) church sponsors, 4 (6.67%) donors and 10 (16.67%) from the Ministry of Education. The results of this study revealed that most of the teachers 72 (72.23%) made PE learning materials and equipment. This concurs with the guidelines for pre-school education in Kenya (1984) which posits that provision of toys, equipment and other play materials is a major role of the pre-school teacher. The results also revealed that parents also contributed to the provision of PE learning resources. Mbugua (2004) points out that in ECE, parents and local communities are expected to help gather materials, and use locally available resources to make children's toys. This is supported by Swadener, Kabiru and Njenga (2000) who point out that, pre-schools are funded and supported by parents and the local community. Kwenya (2003) points out that parents and the local community are expected to participate in the provision of land, funds for construction and maintenance of physical facilities and play materials.

To examine the efficiency of the implementation of the PE programme, the study sought to establish whether there were constraints faced in the acquisition of PE learning facilities and equipment in ECE. The teachers' responses on the challenges encountered in the acquisition of PE learning and equipment are presented in Table 4.22.

Table 4.22: Challenges Encountered in the Acquisition of PE Learning Facilities and Equipment

Response	Nairobi Schools	Nyeri Schools	Frequency%
Lack of finances	36	20	56 (56.56)
Lack of administration support	10	12	22 (22.22)
Lack of parental support	6	14	20 (20.20)
Time to improvise	6	8	14 (14.14)
Lack of materials for improvisation	2	12	14 (14.14)
Unavailability of play materials	2	4	6 (6.06)

The results in Table 4.22 show that majority of the teachers 56 (56.56%) indicated that the pre-schools lacked funds to purchase PE learning resources, followed by 22 (22.22%) lack of administrative support, 20 (20.20%) lack of parental support, 14 (14.14%) lack of time to improvise, 14 (14.14%) lack of materials for improvisation while 6 (6.06%) indicated unavailability of play materials for purchase. One of the teachers commented on the issue of lack of funds:

> "Parents pay the school fee which is used to pay teachers' salaries And it is not enough. If the money is not enough to pay for our salaries how then can we request the administration to buy balls?" [T 10; T 25]

> "There are some play materials that are unavailable and need to be bought and the funds are not available." [T 78]

The comments from the teachers highlight the challenge of lack of funds for purchasing PE learning resources. The funds are outstretched as they are used to run the pre-schools and pay teachers' salaries. This implies that, the purchasing of PE learning resources may not be put in place while other financial obligations of the pre-schools have not been met. This may negatively affect the efficiency of the implementation of the PE programme.

From the parents' interviews, the parents reported that the pre-schools' administration and teachers never involved them in the provision of play equipment and materials. When asked how the pre-schools expected them to contribute or to assist in the provision of the PE facilities and equipment, 40 (67%) said that the pre-schools expected them to pay school fees while 11 (18%) said that they were expected to donate and improvise play materials. This implies majority of the parents expected the pre-schools to purchase and provide adequate play equipment and materials as they had paid schools fees.

The results of the study on PE learning facilities and equipment show that the major challenge in the acquisition of PE learning facilities and equipment is lack of funds, followed by lack of administrators and parental support. Simuyu (1990) found the problem of inadequate PE facilities and equipment was mainly due to lack of funds and shortage of land. Abagi (2008) also reported that the major factors given by ECE stakeholders on the problem of inadequate PE facilities and equipment was poverty and lack of financial resources. In addition, Abagi (2008) further noted that lack of interest from parents to invest in ECE programme and lack of understanding of the need to invest in ECE contributed to the poor state of facilities and equipment.

To examine the efficiency of the implementation of the PE programme, this study also sought to find out if the teachers improvised play materials to provide the learners with an opportunity to learn movement skills with play materials made from locally available materials. The teachers' responses on improvisation of play materials are presented in Table 4.23.

Table 4.23:Improvisation of Play Materials

	NAIROBI SCHOOLS					NYERI SCHOOLS				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
Improvisation 0f materials	13 13.13	23 23.23	3 3.03	3 3.03	42 42.42	16 16.16	22 22.22	3 3.03	41 41.41	83 83.84
No improvisation of materials	3 3.03	3 3.03	0 0.00	3 3.03	8 9.09	1 1.01	6 6.06	0 0.00	7 7.07	16 16.16
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

Table 4.23 shows that majority of the teachers 83(83.84%), 42 (42.42%) from Nairobi and 41 (41.41%) from Nyeri pre-schools improvised play materials while 16 (16.16%) did not improvise. Out of the 16 (16.16%) teachers who indicated that they did not improvise play materials, 9 (9.09%) were from private pre-schools, 4 (4.04%) from public pre-schools and 3 (3.03%) from welfare pre-schools. This implies that teachers improvised play materials to enhance the teaching of movement skills though some teachers did not improvise.

The 16 (16.16%) teachers who did not improvise play materials indicated that they taught activities that did not require apparatus; others reported that they did not improvise because their pre-schools have no play space and they did not teach PE while others indicated that it was time consuming. One of the teachers said that they did not improvise because the sponsor of the pre-school would not allow the use of improvised play materials in the pre-school yet the pre-school did not provide adequate materials.

From the headteachers' interview, 33(55%) headteachers said that their pre-schools improvised play materials. This percentage shows a disparity with the

percentage of the teachers who indicated that they improvised in their pre-schools. This implies that there were some pre-schools which did not improvise play materials yet they did not have adequate materials. This was especially the case with the welfare pre-schools. Improvisation of play facilities and equipment as found in this study and in other studies (Muniu, 1986; Ngumo, 1993; Wawire, 2006; Abagi, 2008) has been used as a strategy to overcome the challenge of inadequate PE facilities and equipment. However, despite the importance of improvisation as a strategy to overcome the challenge of inadequate PE facilities and equipment, some teachers have been found not to embrace the strategy (Ndegwa, 2005).

The teachers were requested to list the play items that they improvised in the pre-schools. The play materials that teachers improvised are presented in Table 4.24.

Table 4.24: Improvised Play Items for Pre-school Children

Response	Nairobi Schools	Nyeri Schools	Frequency	%
Balls	33	37	70	70.71%
Ropes	30	29	59	59.60%
Beanbags	24	20	44	44.44%
Hoops	2	2	4	4.04%
Shakers	2	2	4	4.04%
Blocks	2	1	3	3.03%
Sacks	3	-	3	3.03%
Jumping sticks	-	1	1	1.01%
Baskets	-	1	1	1.01%
Walking tins	1	-	1	1.01%
Bladders	1	-	1	1.01%
Seesaws	1	-	1	1.01%
Skittles	1	-	1	1.01%
Slides	1	-	1	1.01%
Swings	1	-	1	1.01%
Batons	1	-	1	1.01%

Table 4.24 shows that, majority of the teachers 70 (70.71%) both from Nairobi and Nyeri pre-schools prepared balls, followed by ropes 59 (59.60%), beanbags 44 (44.44%), rings 22 (22.22%), tyres 6 (6.06%),hoops 4 (4.04%), batons, swings, skittles, bladders and walking tins 1 (1.01%).This may imply that teachers improvise play items that can be made with less costly resources though this limits the variety of play items improvised. Table 4.24 also reveals that, teachers from Nairobi pre-schools improvised play items that required more funds such as seesaws, slides and swings unlike teachers from Nyeri pre-schools. This may imply that

administrators of some pre-schools in Nyeri county did not avail funds for the improvisation of play items.

The results on the improvisation of play materials show that some pre-schools teachers both Nairobi and Nyeri counties did not improvise play materials yet their pre-schools did not have PE learning materials. The teachers also improvised play materials that required less costly resources like balls but did not improvise permanent structures like swings which would require more resources. This implies that children are offered a limited variety of play activities as pre-school teachers do not improvise a variety of play materials and equipment.

4.4.3 Pre-school Administrators and Parents' Role in the Provision of Learning Facilities and Equipment.

Pre-school administrators and parents are implementers and stakeholders of pre-school programmes. To assess the efficiency of the implementation of the pre-school PE curriculum, this study sought to examine the role of the pre-schools administrators and parents in the provision of learning PE facilities and equipment. The study sought to find out the teachers' opinions on whether the pre-school administrators provided a conducive teaching and learning environment for the acquisition of movement skills in PE. The teachers' responses are presented in Table 4.25.

Table 4.25: Pre-schools' Administrators Provision of a Conducive Learning Environment.

	NAIROBI SCHOOLS					NYERI SCHOOLS				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
Conducive environment	12 12.12	21 21.21	1 1.01	4 4.04	38 38.38 (74.51)	12 12.12	24 24.24	2 2.02	38 38.38 (79.1)	76 76.8
Non-conducive environment	4 4.04	5 5.05	2 2.02	2 2.02	13 13.13	5 5.05	4 4.04	1 1.01	10 10.10	23 23.2
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

As shown in Table 4.25, the study found that 76 (76.77%) of the teachers from Nairobi and Nyeri pre-schools indicated that the pre-school administrators provided a conducive teaching and learning environment for the acquisition of movement skills while 23(23.23 %) of the teachers indicated that the pre-school administrators did not provide a conducive teaching and learning environment for the acquisition of movement skills. Nyeri pre-schools had a higher percentage of teachers 38(79.17%) who indicated that the pre-school administrators provided a conducive teaching and learning environment for the acquisition of movement skills than 38 (74.51%) teachers from Nairobi pre-schools.

The 76 (76.77%) teachers who indicated that the pre-school administrators provided a conducive teaching and learning environment stated that the administrators provided learning resources and monitored the teaching and learning of PE. One of the teachers commenting on the support of administrators in the provision of a conducive learning environment further added that:

> "The head teacher of the primary section tells the primary pupils to make improvised play materials for the pre-school." [T 41]

The teacher's comment indicates that some of the headteachers provided learning resources for the teaching and learning of PE. In situations where the PE learning materials were inadequate, they ensured improvised play items were made.

The 23 (23.23%) teachers who indicated that the administrators did not provide a conducive environment stated that the pre-schools had no funds and therefore, did not provide resources, hire fields, nor do repairs of the broken play resources. Other teachers stated that some administrators did not view PE as important as it was a waste of time and thus did not create a conducive teaching and learning environment.

The results on the pre-school administrators' provision of a conducive teaching and learning environment to enable learning of movement skills show that most of the administrators provided a conducive learning environment and ensured that PE learning materials were adequate even through use of the improvisation strategy. However, some administrators did not provide a conducive learning environment due to lack of funds and negative attitude towards PE. This may affect the efficiency of the implementation of the PE programme.

Riley (2007) posits that schools should give attention to the provision of equipment and resources that are sufficient, challenging and interesting and that can be used in a variety of ways or to support specific skills. Wood and Attfield (2005) further adds that schools should create an environment that supports unity between playing, learning and teaching and this involves taking into account the learners as well as the material resources. Vives-Rodriguez (2005) points out that administrators should be involved in the implementation process of the PE curriculum as their

support on provision of learning resources has an impact on the outcome of the PE programme.

The study further sought to find out from the teachers whether parents supported and contributed towards provision of PE learning resources to enable the learning of movement skills. The teachers' responses on the parental support and contribution towards the provision of PE learning resources are presented in Table 4.26.

Table 4.26: Parental Support and Contribution towards the Provision of PE Learning Resources

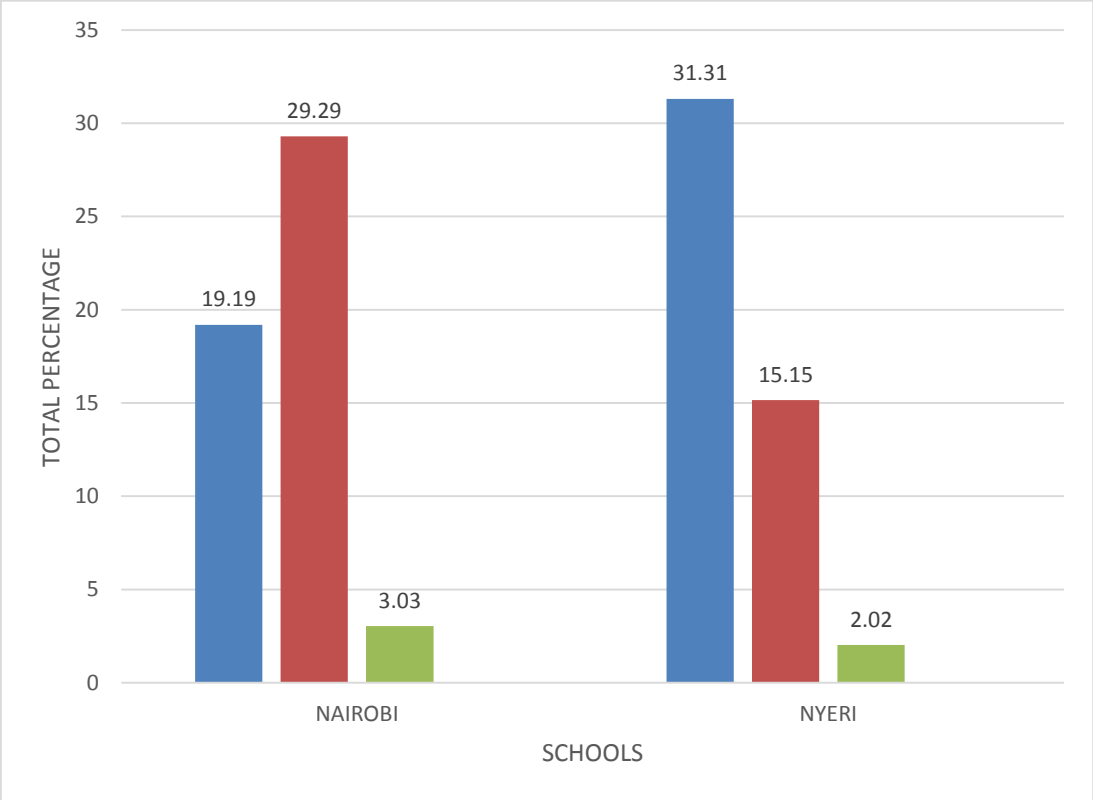
	NAIROBI SCHOOLS					**NYERI SCHOOLS**				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
Parental support	6 6.06	10 10.10	2 2.02	1 1.01	19 19.19	12 12.12	17 17.17	2 2.02	31 31.31	50 50.51
No parental support	9 9.09	14 14.14	1 1.01	5 5.05	29 29.29	4 4.04	10 10.10	1 1.01	15 15.15	44 44.44
Not requested	1 1.01	2 2.02	0 0.00	0 0.00	3 3.03	1 1.01	1 1.01	0 0.00	2 2.02	5 5.05
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

Table 4.26 shows that 50 (50.51%) of the teachers from Nairobi and Nyeri pre-schools reported that the parents supported and contributed towards PE learning resources to enable the learning of movement skills, followed by 44 (44.44%) who reported that parents did not support or contribute towards PE learning resources to enable the learning movement skills and 5 (5.05%) who reported that parents did not

support or contribute towards PE learning resources because the pre-schools or the teachers did not request them to. The results revealed that a higher percentage of teachers 29 (56.86%) from Nairobi pre-schools reported that, parents from their pre-schools did not support nor contribute towards PE learning resources. Figure 4.8 shows the level of parental support and contribution towards the provision of PE learning resources in Nairobi and Nyeri pre-schools.

Figure 4.8: Levels of Parental Support



Source: Author (2014)

The 50 (50.50%) teachers who reported that the parents supported and contributed towards the provision of PE learning resources stated that the parents provided materials such as balls and beanbags. The teachers stated that the parents had no problem as they supported and contributed when they were requested. The 44 (44.44%) teachers who reported that the parents did not support or contribute

towards PE learning resources stated that the parents lacked money and they never appreciated PE as they saw it as a waste of time. The parents were said to have a negative attitude towards PE as they complained their children got dirty due to PE. The parents emphasized more on academic performance of their children and not PE. Further, the teachers stated that some parents paid school fees and were not requested to provide play materials as it was the responsibility of the school to purchase.

Maina (2011) points out that, parents are the sole financiers of the pre-schools andare expected to provide PE learning facilities and equipment. Mbugua (2004) on the other hand reports that parents and communities help gather materials and use locally available resources to make children's toys. However, Abagi (2008) posits that not much was being done by parents and communities across Kenya to make the outdoor space safe as required by the ECD service standard guidelines. Majority of the parents were not ready to mobilize additional resources to support pre-schools due to poverty and lack of financial resources to invest in pre-schools. Parents in rural and slum areas also lacked understanding of the need to invest in care and education of young children.

4.4.4 Teachers' Efficiency in PE curriculum Implementation

Besides the availability of PE learning materials and equipment, the efficiency of the teachers in implementing the PE programme is vital. The study looked at the views of the teachers towards the teaching of PE and their attendance to professional development courses. The teachers' opinions on whether they felt competent and confident to teach PE are presented in Table 4.27.

Table 4.27: Teachers' Responses on their Competence and Confidence to teach PE

	NAIROBI SCHOOLS					NYERI SCHOOLS				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
Competent and confident	14 14.14	24 24.24	3 3.03	5 5.05	46 46.46	16 16.16	28 28.28	2 2.02	46 46.46	92 92.93
Not confident and confident	2 2.02	2 2.02	0 0.00	1 1.01	5 5.05	1 1.01	0 0.00	1 1.01	2 2.02	7 7.07
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

As shown on Table 4.27, majority of the teachers 92 (92.93 %) both from Nairobi and Nyeri pre-schools indicated that they felt competent and confident to teach PE, while 7 (7.07%) did not feel competent and confident to teach PE. These teachers were 2 (2.02%) from Nairobi public pre-schools, 2 (2.02%) from Nairobi private pre-schools, 1 (1.01%) from a Nairobi welfare pre-school, 1 (1.01%) from a Nyeri public pre-school and 1 (1.01%) from a Nyeri council pre-school. Out of the 7(7.07%)) teachers who indicated that they did not feel competent and confident to teach PE, 5 (5.05%) were from Nairobi pre-schools. This implies that more teachers from Nairobi pre-schools did not feel competent and confident to teach PE.

The 7 (7.07%) teachers who indicated that they did not feel competent and confident to teach PE stated that they were trained but the training could be improved 3 (3.03%), 2 (2.02%) experienced challenges of lack of knowledge of activities to teach, 1 (1.01%) lacked experience while 1 (1.01%) stated that they were not trained. The teachers who indicated that they felt competent and confident

to teach PE were requested to give reasons why they felt so. The reasons are presented in Table 4.28.

Table 4.28: Reasons for Feeling Competent and Confident to Teach PE

Response	Nairobi Schools	Nyeri Schools	F	%
Training received	26	22	48	48.48%
Teaching experience	4	18	22	22.22%
Children acquisition of skills after teaching	8	4	12	12.12%
Feels physically fit to teach PE	8	4	12	12.12%
Likes teaching PE	2	0	2	2.02%

From Table 4.28, 48 (48.48%) teachers both from Nairobi and Nyeri indicated that they felt competent and confident to teach PE since they were trained to teach it, followed by 22 (22.22%) the experience they had in teaching it, 12 (12.12%) the children acquired the skills they taught them, 12 (12.12%) they felt physically fit to teach PE while 2 (2.02%) indicated that it was because they liked teaching PE.

The results on the competence and the confidence of the teacher to teach PE showed that majority of the teachers indicated that they felt competent and confident to teach PE. However, out of the 7 (7.07%) teachers who indicated that they did not feel competent and confident to teach PE, 5 (5.05%) teachers were from Nairobi pre-schools. The teachers said that the training they received could be improved and they lacked knowledge of activities to teach. This implies that pre-school teacher training should endeavour to impart knowledge and expertise in all the early childhood

education activity areas and a broad exposure of activities for teaching would produce an efficient teacher.

The results on the competence and confidence of the teacher to teach PE show that majority of the teachers felt competent and confident to teach PE since they were trained to teach PE, followed by the experience they had in teaching it. Ngome (2002) stresses on the value of training teachers as it is reflected on the knowledge, skills and practices acquired. On the other hand, Howes (1997) points out that experience is a positive teacher's factor as teachers who are more experienced on early childhood education have positive relationships with their pre-school children as compared to their colleagues who are less experienced. Branyon (2002) and Ng'asike (2004) further add that, with the number of teaching years, teachers acquire positive attitudes and a higher self-efficacy.

The study further sought to find out whether the teachers enjoyed teaching PE. The teachers' responses on whether they enjoyed teaching PE are presented in Table 4.29.

Table 4.29: Teachers' Responses on whether they Enjoyed the Teaching of PE

	NAIROBI SCHOOLS					**NYERI SCHOOLS**				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
Teacher enjoyed PE	16 16.16	25 25.25	3 3.03	5 5.05	49 49.49	16 16.16	28 28.28	3 3.03	47 47.47	96 96.97
Did not enjoy PE	0 0.00	1 1.01	0 0.00	1 1.01	2 2.02	1 1.01	0 0.00	0 0.00	1 1.01	3 3.03
Total	**16** **16.16**	**26** **26.26**	**3** **3.03**	**6** **6.06**	**51** **51.51**	**17** **17.17**	**28** **28.28**	**3** **3.03**	**48** **48.48**	**99** **100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

Table 4.29shows that majority of the teachers 96 (96.97%) both from Nairobi and Nyeri pre-schools stated that they enjoyed the teaching of PE while 3 (3.03%) stated that they did not enjoy the teaching of PE. The 3 (3.03%)) of the teachers were 1(1.01%) from a Nairobi private pre-school, 1(1.01%) from a Nairobi welfare pre-school and 1(1.01%) from a Nyeri public pre-school. The results imply that majority of the teachers enjoyed the teaching of PE.

From the headteachers' interviews, 36 (60%) of the headteachers said that teachers were interested in teaching PE .They planned, prepared and taught PE and got involved in the physical activities for the children to learn. However 20(33.33%) of the headteachers said that the teachers were not interested in teaching PE. Out of the 20 (33.33%) headteachers 4 (4.04%) said teachers had to be pushed to teach, 5 (8.3%) teachers did not plan, 2 (3.3%) teachers planned for formality sake while 9 (15%) said that teachers did not teach or ignored PE because of preparation for Standard one interviews. The headteachers further reported that some teachers ignored PE as they had to try and keep their pre-schools' academic standards high as they competed with other pre-schools. Some 4(6.67%) of the headteachers reported they did not know whether the teachers prepared or taught PE. Some of these are headteachers from public primary schools who have to oversee the teaching in the pre-schools yet they are not trained in ECE and their attention is more on the primary section than the pre-school. One of the headteachers commenting on whether teachers enjoyed teaching PE stated:

> " I think PE should be taught but I don't think it is taught as the pre-school teachers are preoccupied with teaching numeracy andliteracy skills. There is a lot of pressure from the parents as all they want is to hear their children are performing well academically." [H 60]

The pre-school head teacher's comment implies that teachers do not teach or teach PE because they enjoy or do not enjoy the teaching of PE. The teaching of PE

is influenced by other factors such as academic pressure from parents who want their children to perform academically. The pressure from the parents makes teachers teach numeracy and literacy skills during PE lessons.

The results of the study on whether teachers enjoyed the teaching of PE tend to show that majority of the teachers enjoyed teaching PE although the headteachers indicated that some of the teachers were not interested in teaching PE and needed to be monitored. Watson (2003) describes teaching as a psychological process and believes teachers' abilities to maintain productive classroom environments, motivate students and make decisions depends on their personal relationships with their students. These effective attitudes and actions employed by teachers can make a positive difference on the lives of their students as attitudes have a profound impact on teachers' practices and behaviours. Faucette and Patterson (1989) found that elementary school teachers' negative attitudes about PE were congruent with their teaching behaviours while teaching PE. Madeje (1981) also found that negative attitude of some teachers contributed towards poor implementation of PE programmes.

To keep the teachers abreast with new and upcoming trends in the teaching of PE in order to promote the efficiency of the PE programme implementation, teachers need to attend professional development courses. This study sought to find out whether pre-schools teachers attended seminars and workshops in PE. The teachers' responses on attendance of seminars and workshops in PE are presented in Table 4.30.

Table 4.30:Teachers' Attendance of Seminars and Workshops in PE

	NAIROBI SCHOOLS					NYERI SCHOOLS				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
Seminars and workshop attended	1 1,01	8 8.08	2 2.02	1 1.01	12 12.12 (21.57)	7 7.07	4 4.04	2 2.02	13 13.13 (27.08)	25 25.25
Not attended	15 15.15	18 18.18	1 1.01	5 5.05	39 39.39	10 10.10	24 24.24	1 1.01	35 35.35	74 74.75
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

The results in Table 4.30 indicate that majority of the teachers 74(74.75%) both from Nairobi and Nyeri pre-schools and across all the categories of pre-schools had not attended seminars or workshops in the teaching of PE during their teaching career while 25(25.25 %) stated they had attended seminars and workshops in the teaching of PE. Some 11 (11.11%) indicated they had attended seminars and workshops in other activity areas but not in PE. Table 4.30 shows that, Nyeri pre-schools had a higher percentage of teachers (27.08%) who indicated that they attended seminars and workshops in the teaching of PE than teachers (21.57%) from Nairobi pre-schools.

The headteachers confirmed the teachers' responses as majority 52(86.67%) reported that the teachers had not attended any seminars or workshops. Only 8(13.33%) of the headteachers reported that the teachers had attended seminars and workshops. The headteachers said that the seminars and workshops were very few and rarely held. This implies that teachers were rarely invited for seminars and workshops in PE.

The results of this study on poor attendance of professional development courses concur with N'gasike (2004) and Wawire (2006) who also noted low participation of pre-school teachers in professional development courses. Nyonje (2004) also observed that majority of primary school teachers in Nairobi had not attended seminars or workshops in PE.

The study further sought to find out why teachers did not attend seminars and workshops in PE. The study found out that85 (85.86%) of the teachers from Nairobi and Nyeri pre-schools had not attended any seminars or workshops because they had not been invited to any, 4 (4.04%) had no time to attend while 10 (10.10%) did not respond to the item. Majority of those who did not respond to the item were teachers from pre-schools which did not teach PE. As revealed by the policy review report (2005), DICECE officers did not organize seminars and meetings regularly because the DICECE centres lacked accommodation, boarding facilities and a clear management structure.

The teachers who indicated that they had attended seminars and workshops were requested to indicate the PE areas that were addressed in the seminars and workshops attended. The findings on the areas in PE that were addressed in the seminars and workshops are presented in Table 4.31.

Table 4.31: PE Areas Addressed in the Seminars and Workshops

Response	Nairobi Schools	Nyeri Schools	Frequency %
Play material production	6	4	10 (10.10%)
Benefits of play	5	3	8 (8.08%)
Planning for PE teaching	2	3	5 (5.05%)
Exercises or physical activities for children	3	2	5 (5.05%)
PE learning resources	2	1	3 (3.03%)
PE attire	2	-	2 (2.02%)
Free and directed play	1	1	2 (2.02%)
Team building	1	-	1 (1.01%)

The results in Table 4.31show that, 10 (10.10%) of the teachers from Nairobi and Nyeri pre-schools indicated that the areas addressed included play material production, followed by 8 (8.08%) benefits of play, 5 (5.05%) planning for PE teaching, 5 (5.05%) exercises and physical activities for children, 3 (3.03%) PE learning resources, 2 (2.02%) PE attire, 2 (2.02%) free and directed play, and1 (1.01%) team building. This implies that during the seminars and workshops courses, emphasis was given to play material production and benefits of play. This may enable the teachers to address the problem of inadequacy of play materials and to reinforce the need to teach PE to pre-school children.

The emphasis on play material production is highlighted by Kwenya (2003) who asserts that teachers must be trained or in-serviced on improvisation in the production of play materials. Kwenya (2003) further argues that every community had a wealth of play materials and if teachers were well guided to use the experiences and the knowledge of the local community, they would come out with all kinds of local materials which would be more relevant in the pre-schools. Mbugua (2004) also adds that during seminars and workshops, teachers learn how to make toys and other learning materials using locally available resources. These skills

would enhance the efficiency of the implementation of the pre-school PE curriculum.

The study also sought to find out the teachers' views on the need of seminars and workshops for PE. The teachers' responses on the need for seminars and workshops are presented in Table 4.32.

Table 4. 32: The need for Seminars and Workshops for PE

	NAIROBI SCHOOLS					**NYERI SCHOOLS**				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
Seminars needed	16 16.16	24 24.24	3 3.03	6 6.06	49 49.49	17 17.17	28 28.28	3 3.03	48 48.48	97 97.98
Seminars Not needed	0 0.00	2 2.02	0 0.00	0 0.00	2 2.02	0 0.00	0 0.00	0 0.00	0 0.00	2 2.02
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

The results in Table 4.32 show that 97(97.98%) teachers from both Nairobi and Nyeri pre-schools stated that there was need for seminars or workshops in PE while 2(2.02%)stated that there was no need for seminars or workshops for PE. The 2(2.02%) of teachers who stated that there was no need for seminars or workshops were from Nairobi private pre-schools.

The 2 (2.02%) teachers who stated that there was no need for seminars or workshops for PE stated that it was not necessary to have the seminars because most teachers had an understanding of PE. The 97 (97.98%) teachers who stated that there was need for seminars and workshops for PE gave various reasons. These reasons for the need for seminars and workshops for PE are presented in Table 4.33.

Table 4.33: Reasons for the Need for Seminars/Workshops for PE.

Response	Nairobi Schools	Nyeri Schools	Frequency %
Acquisition of more knowledge through sharing and exchange of ideas	34	40	74 (74.75%)
Refreshing on previous acquired knowledge	5	7	12 (12.12%)
Exposure to new teaching trends	8	3	11 (11.11%)
Sensitization on the importance of PE	3	5	8 (8.08%)
Practice on learning materials production	1	3	4 (4.04%)

Table 4.33 shows that 74 (74.75%) teachers from Nairobi and Nyeri pre-schools indicated that through seminars or workshops, teachers acquired more knowledge through the sharing and exchange of ideas, followed by12(12.12%) helped the teachers to refresh on previously acquired knowledge, 11 (11.11%) exposed teachers to new teaching trends, 8 (8.08%) facilitated sensitization on the importance of PE 8 (8.08%) and 4 (4.04%) practised on learning about materials production.

The results of this study on the attendance of seminars and workshops in PE tend to show that the teachers felt there was need for seminars and workshops for them to acquire more knowledge through sharing and exchange of ideas. The results are similar with Muniu's (1986), Kivuva's (1997), Nyonje's (2004) and Wawire's (2006) who also affirmed the need for seminar and workshop courses for teachers for updating them on upcoming educational trends.

4.4.5 Pre-school PE Teaching Approaches

To examine further the efficiency of the implementation of the pre-school PE curriculum, the study sought to find out the teaching approaches used by the teachers. The Handbook for Early Childhood Development Syllabus (KICD, 2008) recommends the use of child-centred and participatory methods. The study sought to find out the general approach the teachers used when teaching movement skills in PE. The teachers' responses on the approaches they used when teaching movement skills in PE are presented in Table 4.34.

Table 4.34: Approaches Used when Teaching Movement Skills in PE

	NAIROBI SCHOOLS					NYERI SCHOOLS				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
Explain activities, demonstrates, instructs and supervises	10 10.10	23 23.23	2 2.02	5 5.05	40 40.40 (78.43)	17 17.17	21 21.21	3 3.03	41 41.41 (85.42)	81 81.82
Attended and supervise	5 5.05	1 1.01	1 1.01	0 0.00	7 7.07	0 0.00	3 3.03	0 0.00	3 3.03	10 10.10
Never attends	0 0.00	1 1.01	0 0.00	1 1.01	2 2.02	0 0.00	2 2.02	0 0.00	2 2.02	4 4.04
Stands at the side of the field	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	2 2.02	0 0.00	2 2.02	2 2.02
Give play items and stays in the classroom	0 0.00	1 1.01	0 0.00	0 0.00	1 1.01	0 0.00	0 0.00	0 0.00	0 0.00	1 1.01
Attend sometimes	1 1.01	0 0.00	0 0.00	0 0.00	1 1.01	0 0.00	0 0.00	0 0.00	0 0.00	1 1.01
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

Table 4.34 shows that majority of the teachers 81 (81.82%) from Nairobi and Nyeri pre-schools stated that when teaching the movement skills, they explained the activities, demonstrated, instructed and supervised, while 10 (10.10%) attended and supervised, 4 (4.04%) never attended, 2 (2.02%) stood at the side of the field, 1(1.01%) attended sometimes while 1(1.01%) gave the play resources and stayed in the classroom. The table also reveals that, Nyeri pre-schools had a higher percentage of teachers (85.42%) who explained the activities, demonstrated, instructed and supervised than teachers (78.43%) from Nairobi pre-schools. On the other hand,

more teachers (13.73%) from Nairobi reported that they attended and supervised when teaching movement skills in PE than teachers (6.25%) from Nyeri pre-schools. From the observation schedules, most of the PE lessons observed did not reflect the use of the general teaching approach indicated by majority of the teachers. The study observed 30 (50%) PE lessons where the teachers attended and supervised the lessons, followed by 24 (40%) PE lessons where the teachers explained the play activities, demonstrated and supervised the lessons, and 6 (10%) games' sessions where the teachers attended and supervised the play activities.

The results of the study on the PE teaching approaches tend to show that although majority of the teachers indicated that they explained the play activities, demonstrated and supervised the PE lessons, the observation schedules showed that not all the teachers did the explanation, demonstration and supervision. Majority of the teachers explained and supervised when teaching PE but rarely demonstrated and participated in the activities.

Muindi's (1998) study reported that (32.3%) primary school pupils indicated that teachers stood at the edge of the play ground and looked as pupils did whatever they wanted,(26.6%) teachers gave balls to play with and remained in the staffroom,(23.4%) teachers explained, demonstrated and supervised,(16.5%) teachers joined pupils and played soccer game. This is an indication that majority of the children are not exposed to organised and effectively taught PE lessons as teachers do not plan for PE instructions.

The study further sought the specific method the teachers used when teaching movement skills in PE. The teachers' responses on the teaching method used when teaching movement skills in PE are presented in Table 4.35.

Table 4.35: Teaching Approach Used when Teaching Movement Skills in PE

	NAIROBI SCHOOLS					NYERI SCHOOLS				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
Free play	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 1.01	3 3.03	0 0.00	4 4.04	4 4.04
Directed play	2 2.02	0 0.00	0 0.00	1 1.01	3 3.03	0 0.00	0 0.00	0 0.00	0 0.00	3 3.03
Both free and directed play	14 14.14	25 25.25	3 3.03	4 4.04	46 46.46	16 16.16	23 23.23	3 3.03	42 42.42	88 88.89
No response	0 0.00	1 1.01	0 0.00	1 1.01	2 2.02	0 0.00	2 2.02	0 0.00	2 2.02	4 4.04
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

The results on Table 4.35 indicate that majority 88(88.89%) of the teachers from Nairobi and Nyeri pre-schools and from all the categories of the pre-schools used both free and directed play, 4 (4.04%) from Nyeri pre-schools used free play, 3(3.03%) from Nairobi pre-schools used directed play while 4 (4.04%); 2 (2.02%) from Nairobi and 2 (2.02%) from Nyeri pre-schools did not indicate the teaching approach they used. Table 4.35 also shows that, Nairobi pre-schools had a higher percentage of teachers (90.20%) who indicated that they used both free and directed play than teachers (87.5%) from Nyeri pre-schools. Only 4 (4.04%) teachers from Nyeri pre-schools indicated that they used free play while only 3 (3.03%) teachers from Nairobi pre-schools indicated that they used directed play.

Free play involves activities that children engage in freely while the teacher ensures there are adequate play materials and supervises. Directed play involves activities that are planned and taught by the teacher for the children to acquire. Both free play and directed play are recommended during a PE lesson (KICD, 2008). The findings therefore imply that the teachers were aware of the best and the recommended teaching approach to use during a PE lesson. The use of both the free and directed play would contribute to the efficient implementation of the PE programme.

From the observation schedule however, it was observed that 36 (60%) of teachers allowed children to play freely during the lesson without instruction, 17 (28.33%) teachers instructed and used the recommended approach while7 (13.33%) instructed using the free play approach only. Thematic approach was rarely used during the PE lessons as only 8 (13.33%) teachers and mostly from Nairobi pre-schools were observed using the approach. This implies that majority of the teachers do not integrate the activity areas when teaching. Most of the teachers allowed the children to go to the field before they arrived to the field. The lessons were started with the play activities and the warm-up activities were overlooked and so were the cool down activities after the lesson instruction. Out the 24 (40%) teachers who did PE instruction, 15 (62.5%) conducted warm-up activities while only 3 (12.5%) conducted cool down activities. The main role of the teacher was to provide the available play resources and supervise the children as they played. The observation schedules revealed that out of the 24 (40%) of teachers who did PE instruction, 12 (50%) had lesson plans while the others taught without lesson plans.

When observing a PE lesson in a private pre-school in Nairobi County, the researcher saw another teacher lead another pre-school class to the field which was an open plot with no fixed structures. The teacher sat down and watched the children

play freely in the field. This may have been what they teacher normally did during the class's PE lessons. Some of the children joined the class the researcher was observing as the teacher in charge of their class did not direct or give PE instructions to the class.

When PE lessons are not planned, it is unlikely that they will offer opportunities for thematic teaching as children are likely to engage in physical activities freely thus no integration of PE with themes in other activity areas. N'gasike (2004) and Wawire (2006) also observed that pre-schoolteachers rarely used thematic teaching. Seefeldt and Vogel (1987) point out that, it is possible to develop an outstanding curriculum only to discover that learners fail to achieve desired learning outcomes because the curriculum development has not translated successfully into teaching methods. In addition, Galluhe (1993) posits that instruction from the teacher influences the efficiency of the implementation of the PE programme as the teacher has the responsibility of tailoring the PE content, the teaching methods, materials and the learning activities.

The teachers further explained why they used both the free play and the directed play when teaching movement skills in PE. The teachers' responses on why they used both free and directed play when teaching movement skills in PE are presented in Table 4.36.

Table 4. 36: Reasons for Using Both Free and Directed Play when Teaching PE

Response	Nairobi Schools	Nyeri Schools	F %
Children explore and are also guided	20	18	38 (38.38)
Children perform their own activities and also learn skills	11	7	18 (18.18)
Children benefit from both free and directed play	4	12	16 (16.16)
Children need to learn and also practice	4	8	12 (12.12)
In both, children socialize and learn skills	4	6	10 (10.10)

According to the results in Table 4.36, 38(38.38%) of the teachers from Nairobi and Nyeri pre-schools reported that, when both free and directed approaches were used, the children were able to explore or play freely and also be guided or instructed, 18(18.18%) children performed their own activities and also learned skills from the teacher,16 (16.16%) children benefitted from the free play as well as the directed play, 12(12.12%) children were able to learn skills and practice them while 10 (10.10%) indicated that in both free and guided play, children were able to socialize and learn skills. This implies that the teachers were aware of the benefits of using both the free and the directed play. Using both would allow efficient implementation of the PE programme.

The teachers indicated that they instructed and guided the pre-school children as well as expose them to free play. Mweru (2002) observed that when teachers are present during children's play activities, they guide the children in selection and use of play materials and also in the actual choice of play activities. Pica (2008) on other hand, posits that directed play contributes to the development of self-esteem in young children.

The results on the teaching approach used when teaching movement skills in PE show that most teachers did not practically implement the free and directed play

well during the PE lessons. They allowed the children to play freely without instruction the whole lesson or used free play only during the lesson. Due to lack of use of directed play, thematic approach was not used during the PE lessons. Thus, there was no integration of PE with the themes learnt in the class. Warm-up and cool down activities which are necessary for the safety of the children were overlooked during the PE lesson. This may imply that if all the aspects of the teaching approach used when teaching movement skills in PE were not utilized, this would affect the efficiency of the implementation of the PE programme.

4.4.6 Pre-school PE Assessment

Assessment of any teaching and learning process is vital in order to obtain feedback on the efficiency and effectiveness of a programme. Teachers need to assess the teaching and learning of PE to evaluate among other things, whether the objectives are being achieved and the progress of the children. Teachers' responses on whether children are assessed in PE in pre-schools are presented in Table 4.37.

Table 4.37: Assessment of Children in PE

	NAIROBI SCHOOLS					NYERI SCHOOLS				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
PE assessment	8 8.08	10 10.10	2 2.02	0 0.00	20 20.20 (39.22)	4 4.04	7 7.07	0 0.00	11 11.11 (22.9)	31 31.31
No PE assessment	8 8.08	16 16.16	1 1.01	6 6.06	31 31.31	13 13.13	21 21.21	3 3.03	37 37.37	68 68.69
Total	16 16.16	26 26.26	3 3.03	6 6.06	51 51.51	17 17.17	28 28.28	3 3.03	48 48.48	99 100

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

Table 4.37 shows that majority of the teachers 68 (68.69%) from Nairobi and Nyeri pre-schools reported that the children were not assessed in PE while 31 (31.31%) reported that they assessed children in PE. Out of the 31 (31.31%) teachers, 20 (20.20%) were from Nairobi while 11(11.11%) were from Nyeri pre-schools. This implies Nairobi pre-schools had a higher percentage of teachers (39.22%) who assessed children in PE than Nyeri pre-schools. Figure 4.9 shows the level of PE assessment in Nairobi and Nyeri pre-schools.

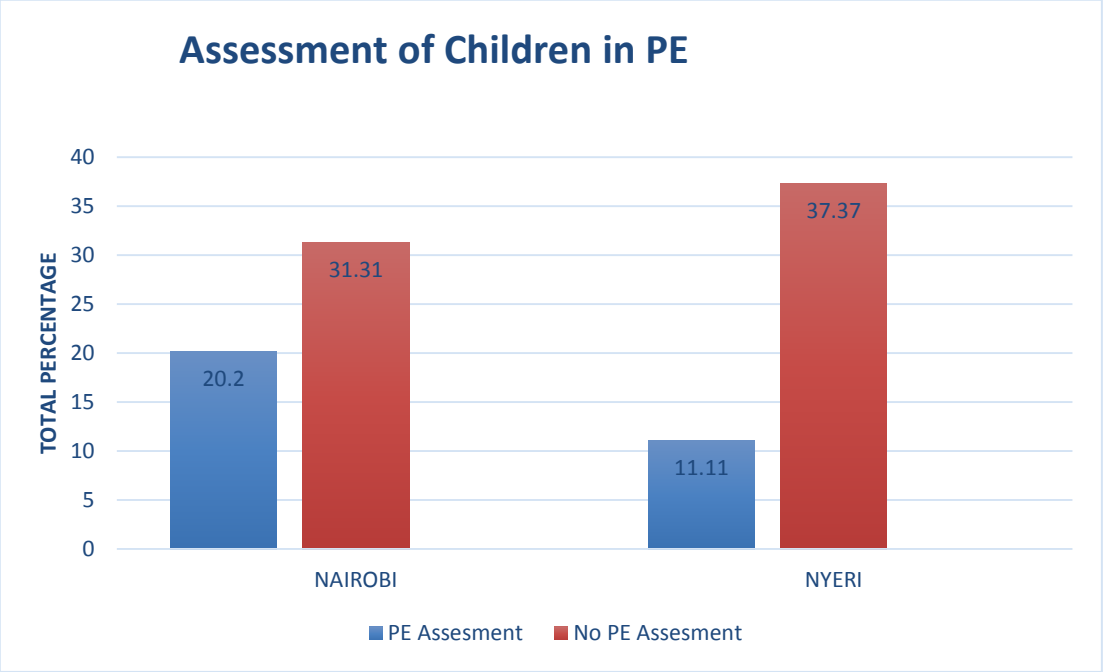


Figure 4. 9: Levels of PE Assessment in Pre-schools

The 68 (68.69%) teachers who reported that they did not assess children in PE stated that, the emphasis was more on the academic performance 29 (29.29%), they were not expected to assess PE by the administrators 27 (27.27%), they did not teach PE6 (6.06%), they had no time to assess PE 4 (4.04%), while 4 (4.04%) stated they had never thought about it. Out of the 31 (31.31%) teachers who indicated that they assessed PE, 30 (30.30%) did so through observation methods while 1 (1.01%) instructed children to perform various physical skills. This implies that majority of the teachers did not keep a record of children's performance in PE which would help them monitor children's progress.

The results on PE assessment showed that some administrators did not ensure that PE assessment was done in pre-schools as much emphasis was put on academic work. Some teachers never thought of PE assessment and this implies that the teachers did not think PE assessment was valuable and was part of the assessment of the total development of the child.

The results of the study on PE assessment tend to show that majority of teachers did not assess PE learning. The results are similar with Muindi's (1998) and

Nyonje's (2004) who also noted that there was no assessment carried out for PE at primary schools in Kenya. Muindi (1998) further observed that the parents and the teachers were aware that the grades would not be put into any subsequent use. However, KIE (1984) point out it is important for teachers to observe and make progress records as children engage in different activities. The records show the teacher how well or how poorly children perform their activities and the teacher understands the kind of assistance each child needs.

According to Anderson and Arsenault (2002), efficiency measures the relationship between the outputs (the products) of a programme and the inputs (the resources). A programme is said to be efficient if it uses the least costly resources that are appropriate and available to achieve the desired outputs (OECD/DAC, 2008).The efficiency criterion focuses on the management of the programme and examines issues concerning policy, administrators, teachers, parents, educational officers, funding, time and learning resources. The efficiency criterion addressed the input and process components of the CIPP model used in this study as it examined whether the input (the resources) was appropriate and according to the needs of the children, and whether the programme was executed competently (Stufflebeam, 1983).

The findings on the second objective on the efficiency of the implementation of the pre-school PE curriculum tend to show that the implementation of the PE curriculum was efficient in some aspects and not in others. Majority of the teachers indicated that PE was indicated in the timetable and taught in their pre-schools, PE learning facilities were adequate, play materials were improvised, pre-schools administrators provided a conducive teaching and learning environment, parents supported and contributed towards PE learning resources, teachers felt competent

and confident to teach PE, teachers enjoyed the teaching of PE and teachers used both the free and directed teaching approach when teaching movement skills in PE.

The findings on the efficiency of the implementation of the pre-school PE curriculum however shows that, PE lessons were not taught in some pre-schools, while in others, PE lessons were indicated in the timetable but were not taught as other activity areas were taught due to pressure for children to perform well academically. The PE teaching policy was not adhered to and pre-schools had different time allocation for PE teaching. PE learning materials and references were not adequate in some pre-schools and funds were not enough for the purchase of PE learning materials. Despite lack of adequate PE learning materials, some pre-schools did not improvise play materials for effective PE teaching. Teachers did not attend professional development courses to enhance their PE teaching and they did not actively participate during PE lesson. Children were not assessed in PE and therefore, their progress in skill development was not monitored.

Efficient implementation of the pre-school PE curriculum calls for adherence of policies which have been put in place to guide the achievement of the objectives and goals (CARICOM, 2011). These are policies concerning time allocation and scheduling, teaching methodology, provision of learning resources and equipment, and administration policies. Thirty minutes of daily physical activity is recommended (KIE, 2008) for pre-schools and this concurs with the physical activity guidelines for Americans which state that, children and adolescents should participate in physical activity for at least 60 minutes everyday. Since children spend half their time in school, they should get 30 minutes of their daily physical activity time during the school day (US Department of Health and Human Services, 2009). Sallis (2002) also posits that, educational programmes cannot be efficiently implemented using only policy guidelines even if teachers are trained and committed

without adequate and appropriate physical facilities. As Adeogun (2001) points out, effective teaching cannot take place if basic instructional resources are not present. In addition, American Youth Policy Forum (2006) argue that, implementing quality school programmes requires well-trained and well-prepared teachers who are supported by informed, competent and committed programme managers and administrators. The programme managers and administrators will create an environment conducive to quality programme implementation as they will provide organized leadership, ensure teachers receive training, supervise, identify and address implementation problems.

4.5 Findings on the Effectiveness of the Implementation of the Pre-school PE Curriculum

The third objective of the study sought to examine the effectiveness of the implementation of the pre-school PE curriculum in the pre-schools. According to Anderson and Arsenault (2002), effectiveness focuses on the extent to which the objectives of a programme are achieved or are likely to be achieved. A programme is seen to be effective when its outputs produce the desired outcomes. This study sought to examine the achievement of the PE objectives in pre-schools. To achieve this, the study examined the physical activities children are exposed to during PE lessons, the attitude of the children towards PE and the acquisition of movement skills.

4.5.1 Physical Activities in Pre-school PE Lessons

To achieve the PE objectives in pre-schools, the teachers need to expose the children to a wide range of physical activities. Some of the basic physical skills that children acquire when exposed to physical activities regularly are movement skills such as running, hopping, jumping, skipping and kicking. The study requested the

teachers to list the physical skills they engaged the children in. A list of the physical skills is presented in Table 4.38.

Table 4.38: List of Physical Skills for Pre-school Children

Response	Nairobi Schools	Nyeri Schools	F	%
Running/Racing	36	37	73	73.73
Jumping	23	35	58	58.58
Skipping	20	21	41	41.41
Throwing and catching	9	13	22	22.22
Playing games e.g. football	6	11	17	17.17
Hopping	8	7	15	15.15
Racing tyres	4	8	12	12.12
Dancing	2	10	12	12.12
Swinging	6	3	9	9.09
Jogging	6	2	8	8.08
Singing games	4	3	7	7.07
Sliding	4	2	6	6.06
Sack race	4	2	6	6.06
Kicking	2	3	5	5.05
Climbing	4	-	4	4.04
Crawling	4	-	4	4.04
Stretching	2	2	4	4.04
Bending	1	3	4	4.04
Pulling	1	2	3	3.03
Clapping	3	-	3	3.03
Hit the dodger	2	1	3	3.03
Frog jump	2	-	2	2.02
Swimming	2	-	2	2.02
Pushing	1	1	2	2.02
Filling and empting sand	2	-	2	2.02
Tug of war	2	-	2	2.02
Walking	2	-	2	2.02
Rabbit walk	-	2	2	2.02
Balancing	1	1	2	2.02
Galloping	1	-	1	1.01
Rolling	1	-	1	1.01
Standing on one leg	1	-	1	1.01
Tapping	1	-	1	1.01
Cock fighting	1	-	1	1.01
Duck walk	1	-	1	1.01

Results in Table 4.38 show that teachers engaged the children in a variety of skills. Majority of teachers 73(73.73%) engaged the children in running or racing followed by 58(58.58%) jumping, 41(41.41%) skipping, 17(17.17%) playing

games,15 (15.15%) hopping and 12(12.12%) in dancing. This implies that children are exposed to a variety of physical activities that can lead to acquisition of movement skills and thus effective implementation of the PE programme. However, from the lesson observations, running or races, singing games and exercises that did not require apparatus such as hopping and stretching were the common activities played by the children. Physical skills that required play apparatus were minimal apart from the pre-schools that had play apparatus. In most pre-schools, the play apparatus were not adequate as the number of children was not compared to the play apparatus. Moreover, some pre-schools had PE or games at the same time thus stretching the limited facilities and equipment.

The physical skills listed by the teachers are some of the fundamental skills and games found in the pre-school PE curriculum. Graham, Holt/Hale and Parker (1993) posit that fundamental movements skills are the foundation for the development of more complex and specialized skills in games, dance and fitness activities. Sallis and McKenzie (1991) further point out that learning of fundamental skills facilitates the maintenance and improvement of physical fitness not only during children's school years but also in their adult years.

4.5.2 Attitude of Children Towards PE

For effective learning to take place, the learners need to have a positive predisposition towards the activities they are engaged in. This study sought to find out the attitude of children towards PE as it relates to the effectiveness of the implementation of the PE programme. Besides the need for a positive predisposition towards physical activity for effective learning, participating in physical activities for enjoyment is one of the PE objectives in the ECE curriculum. Teachers' responses

on whether children enjoyed performing physical activities are presented in Table 4.39.

Table 4. 39: Teachers' Responses on Whether Children Enjoyed Performing Physical Skills.

	NAIROBI SCHOOLS					**NYERI SCHOOLS**				
Response	**F**	**F**	**F**	**F**	**Total**	**F**	**F**	**F**	**Total**	**Total**
	%	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
	PB	PR	CC	WF		PB	PR	CC		
Enjoyed	16	25	3	5	39	14	24	2	40	89
	16.16	25.25	3.03	5.05	39.39 (76.47)	14.14	24.24	2.02	40.40 (83.33)	89.9
Did not enjoy	0	0	0	0	0	3	4	1	8	8
	0.00	0.00	0.00	0.00	0.00	3.03	4.04	1.01	8.08	8.0
No response	0	1	0	1	2	0	0	0	0	2
	0.00	1.01	0.00	1.01	2.02	0.00	0.00	0.00	0.00	2.02
Total	**16**	**26**	**3**	**6**	**51**	**17**	**28**	**3**	**48**	**99**
	16.16	**26.26**	**3.03**	**6.06**	**51.51**	**17.17**	**28.28**	**3.03**	**48.48**	**100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

The results in Table 4.39 show that 89 (89.90%) of the teachers reported that children enjoyed performing physical skills, 8 (8.08%) reported that children did not enjoy performing physical skills while 2 (2.02%) did not respond. More teachers (96.08%) from Nairobi pre-schools indicated that children enjoyed performing physical skills than teachers (83.33%) from Nyeri pre-schools. Table 4.39 also shows that the 8 (8.08%) teachers who reported that children did not enjoy performing physical skills were from Nyeri pre-schools while the teachers who did not respond to the item were from Nairobi pre-schools.

The 89 (89.90%) teachers who indicated that children enjoyed performing physical skills stated that, children enjoyed performing the skills because it was fun. Some of the teachers commented on the children's attitude towards PE and said:

> "Sometimes we tell children they will not go out for PE if they have not finished their homework. Children therefore finish their homework early in order to go out and play." [T 99]

> "Children enjoy PE and they keep on reminding the teacher it is time for outdoor activities." [T 26]

The teachers' comments show that children enjoy play and are always eager to go out to the field to play. Children do not like missing out on play as it is a time for them to have fun and enjoy.

The 2 (2.02%) teachers who did not respond reported that they did not teach PE either because of lack of PE resources or PE was not taught in the pre-school. From the headteachers' interviews, 58 (96.67%) of the headteachers said that children enjoyed PE and had a positive attitude towards play. Some of the headteachers commenting on the children's attitude towards PE stated:

> "Children enjoy PE especially if they are engaged in play. They enjoy learning new skills by running, knowing how to jump and to throw the ball." [H 36]

> " PE is the best time for children. Children love PE but we hardly give them enough time to play." [H 40]

> "Children have a positive attitude to PE. During class time, the children remind their teacher it is time for PE." [H 55]

The headteachers' comments point to the fact that play is the best time for children although some pre-schools deny children opportunities to play. Children are positive towards play and enjoy learning new skills. From the parents' and the DICECE officers' interviews, 60 (100%) parents and the 4 (100%) DICECE officers from Nairobi and Nyeri countiesalso observed that children enjoyed and loved to play. One parent commented on the children's attitude towards PE and said that:

> "Children like and love playing all the time. They enjoy being on the move unless they are sick." [P 43]

The parent's comment shows that children have a positive attitude towards play. Children enjoy movement and play is their business. This disposition towards play enables children to learn new physical skills easily.

Similar findings were recorded during the lesson observations as it was observed that majority of the children enjoyed playing and wished to continue playing even when the lesson was over. The researcher observed children who were eager to go to the field to play as the teachers tried to organise them to move to the field in an orderly manner. When time for play was over, the teachers had to be firm to stop the playing sessions. As Kabiru and Njenga (2009) reported, children have a natural desire to experience movement through physical activities. Therefore, if children are exposed to an appropriately structured PEprogramme, the children will acquire the necessary knowledge, skills and attitudes at the same time enjoy themselves leading to effective implementation of the PE programme.

4.5.3 Children's Acquisition of Movement Skills in Pre-school

To assess the effectiveness of the PE programme, this study sought to examine whether children acquired and performed different movement skills. PE objectives in the ECE syllabus include, to explore and develop personal talents and skills, develop large and small motor skills, and control and co-ordinate different parts of the body. The teachers were requested to give their views on whether the children acquired and performed different movement skills. Their responses are presented in Table 4.40.

Table 4.40: Teachers' Responses on Children's Acquisition and Performance of Different Movement Skills.

NAIROBI SCHOOLS						**NYERI SCHOOLS**				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
Children acquired skills	16 16.16	25 25.25	3 3.03	5 5.05	49 49.49 (96.08)	16 16.16	23 23.23	2 2.02	41 41.41 (85.42)	90 90.91
Children did not acquire skills	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 1.01	3 3.03	1 1.01	5 5.05	5 5.05
No response	0 0.00	1 1.01	0 0.00	1 1.01	2 2.02	0 0.00	2 2.02	0 0.00	2 2.02	4 4.04
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

Results in Table 4.40 show that 90 (90.91%) of the teachers indicated that the children acquired and performed different movement skills, 5 (5.05%) children were not able to acquire and perform different movement skills while 4(4.04%) did not respond. More teachers (96.08%) from Nairobi pre-schools indicated that children acquired and performed different movement skills than teachers (85.42%) from Nyeri pre-schools. The 5 (5.05%) of teachers who indicated that children were not able to acquire and perform different movement skills were from Nyeri pre-schools. This may be supported by the results on Table.4.39 which show that 8 (8.08%) teachers from Nyeri pre-schools reported that children did not enjoy performing physical skills.

Out of the 90 (90.91%) teachers who indicated that children acquired and performed different movement skills, majority 68 (68.68%) of the teachers reported that children performed the skills taught, followed by 18 (18.18%) children imitated

what the teacher demonstrated, 8 (8.08%) children followed instructions given by the teacher, 5 (5.05%) children competed with one another using the learnt skills, 3 (3.03%) children were physically fit while 3 (3.03%) stated that children were interested in performing the movement skills.

One of the teachers commented on children's acquisition and performance of movement skills and said that:

> "Some of the children were not able to run when they joined pre-school but now, they can be able to run and to jump." [T 35]

The teacher's comment shows that when children are taught PE, they acquire physical skills. These are skills which children could not perform when they joined pre-school but after instructions, they could perform them. From the headteachers' interviews, it was established that 55(91.67%) of the headteachers indicated that children acquired and were able to perform varied movement skills. Indeed some of the headteachers commenting on children's acquisition and performance of movement skills stated:

> "The skills they learn can be seen when they are playing outside as they run, jump, climb, bend, hop and skip." [H 11; H 79]

> "Children like PE and they have been able to improve their movement skills. One child in particular could not run but after a while, he was able to run and engage in a variety of physical skills." [H 14]

The headteachers' comments show that children acquired different movement skills and this was observed as children played in the playground. Children who could not perform some movement skills were able to do so after instructions. However, the headteachers further said that, some children were not able to perform the skills as they needed more time for practice, some learnt on their own, while some did not acquire the skills fully because they were not taught and the

time for learning was minimal. From the parents interviews, the parents indicated that the children learnt various physical skills in the pre-schools as they could observe them engage in various games at home such as running, skipping, jumping and hopping. They further indicated that, children had developed body coordination and control as they participated in movement skills well. Some of the parents commenting on children's acquisition and performance of movement skills said that:

> "Children have learnt how to co-ordinate various body parts. They have acquired movement skills and they move various body parts without a lot of difficulty. They can run, jump, skip and play different games." [P 7; P 10; P 33; P 60]

From the DICECE officers interviews, the 4 (100%) DICECE officers pointed out that the teaching of PE was not effectively conducted in some pre-schools. Where the teaching of PE was done effectively, children acquired the skills and performed them effectively. One of the DICECE officers commented on children's acquisition and performance of movement skills and said:

> "In pre-schools where PE is effectively taught, you will see children in the field engaging in a variety of movement skills. In fact in pre-schools where sports days are organized, you will see the children compete very well in a variety of movement skills." [D 1]

The observation of skills performance by the children revealed that majority 100 (83.33%) of the children had acquired running skills, 66 (55%) jumping skills, 63 (52.5%) kicking skills, 50 (41.67%) static balancing skills, 49 (40.83%) dynamic balancing skills, 45 (37.5%) throwing at a target or aiming skills, and 42 (35%) catching and throwing skills. The observation of skills performance by children revealed that children were able to acquire running skills as running was an activity they engaged in frequently with or without play apparatus. The kicking and jumping skills were fairly performed by the children though they had a problem in kicking at a target and maintaining body control. The catching and throwing, aiming and

balancing skills proved to a bit difficult for the children to perform as they had a problem with hand co-ordination, accuracy, estimation and stability skills. These skills require play apparatus, practice and guidance to be acquired by young children. Figure 4.10 and Figure 4.11 show pre-school children performing physical activities in the playground.

Figure 4.10: Pre-school Children Performing Sack Race

Figure 4.11 Pre-schools Children Performing Tyre Race

The results of this study on children's acquisition of movement skills tend to show that children who received PE instructions and were exposed to play apparatus acquire some movement skills. This is supported by Ignico (1992a, 1992b) who found that young children who participated in a school-based PE programme demonstrated significant improvement on basic motor skills performance. Similarly, other studies carried out at different levels of education in Kenya reveal positive effects for students who engaged in PE programmes (Esmail, 1983; Nalletamby, 1987; Wasonga, 1989; Kinoti, 1998). Children also posited positive results on their health and self-esteem after being exposed to a healthy for life programme (Prosper et al., 2009). McKenzie et al., (2004) also developed, implemented and assessed a PE intervention programme meant to increase physical activity during middle school PE classes and the intervention significantly improved student moderate to vigorous physical activity in PE.

According to Anderson and Arsenault (2002), effectiveness focuses on the extent to which the objectives of a programme are achieved or are likely to be achieved. A programme is seen to be effective when its outputs produce the desired outcomes. The effectiveness criterion addressed the product component of the CIPP model used in this study which interprets attainments. It looked at whether the needs of the children were met. The findings on the third objective on the effectiveness of the implementation of the pre-school PE curriculum tend to show that the implementation of the PE curriculum was effective in some aspects and not effective in others. Majority of the teachers indicated that they exposed children to a variety of physical skills, children enjoyed performing physical skills, and children acquired and performed different movement skills. However, the results showed that teachers exposed children to physical activities that did not require play apparatus like running. This limited the range of physical skills that the children were exposed to.

This limitation could be addressed by use of improvised play materials and equipment. The results also showed that, some pre-schools had games days where all the children went to the field instead of having PE lessons. When all the children are in the field at the same time, this stretches the play facilities and equipment and instruction becomes difficulty to deliver. This affects the effectiveness of the PE programme. Individual class PE lessons would be more effective than games for the whole pre-school. It was also noted that, children who had not been exposed to play activities before joining pre-school did not enjoy performing physical activities. Exposure to play and physical activities should be introduced to children at an early age. Some physical skills like throwing at a target require play apparatus, time for practice and guidance for proper acquisition.

The general objectives of outdoor activities (PE) include: to explore and develop personal talents and skills, to relax and enjoy, to develop large and small motor skills, to control and co-ordinate different parts of the body, and to develop estimation and accuracy skills (KIE, 2008). The observation guide facilitated the observation of children during PE lessons and while performing various physical skills. The findings from the observation of skills performance affirm that there was effective implementation of the PE curriculum in Nairobi and Nyeri pre-schools. . PE objectives were achieved as the children performed various physical skills, enjoyed performing various physical skills, practiced control and co-ordination of different body parts and performed estimation and accuracy skills.

The first priority of an effective PE programme is to provide children with the simple motor skills needed to be able to participate fully in the physical play forms of childhood. These simple motor skills should be acquired and practised during early years as they are the building blocks for more complex movements and combination of movements needed for successful participation in physical activities

(Graham, Holt/Hale, & Parker, 2004). There is advocacy for PE programmes that teach children the skills they will need to lead a physically active lifestyle (Centres for Disease Control and Prevention, 2006; National Association for Sport and Physical Education, 2004). Research also identifies several factors that play a major role in determining the degree to which children are inclined to lead a physically active lifestyle. Among the strongest of those factors are competence at performing and confidence in using motor skills (Solomon, 2003).

4.6 Findings on the Impact of the Implementation of the Pre-schoolPE Curriculum

The fourth objective of the study sought to establish the impact of the implementation of pre-school PE curriculum in pre-schools. According to OECD/DAC (2008), the impact criterion, measures what has happened as a result of the programme. In addition, Anderson and Arsenault (2002) point out that impact also looks at the difference that the programme has made to the beneficiaries. To establish the impact of the implementation of the pre-school PE curriculum, this study sought to establish whether the beneficiary of the PE programme had benefitted from the programme. The study further sought to find out whether the PE programme had achieved the PE objectives, ECE objectives, and national goals of education.

4.6.1 Benefits of the Pre-school PE Programme

This study sought to find out from the implementers and the pre-school stakeholders whether the children benefited from the teaching of PE. The teachers' views on the benefits of teaching PE to pre-school children are presented in Table 4.41.

Table 4.41: Benefits of Teaching PE to Pre-school Children

Response	Nairobi Schools	Nyeri Schools	F	%
Enhances socialization/interaction	37	39	76	76.77
Enhances physical growth and development	23	32	55	55.56
Promotes physical fitness and health	22	15	37	37.37
Promotes learning through play	19	17	36	36.36
Refreshes/Relaxes the body	14	13	27	27.27
Facilitates self-expression	15	10	25	25.25
Encourages the aspect of sharing	14	6	20	20.20
Promotes skill learning	11	8	19	19.19
Enhances language development	3	13	16	16.16
Promotes emotional control	7	8	15	15.15
Facilitates enjoyment	6	8	14	14.14
Develops talents	3	6	9	9.09
Promotes self confidence	2	3	5	5.05
Enhances learning of turn taking	2	1	3	3.03
Enhances appreciation of other	1	2	3	3.03
Promotes the aspect of cooperation	1	1	2	2.02
Encourages making of friends	1	1	2	2.02
Enhances the aspect of patience	1	1	2	2.02
Enhances creativity	1	1	2	2.02
Promotes a sense of belonging	1	-	1	1.01

Table 4.41shows that 76 (76.77%) of the teachers stated that teaching PE to pre-school children enhances socialization and interaction, followed by 55 (55.56%) enhances physical growth and development, 37 (37.37%) promotes physical fitness and health, 36 (36.36%) promotes learning through play, 27 (27.27%) refreshes and relaxes the body, 2 (2.02%) promotes the aspect of cooperation, 2 (2.02%) encourages making of friends, 2 (2.02%) enhances the aspect of patience, 2(2.02%) enhances creativity while 1(1.01%) indicated that it promotes a sense of belonging.

From the headteachers' interviews, 60 (100%) of the headteachers affirmed that the teaching of PE benefited pre-school children. The headteachers gave various reasons why the teaching of PE was beneficial to pre-school children. The reasons are presented in Table 4.42.

Table 4.42: Headteachers Reasons on Benefits of Teaching PE

Response	F	%
Promotes acquisition of skills	21	35.00
Promotes physical fitness and health, coordination, balance	14	23.33
Refreshes/relaxes the body	9	15.00
Enhances physical growth and development, strengthens muscles	7	11.67
Enhances socialization/interaction	4	6.67
Develops talents	2	3.33
Enhances learning of different games	2	3.33
Facilities self-expression	2	3.33
Enhances language development	1	1.67
Promotes development of leadership skills	1	1.67

Table 4.42 shows that 21 (35.00%) of the headteachers felt that PE promotes acquisition of skills in children, followed by 14 (23.33%) promotes physical fitness and health, coordination and balance, 9 (15.00%) refreshes and relaxes the body, 7 11.67%) enhances physical growth and development and strengthens muscles, 4 (6.6%) enhances socialization and interaction, 2 (2.02%) develops talents while 1 (1.67%) cited that PE promoted development of leadership skills and enhanced language development.

From the parents interviews, the parents also pointed out the benefits of teaching PE to pre-school children. They said that physically, children's growth and development was sustained, physical fitness in terms of strength, coordination and endurance was developed, physical skills were acquired, their bodies were relaxed and good health was maintained. Socially, they acquired moral values and socialized with other children. Mentally, they relaxed, acquired new skills and games, developed their language and learnt new concepts. Emotionally, they got an opportunity for self-expression, gained self-confidence and learnt how to relate with others. One of the parents commenting on the benefits of teaching PE stated that:

> " My son has autism and had problems with body control and co-ordination but he has improved a lot. He likes PE very much as children with special needs are taken care of." [T 37]

Some parents further added:

> "My child plays and performs new games and skills learnt at school. Together with the other children, I see them do running and ball games."[P55]

> "My child has become more open and social due to children's interaction during play. She was shy and reserved but now she is different." [P 8]

The parents' comments show the benefits of teaching PE in the physical and social development of children. Participation in physical activities acts as a corrective therapy for children with physical challenges. This shows that, participation in physical activities has a positive impact on children with special needs. Through participation in physical activities, children also acquire new skills and games and they develop their personality through social interaction.

From the DICECE officers interviews, the 4(100%) DICECE officers also said that the benefits of teaching PE to pre-school children are immense as PE developed the total child; socially, emotionally, mentally and physically. The responses of the teachers, headteachers, parents and DICECE officers revealed that children benefit from participation in PE and this has an impact on their total growth and development. These benefits as found in this study are in line with the PE objectives, ECE objectives and national goals of education in Kenya. Sallis and McKenzie (1991) posit that a pre-school child derives physical, health, socio-emotional and intellectual benefits from participation in physical activities.

Studies by Moyles (1989), Read, Gardner and Mahler (1993), Seefeldt and Barbour (1994) support the results of this study as they indicate that creativity and cognitive development is strongly linked with play processes in children's learning.

Other studies report that play activities enhance children's sense of individuality, self-worth, self-control, self-confidence, intrinsic motivation, the desire to take risks and to solve problems, the ability to make decisions and to choose (Vygotsky, 1978; Whitebread, 1996; Bruce, 1991; Bailey, 2006). On the other hand, Bruce (1991) points out that, play deprivation leads to an imbalanced growth in children. Children who do not participate in play lack self-confidence, have an attitude of selfishness, are nervous, easily irritable and intolerant. These children are likely to develop poor problem solving skills and lack pro-social skills.

4.6.2 Teaching of PE and Achievement of PE and Early Childhood Education Objectives, and National Goals of Education.

The teaching of the PE content is geared towards the achievement of the PE objectives which in turn leads to the achievement of the ECE objectives and eventually the achievement of the national goals of education. This study sought to find out whether the teaching of PE leads to the achievement of the PE objectives, the ECE objectives and finally the national goals of education. The achievement of the PE and ECE objectives and the national goals of education through the teaching of PE is bound to have an impact on the total development of a child. The study sought the teachers' views on the achievement of the PE objectives, ECE objectives and the national goals of education through the teaching of PE. The teachers' views on whether the teaching of PE contributes to the achievement of PE objectives are presented in Table 4.43.

Table 4.43: Teachers' Responses on Contribution of Teaching of PE towards the Achievement of PE Objectives.

	NAIROBI SCHOOLS					NYERI SCHOOLS				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
PE contributes to achievement of objectives	15 15.15	22 22.22	3 3.03	4 4.04	44 44.44	17 17.17	22 22.22	2 2.02	41 41.41	85 85.86
PE does not contribute to achievement of objectives	0 0.00	1 1.01	0 0.00	0 0.00	1 1.01	0 0.00	0 0.00	0 0.00	0 0.00	1 1.0
No response	1 1.01	3 3.03	0 0.00	2 2.02	6 6.06	0 0.00	6 6.06	1 1.01	7 7.0	13 13.13
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

The results in Table 4.43 show that majority 85 (85.86%) of the teachers, 44 (44.44%) from Nairobi pre-schools and 41 (41.41%) from Nyeri pre-schools indicated that teaching PE contributed to the achievement of the PE objectives, 1(1.01%) of the respondents indicated that teaching of PE did not contribute to the achievement of the outdoor activities objectives while 13 (13.13%) did not respond. Out of the 13 (13.13%) teachers, 6 (6.06%) were from Nairobi and 7 (7.07%) were from Nyeri pre-schools. Results in Table 4.10 showed that 5 (5.05%) teachers had said that the PE objectives were not clear, relevant and achievable while 9 (9.09%) had not responded. Out of the 9 (9.09%) teachers who had not responded, 6 (6.06%) teachers had said that PE was not taught in their pre-schools and they could not tell

whether the objectives were achieved or not while 3 (3.03%) said that they last referred to the objectives when they were teacher trainees. This implies that some teachers did not refer to the objectives when planning to teach PE. This suggests that some teachers do not plan and gear PE learning activities towards the achievement of PE objectives.

The teachers who reported that the teaching of PE contributed to the achievement of the PE objectives were requested to indicate the PE objectives achieved. The teachers' responses are presented in Table 4.44.

Table 4.44: Teachers' Responses on PE Objectives Achieved

Response	F	%
To relax and enjoy	30	30.30
To learn different physical skills	21	21.21
To develop talents	15	15.15
To strengthen body muscles	12	12.12
To develop socialization skills	12	12.12
To develop body coordination	9	9.09
To increase vocabulary and self-expression	9	9.09
To appreciate cultural heritage and develop sense of nationhood	6	6.06
To explore the world around them	3	3.03

Table 4.44 shows that 30 (30.30%) of teachers reported that the objective to relax and enjoy was achieved, followed by 21 (21.21%) to learn different physical skills, 15 (15.15%) to develop talents, 12 (12.12%) to strengthen body muscles, 12 (12.12%) to develop socialization skills, 9 (9.09%) to develop body coordination, 9(9.09%) to increase vocabulary and self-expression, 6 (6.06%) to appreciate cultural heritage and develop sense of nationhood while 3 (3.03) indicated to explore the world around them.

From the interview schedules with the headteachers, 33 (55%) of the headteachers indicated that the PE objectives were achieved in their schools, followed by 10 (16.67%) PE objectives were not achieved, 15 (25%) PE objectives

were not fully achieved while 2 (3.33%) indicated that they did not know whether they were achieved or not. The headteachers stated that the PE objectives were not achieved as some pre-schools did not teach PE. The 15 (25%) headteachers who stated that the PE objectives were not fully achieved said that more time was required for teaching PE as due to limitation of time,some objectives were achieved while others were not. In addition, they said that the objectives were not fully achieved as some schools taught PE while others did not teach. Wuest and Bucher (1999) assert that participation in high quality PE programmes contributes to the development of the whole person and thus, contributes to the achievement of PE objectives.

Apart from the contribution of the teaching of PE to the achievement of the outdoor activities, the study sought to find out if the teaching of PE contributed to the achievement of ECE objectives and the national goals of education. The views of the teachers on whether the teaching of PE contributes to the achievement of ECE and the national goals of education are presented in Table 4.45.

Table 4.45: Teachers' Responses on Contribution of Teaching of PE towards the Achievement of ECE Objectives and National Goals of Education

NAIROBI SCHOOLS						**NYERI SCHOOLS**				
Response	**F**	**F**	**F**	**F**	**Total**	**F**	**F**	**F**	**Total**	**Total**
	%	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
	PB	PR	CC	WF		PB	PR	CC		
PE contributes to achievement of ECE objectives	13 13.13	21 21.21	3 3.03	4 4.04	41 41.41	14 14.14	24 24.24	1 1.01	39 39.39	80 80.81
PE does not contribute to achievement of ECE objectives	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
No response	3 3.03	5 5.05	0 0.00	2 2.02	10 10.10	3 3.03	4 4.04	2 2.02	9 9.09	19 19.19
Total	**16** **16.16**	**26** **26.26**	**3** **3.03**	**6** **6.06**	**51** **51.51**	**17** **17.17**	**28** **28.28**	**3** **3.03**	**48** **48.48**	**99** **100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

Table 4.45 shows that majority of the teachers 80 (80.81%) indicated that teaching of PE contributed to the achievement of the ECE objectives and the national goals of education, none of the teachers indicated that PE did not contribute to the achievement of the ECE and the national goals of education. However, 19(19.19%) of the teachers did not respond. These were 10 (10.10%) teachers from Nairobi and 9 (9.09%) teachers from Nyeri pre-schools. This implies that the teachers who did not respond to the item were both from Nairobi and Nyeri pre-schools.

The no response shown in Table 4.45 was from teachers who did not teach PE in their schools and those who did not refer to the syllabus when planning for teaching PE. These results seem to imply that some teachers do not refer and relate

the teaching of PE to the achievement of ECE objectives and the national goals of education.

One teacher from a Nyeri private pre-school stated:

> "The syllabus is normally kept in the head teacher's office.
> We are allocated what to teach every week by the head teacher."
> [T 16]

This teacher's comment shows that the head teacher issues out the content to be covered by the teachers. This shows that the teacher has no access to the syllabus which contains the PE and ECE objectives, and the National goals of education. This may imply that the teacher teaches the content but is not guided by the objectives yet the learning activities need to be geared towards the achievement of the objectives.

The teachers who reported that the teaching of PE contributed to the achievement of the ECE objectives and national goals of education were requested to indicate the ECE objectives and national goals of education achieved. The teachers' responses are presented in Table 4.46.

Table 4.46:Teachers' Responses on ECE Objectives and National Goals of Education Achieved

Response	F	%
To develop children's mental and physical capabilities	42	42.42
To promote sound moral values and social responsibility	32	32.32
To promote individual development and self-fulfillment	24	24.24
To foster nationalism and unity	18	18.18
To enjoy living and learn through play	12	12.12
To promote appreciation for culture and environment	10	10.10
To promote positive attitudes towards good health	8	8.08

Results in Table 4.46 show that 42 (42.42%) of the teachers indicated that the objective to develop children's mental and physical capabilities was achieved,followed by 32 (32.32%) to promote sound moral values and social responsibility, 24 (24.24%) to promote individual development and self-fulfillment,

18 (18.18%) to foster nationalism and unity, 12 (12.12%) to enjoy living and learn through play, 10 (10.10%) to promote appreciation for culture and environment, 8 (8.08%) indicated to promote positive attitudes towards good health.

From the interview schedules with the headteachers, 54(90%) of the headteachers felt that the teaching of PE contributed to the attainment of ECE objectives and national goals of education, 4 (6.67%) reported that the objectives were not fully achieved, 1 (1.67%) reported that they were not achieved while 1 (1.67%) reported that they did not know whether the objectives were achieved. The headteachers who reported that the teaching of PE contributed to the achievement of the ECE objectives and national goals of education were requested to indicate the ECE objectives and national goals of education achieved. The headteachers' responses are presented in Table 4.47.

Table 4.47:Headteachers' Responses on ECE Objectives and National Goals of Education Achieved

Response	F	%
To promote sound moral values and social responsibility	26	26.26%
To develop children's mental and physical capabilities	22	22.22%
To enjoy living and learn through play	21	21.21%
To improve children's health	20	20.20%
To promote individual development and self-fulfillment	14	14.14%
To promote appreciation for culture	5	5.05%
To foster nationalism and unity	2	2.02%

Out of the 54 (90%) headteachers who reported that the objectives and the goals were achieved, 26 (26.26%) said that PE promoted sound moral values and social responsibility, followed by 22 (22.22%) PE developed children's mental and physical capabilities, 21 (21.21%) PE enabled children to enjoy living and learn through play, 20 (20.20%) PE improved children's health, 14 (14.14%) PE promoted individual development and self-fulfillment, 5 (5.05%) PE promoted appreciation of

culture while 2 (2.02%) said that PE fostered nationalism and unity. The 4 (6.67%) headteachers who indicated that the objectives and goals were not fully achieved said that, the objectives can only be fully achieved if PE is taught as it should be. They further stated that the Ministry of Education, Science and Technology should step in to ensure the teaching of PE is conducted effectively and efficiently to ensure the achievement of the objectives.

From the DICECE officers interview, the 4 (100%) officers from Nairobi and Nyeri counties also stated that the PE objectives, ECE objectives and the national goals of education were achieved though in some pre-schools, they were not fully achieved. One of the DICECE officers commenting on the contribution of teaching to the achievement of PE objectives, ECE objectives and the national goals of education stated that:

> "PE makes children happy, it gives them vital exercises and it makes them mentally alert." [D 1]

This DICECE officer's comment shows that the objectives of PE of enhancing relaxation and enjoyment, promoting good health, strengthening the body muscles, developing skills and language are achieved. However, in pre-schools where PE is not taught or is taught for less than the stipulated time, then the PE objectives are not achieved or are partially achieved. Wuest and Bucher (1999) posit that PE programmes offer students the opportunity to work toward achieving the goals and objectives of education through an active learning process. Further, Wuest and Bucher (1999) point out that all PE professionals may find it helpful to understand the goals and objectives of education and the contribution of PE to their attainment. This understanding will enable the teacher to tailor make PE learning activities that will contribute to the achievement of PE and ECE objectives, and national goals education.

According to OECD/DAC (2008), the impact criterion, measures what has happened as a result of the programme. It also looks at the difference that the programme has made to the beneficiaries (Anderson &Arsenault, 2002).The impact criterion addressed the product component of the CIPP model used in this study and it examined whether the PE programme had reached the right beneficiaries (Stufflebeam, 1983). The findings on the fourth objective on the impact of the implementation of the pre-school PE curriculum tend to show that, the implementation of the PE curriculum had an impact as PE benefited pre-school children physically, mentally, socially and emotionally. The teaching of PE also contributed to the achievement of the PE and ECE objectives, and the national goals of education. However, the results also revealed that the PE objectives were not achieved or fully achieved as PE was not taught in some pre-schools or it was not allocated enough time. Some teachers did not refer to the PE objectives when planning to teach PE and this may imply that they did not plan or gear the PE learning activities towards the achievement of the PE objectives. On the other hand, some teachers did not relate the teaching of PE to the achievement of ECE objectives and the national goals of education.

Sallis and McKenzie (1991) affirm that pre-school children derive physical, health, socio-emotional and intellectual benefits from participation in physical activities. Thus, PE has an impact on the total growth and development of children. Health benefits of PE extend beyond physical health, having a positive impact on the domains of motor skills, psychological wellbeing, cognitive development, social competence and emotional maturity (Bailey, 2006; Graham, Holt/Hale& Parker, 2004; Read, Gardner & Mahler, 1993). The benefits of participating in PE lead to the achievement of the PE objectives which in turn lead to the achievement of ECE objectives and eventually the achievement of the national goals of education

4.7 Findings on the Sustainability of the Implementation of the Pre-school PE Curriculum.

The fifth objective was to establish the sustainability of the implementation of the pre-school PE curriculum in the pre-schools. OECD/DAC (2008) points out that the sustainability criterion focuses on the effects of the programme over the long term. The criterion is concerned with the maintenance, financial and economic viability of keeping the programme going despite the challenges. To establish the sustainability of the implementation of the pre-school PE curriculum, this study sought to establish the challenges faced in the teaching of PE in pre-schools that may hinder the sustainability of the PE programme, the strategies used to overcome the challenges, the value of the continuation of the programme, administrative and parental support towards the PE programme to enhance its sustainability.

4.7.1 Challenges Faced in the Teaching of PE in Pre-schools

The study sought to find out the challenges the teachers faced in the teaching of PE in pre-schools as the challenges may affect the sustainability of the PE programme. The teachers' responses on the challenges facing the teaching of PE in pre schools are presented in Table 4.48.

Table 4.48: Teachers' Responses on the Challenges Faced in the Teaching of PE

Response	Nairobi Schools	Nyeri Schools	F	%
Lack of PE resources	37	32	69	69.70
Inappropriate facilities	5	8	13	13.13
Lack of administration and parental support	5	7	12	12.12
Unfavorable weather	6	4	10	10.10
Stubborn children	8	2	10	10.10
Children's lack of exposure and inability	4	6	10	10.10
Limited time	6	3	9	9.09
Negative attitude from parents	4	4	8	8.08
Injuries	1	3	4	4.04
Lack of knowledge of activities to teach	2	2	4	4.04
Lack of PE kits	2	1	3	3.03
Large classes	1	2	3	3.03
Children with different abilities	2	1	3	3.03
Lack of reference books	1	2	3	3.03

The results in Table 4.48 show that 69(69.70%) of the teachers indicated that there was lack of PE resources, followed by 13(13.13%) inappropriate facilities, 12 (12.12%) lack of administration and parental support, 10(10.10%) unfavourable weather, 10(10.10%) stubborn children, 10(10.10%) children's lack of exposure and inability, 9 (9.09%) limited time while 8(8.08%) indicated negative attitude from parents. Other challenges reported by the teachers were injuries, large classes, lack of references, children with different abilities and lack of PE kits. The results showed that the upmost challenge facing the teachers in the teaching of PE was lack of PE resources. The study further sought the headteachers' views on the challenges faced in the teaching of PE in the pre-schools. The headteachers' views are presented in Table 4.49.

Table 4.49: Headteachers' Responses on the Challenges Faced in the Teaching of PE

Response	Nairobi Schools	Nyeri Schools	F	%
Lack of PE learning materials and equipment, lack of references	22	19	41	68.33
Lack of play grounds	6	8	14	23.33
Negative attitude of teachers and parents	4	3	7	11.67
Limited time	0	3	3	5.00
Unfavourable weather	1	2	3	5.00
Children's lack of exposure and inability	2	0	2	3.33
Injuries	2	0	2	3.33
Lack of PE kits	0	2	2	3.33
Large classes	1	0	1	1.67
PE being non-examinable	1	0	1	1.67
Preparation for Std. one admission	0	1	1	1.67

Table 4.49 shows that, 41 (68.33%) of the headteachers indicated that there was a challenge of lack of PE learning materials, equipment and resources, 14 (23.33%) lack of playgrounds, 7 (11.67%) negative attitude from the teachers and parents, 3 (5.00%) limited time, 3 (5.00%) unfavourable weather, 2 (3.33%)children's lack of exposure and inability, 2 (3.33%)injuries, 1 (1.67%) large classes, 1 (1.67%) PE not being examinable and 1 (1.67%) indicated children's preparation for standard one admission. The results showed that lack of PE learning materials, equipment and resources was the main challenge that pre-schools faced in the teaching of PE. The responses of the headteachers on the challenges faced in the teaching of PE were similar with the teachers' responses and the major challenge reported by both was lack or inadequate PE facilities and equipment.

One of the teachers commented on the challenges faced in the teaching of PE and said:

> " The council sees PE as a waste of money. The town clerk sees that, something else should be done with the available money instead of buying swings." [T 22]

This teacher's comment shows that lack of PE learning materials and equipment which was due to lack of provision of PE learning materials by administrators due to their negative attitude towards PE was a challenge to the sustainability of the teaching PE. Provision of PE learning materials is necessary for the sustainability of the PE programme.

From the DICECE officers' interview, the 4 (100%) officers from Nairobi and Nyeri Counties stated that the pre-schools faced various challenges in the teaching of PE. The biggest challenge was the lack of PE equipment and play materials which hindered effective teaching of PE. They added that adequate playground was also a challenge as some pre-schools had no play spaces at all while others had play spaces that were small. One DICECE officer from Nairobi County decried the lack of play spaces in some private and welfare pre-schools. Some pre-schools still had a challenge of having to share playgrounds with the primary schools sections and this was not very conducive for the pre-school children. The officers pointed out that some pre-schools had limited funds to buy land or to purchase play equipment as the school fees paid by the parent was used to cater for all the expenditures of the pre-schools. The officers stressed that the provision of PE learning resources was also hampered by the negative attitude of the pre-schools administrators, teachers and parents towards PE. The pressure for pre-schools to perform well academically and the parents' expectations from the pre-schools had a negative impact on the teaching of PE. This situation can be summarized by a quote from one of the teachers:

> "There is no time for play in school as the parents demand for good grades and the head teacher has to ensure the grades are delivered." [T 14]

The DICECE officers' views were also supported by one of the headteachers who said:

> "Parents tend to think PE is a waste of time and are keener on the academic work. They have a negative attitude towards PE." [H 29]

The teacher and the head teacher's comments show that there are various challenges that may affect the sustainability of the PE programme such as the negative attitude of parents towards PE and their emphasis on academic performance in pre-schools. If pre-schools administrators bow to the parents' demand, this may affect the teaching of PE and thus the sustainability of the PE programme. No resources will be earmarked for the sustainability of the PE programme as all resources will be diverted to ensure academic excellence in the pre-schools.

The DICECE officers' responses on the challenges faced in the teaching of PE were also similar with the teachers and the headteachers' responses. The DICECE officers also reported that the major challenge experienced in the teaching of PE was lack of PE facilities and equipment. This implies that effectiveness and efficiency of the implementation of the PE programme is affected by lack of PE facilities and equipment.

Studies have noted that the challenges faced in the teaching of PE at all tiers of education in Kenya and in other countries include; lack of funds, inadequate learning facilities and equipment, inadequate time allocation, large classes, inadequate references, negative attitude of some school administrators, teachers and parents (Gakuru, 1979; Madeje, 1981; Muniu, 1983; Kiganjo, 1987; Simiyu, 1990; Wawire, 2006; CARICOM, 2011; Maina, 2011). Other studies which support the results of this study have established that PE even in the class setup has not been accorded the weight it deserves (Muindi, 1998; Mukala, 2002). As Waithaka (2009) points out, many adults, whether teachers or caregivers usually take children's play for granted. This sentiment is supported by Fahey (2000) who contends that most

teachers treat PE as a break time activity or mere play time. Studies by Gakuru (1979), Swadener, Kabiru and Njenga (2000) also indicate that the Kenyan society considers children's play to be a waste of learning time. Wawire (2006) also points out that parents' expectations affect ECE as most parents want their child to perform well in literacy and numerical skills. This makes the teachers concentrate on academics at the expense of the other aspects.

The study further sought to find out how the teachers overcame the challenges they faced in the teaching of PE. The teachers' responses are presented in Table 4.50.

Table 4.50: Teachers' Responses on Overcoming of Challenges Faced in Teaching PE

Response	Nairobi Schools	Nyeri Schools	F	%
Improvisation of PE resources	25	26	69	69.70
Encouraging and motivating children to play	7	6	13	13.13
Using break times for play	3	3	6	6.06
Enhancing practice of skills	3	2	5	5.05
Use of indoor lessons	3	2	5	5.05
Modification of activities to suit play areas	3	2	5	5.05
Talks to parents	3	2	5	5.05
Use of activities children like	2	3	5	5.05
Seeking donations	4	-	4	4.04
Enhancement of safety	3	3	3	3.03
Use of groups for large classes	1	1	2	2.02
Use of more guided play	1	1	2	2.02
Borrows play materials	1	-	1	1.01
Borrows reference books	-	1	1	1.01

Table 4.50 shows that 69(69.70%) of the teachers stated that they improvised PE resources, 13 (13.13%) encouraged and motivated the stubborn and weak children to participate in play,6 (6.06%) used break time for play, 5 (5.05%) allowed more practice time for skills in order for children to acquire skills, 5 (5.05%) used indoor lessons when the weather was unfavourable, 5 (5.05%) modified the play

activities to suit the available play areas, 2(2.02%) used the guided play approach more in order to effectively use available play area and resources, 1(1.01%) borrowed play materials from community resources while 1(1.01%) borrowed references from neighbouring schools. This implies that measures such as improvisation of PE resources through use of locally available materials and use of community resources can ensure the sustainability of the PE programme.

The teachers suggested that to overcome the challenges and to sustain the teaching of PE, the schools administrators should strive to provide adequate play resources. The administrators should also hire play fields or use community grounds and ensure enough time is allocated to PE. Second, the administrators should lead by giving guidance and school policies to ensure PE is well-taught. Third, the available play space should be used in turns instead of the whole school at once to make maximum use of available play space. Fourth, workshops or sports days should also be held and used in all pre-schools to sensitize parents on the importance of PE.

From the interview schedules with the headteachers 48 (80%) of the headteachers said that their pre-schools overcame the challenges by improvising play materials, 4 (6.67%) increased practice time, 4 (6.67%) used indoor PE lessons in instances of unfavourable weather, 2 (3.33%) used groups for large classes, 2 (3.33%) used safety rules to minimize injuries, 4(6.67%) talked to parents to sensitize them on the importance of PE, 4 (6.67%) followed up teachers and 2(3.33%)) purchased play materials.

From the interview schedules with the DICECE officers, the 4 (100%) officers from Nairobi and Nyeri counties suggested that pre-schools administrators should ensure adequate provision of PE learning materials and equipment, play materials and equipment should be improvised, playgrounds should be hired and community grounds should be used. To enhance teaching in all activity areas in pre-

schools, the DICECE officer from Othaya reported that they had started competition among pre-schools in Othaya division. This was to ensure that pre-schools maintained high standards of teaching in the division. The exercise involved inspecting the pre-schools infrastructures, schemes of work, lesson plans, school records and classroom teaching. This had improved the standard and quality of teaching in the pre-schools.

Majority of the teachers and the headteachers reported that improvisation was the major strategy used to overcome the challenge of lack of PE facilities and equipment and thus enhance the sustainability of the PE programme. The use of improvisation as a strategy to overcome challenges faced in teaching of PE and modification of PE activities has been established (Muniu, 1986; Ngumo, 1993). Harrison (1983) posits that, well-organized and imaginative use of space and facilities however limited can lead to achievement of PE objectives. A creative teacher can make the best of available space both within the school and the community.

4.7.2 The Value of the Continuation of the Pre-school PE programme

The study sought to find out if despite the challenges faced in the teaching of PE, it was worthwhile to continue teaching PE in pre-school as this would help seek advocacy on the sustainability of the PE programme.. The views of the teachers' on whether it was worthwhile to continue teaching PE despite the challenges are presented in Table 4.51.

Table 4.51: Teachers' Responses on the Worthwhileness of Teaching PE in Pre-school

	NAIROBI SCHOOLS					NYERI SCHOOLS				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
PE worthwhile to teach	16 16.16	25 25.25	3 3.03	6 6.06	50 50.50	17 17.17	26 26.26	3 3.3	46 46.46	96 96.97
PE not worthwhile to teach	0 0.00	1 1.01	0 0.00	0 0.00	1 1.01	0 0.00	1 1.0	0 0.00	1 1.01	2 2.0
No response	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 1.01	0 0.00	1 1.01	1 1.01
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

The results in Table 4.51 show that 96 (96.97%) of the teachers indicated that it was worthwhile to teach PE in pre-schools, 2 (2.02%) indicated that it was not worthwhile to teach PE in pre-schools while 1 (1.01%) did not respond. This implies that for majority of teachers, PE was beneficial to the children and it was worthwhile teaching it despite the challenges. The teachers who indicated it was worthwhile to teach PE further gave reasons as to why they thought it was worthwhile to teach PE. The reasons are presented in Table 4.52.

Table 4.52: Teachers' Responses on Why it was Worthwhile to Teach PE in Pre-school

Response	Nairobi Schools	Nyeri Schools	F	%
It enhances the holistic development of a child	12	11	23	23.23
It promotes physical growth and development, health and skill learning	9	8	17	17.17
It promotes relaxation	7	6	13	13.13
It is fun and enjoyable	7	5	12	12.12
It enhances mental development	7	4	11	11.11
It enhances socialization	5	4	9	9.09
It promotes body coordination	1	3	4	4.04
It develops talents	2	2	4	4.04
It breaks classroom monotony	1	2	3	3.03
It enhances language development	1	2	3	3.03
It promotes self confidence	2	1	3	3.03

Table 4.52 shows that 23 (23.23%) of the teachers indicated that PE enhanced the total development of children, 17 (17.17%) PE promoted the physical growth and development, health and promoted skill learning,13(13.13%) it promoted relaxation, 4(4.04%) promoted body coordination, 4(4.04%) developed talents, 3(3.03%) promoted self-confidence, 3(3.03%) enhanced language development, while 3(3.03%) indicated it was a change from the classroom monotony. The results show that most teachers thought that it was worthwhile to teach PE as it enhanced the total development of children.

From the headteachers' interviews, the headteachers 60(100%) felt that it was worthwhile to teach PE despite the challenges. They stated that PE was important in the total growth and development of children and therefore, it should be taught. Similarly, the 4 (100%) DICECE officers all affirmed the need for the continuation of the teaching of PE despite the challenges faced. The officers stated that PE was worthwhile as it had positive gains for the children as it improved their health, learning, social and moral growth and it was fun and enjoyable. The affirmation of

the value of the continuation of the PE programme would positively affect the sustainability of the implementation of the PE programme.

Despite the challenges faced in the teaching of PE, the need for PE programmes in schools has been affirmed as studies have shown that children who participate in a school-based PE programme demonstrate significant improvement on basic motor skills performance (Ignico, 1992a, 1992b). Moreover, Sallis and McKenzie (1991) stress that, children who learn a myriad of movement skills at an early age are most likely to be physically active throughout school which facilitates the development of lifetime patterns of physical activity. In addition, Mukala (2002) points out that, to ascertain children's holistic growth and development, it is necessary to ensure continuance of their involvement in PE.

4.7.3 Administrative and Parental Support Towards the Pre-school PE Programme

The study sought to find out the administrative and parental support accorded to PE programme to assess the sustainability of the programme. The teachers' responses on whether the pre-schools' administrators were supportive towards the achievement of the PE programme are presented in Table 4.53.

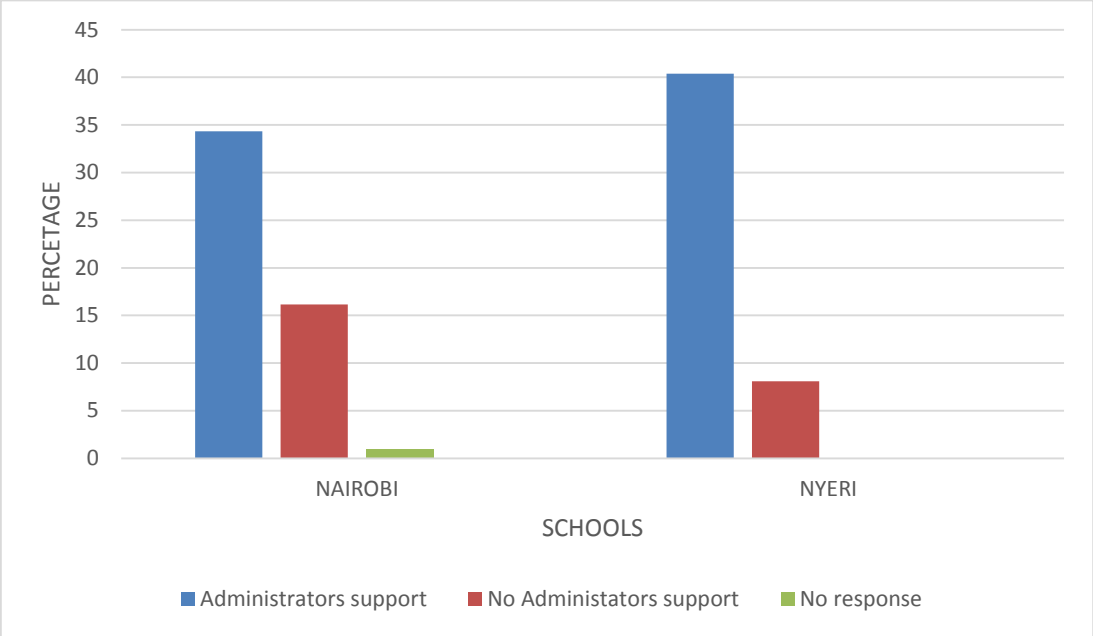
Table 4. 53: Teachers' Responses on Administrators' Support Towards the Achievement of the PE Objectives

NAIROBI SCHOOLS						NYERI SCHOOLS				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
Administrators' support	8 8.08	21 21.21	1 1.01	4 4.04	34 34.34	14 14.14	24 24.24	2 2.02	40 40.40	74 74.75
No administrators' support	7 7.07	5 5.05	2 2.02	2 2.02	16 16.16	3 3.03	4 4.04	1 1.01	8 8.08	24 24.24
No response	1 1.01	0 0.00	0 0.00	0 0.00	1 1.01	0 0.00	0 0.00	0 0.00	0 0.00	1 1.01
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare)

The results in Table 4.53 show that 74(74.75%) of the teachers, 34 (34.34%) from Nairobi and 40 (40.40%) from Nyeri pre-schools said that the administrators supported the achievement of the PE programme objectives, 24(24.24%) said that the administrators did not support the achievement of the PE programme objectives while 1(1.01%) did not respond. Out of the 25 (25.25%) teachers who reported that the administrators did not support the achievement of the PE objectives and the teacher who gave no response, 17 (17.17%) were from Nairobi pre-schools and 8 (8.08%) were from Nyeri pre-schools. This implies that more administrators from Nairobi pre-schools did not support the achievement of PE programmes objectives. Figure 4. 12 shows the levels of administrators' support towards the achievement of the PE objectives in Nairobi and Nyeri pre-schools.

Figure 4.12: Levels of Administrators' Support Towards PE Objectives Achievement



The 74 (74.75%) teachers who indicated that the administrators supported the achievement of the PE programme objectives were requested to report how the administrators supported the achievement of the PE programme objectives. The teachers' responses are presented in Table 4.54.

Table 4.54: Teachers' Responses on the Nature of the Administrators' Support

Response	Nairobi Schools	Nyeri Schools	Frequency	%
Provided PE learning materials	20	21	42	42.42
Allocated time for PE teaching	9	11	20	20.20
Monitored PE teaching	5	7	12	12.12
Repaired PE equipment	3	4	7	7.07
Provided PE references	4	2	6	6.06
Supported sports days	2	-	-	2.02

Table 4.54 shows that majority of teachers 42 (42.42%) who indicated that the administrators supported the PE programme reported that the administrators provided PE learning materials, followed by 20 (20.20%) allocated time for teaching PE, 12 (12.12%) monitored the teaching of PE, 7 (7.07%) repaired PE equipment, 6 (6.06%) provided PE references while 2 (2.02%) provided PE references. The results show that most of the administrators supported the PE programme by providing learning materials. This would ensure the sustainability of the implementation of the PE programme.

The 24 (24.24%) teachers who indicated that the administrators did not support the achievement of the PE programme objectives were requested to report how the administrators did not support the achievement of the PE programme objectives. The teachers' responses are presented in Table 4.55.

Table 4. 55: Teachers' Responses on the Lack of Administrators' Support

Response	Nairobi Schools	Nyeri Schools	F	%
No provision of adequate PE learning materials	9	6	15	15.15
No provision of funds for purchase of PE Materials	6	5	11	11.11
Poor attitude towards PE	3	5	8	8.08
No repair of PE equipment	3	3	6	6.06

Table 4.55 shows that majority 15 (15.15%) of the teachers who indicated that the administrators did not support the achievement of the PE programme objectives stated that the administrators did not provide PE learning materials, followed by 11 (11.11%) administrators did not provide funds for purchase of PE materials, 8 (8.08%) administrators' poor attitude towards PE, while 6 (6.06%) stated that the administrators did not repair PE equipment. This implies that most of the administrators who did not support the achievement of the PE programme objectives did not provide adequate PE learning materials and funds for the purchase of PE materials. This may negatively affect the sustainability of the implementation of the PE programme due to lack of resources and funds.

The study further sought to find out whether the parents were supportive of the PE programme. The views of the teachers on whether the parents were supportive of the PE programme are presented in Table 4.56.

Table 4.56: Teachers' Responses on Parental Support of the PE Programme

	NAIROBI SCHOOLS					NYERI SCHOOLS				
Response	**F %** PB	**F %** PR	**F %** CC	**F %** WF	**Total %**	**F %** PB	**F %** PR	**F %** CC	**Total %**	**Total %**
Parental support	5 5.05	16 16.16	2 2.02	1 1.01	24 24.24	12 12.12	18 18.18	2 2.02	46 46.46	56 56.57
No parental support	9 9.09	8 8.08	1 1.01	5 5.05	23 23.23	4 4.04	10 10.10	1 1.01	15 15.15	38 38.38
Not Involved	2 2.02	2 2.02	0 0.00	0 0.00	4 4.04	1 1.01	0 0.00	0 0.00	1 1.01	5 5.05
Total	**16 16.16**	**26 26.26**	**3 3.03**	**6 6.06**	**51 51.51**	**17 17.17**	**28 28.28**	**3 3.03**	**48 48.48**	**99 100**

Note: PB (Public), PR (Private), CC (Council), WF (Welfare

The results in Table 4.56 revealed that 56 (56.57%) of the teachers stated that parents supported the PE programme, 38 (38.38%) stated that parents did not support the PE programme while 5 (5.05%) stated that parents were not involved or requested to support the PE programme.Out of the 56 (56.57%) teachers who stated that parents supported the PE programme, 32 (32.32%) were from Nyeri pre-schools. This implies that there was more parental support of the PE programme in Nyeri pre-schools. The 56 (56.57%) teachers who stated that the parents supported the PE programme were requested to indicate how the parents supported the PE programme. The teachers' responses are presented in Table 4.57.

Table 4.57: Teachers' Responses on the Natureof Parental Support

Response	Nairobi Schools	Nyeri Schools	F	%
Paid schools fees	17	15	22	22.22
Provided PE learning materials	6	14	20	20.20
Appreciated the teaching of PE	5	4	9	9.09
Provided children with PE kits	6	2	8	8.08
Attended sports day	5	-	5	5.05

Out of the 56 (56.57%) teachers who reported parents were supportive of the PE programme, 22 (22.22%) indicated that parents paid school fees which was used to purchase play materials, followed by 20 (22.22%) provided PE learning materials, 9 (9.09%) appreciated the teaching of PE as a learning activity area, 8 (8.08%) provided children with PE kits, while 5 (5.05%) indicated parents attended sports day. This implies that most of the parents who supported the PE programme did this through the payment of school fees and the provision of PE learning materials. This would enhance the sustainability of the implementation of the PE programme.

The 38 (38.38%) teachers who said that the parents did not support the PE programme were requested to indicate how the parents did not support the PE programme. The teachers' responses are presented in Table 4.58.

Table 4.58: Teachers' Responses on Lack of Parental Support of the PE Programme

Response	Nairobi Schools	Nyeri Schools	F	%
No provision of PE learning materials	12	8	20	20.20
No school fees payment for purchase of play materials	6	10	16	16.16
Poor attitude towards PE	8	6	14	14.14
No appreciation of PE teaching	6	5	11	11.11
Complain of dirt or dust	5	3	8	8.08
Emphasis on academic performance	3	3	6	6.06

From the 38 (38.38%) teachers who reported that parents were not supportive of the PE programme, majority 20 (20.20%) stated that parents did not provide PE learning materials, followed by 16 (16.16%) did not pay school fees used for purchase of play materials, 14 (14.14%) poor parental attitude towards PE, 11 (11.11%) no parental appreciation of PE teaching as PE was seen as a waste of time, 8 (8.08%) parents complained of dirt or dust, while 6 (6.06%) stated that the parents emphasized on academic performance. One of the teachers commenting on the parental support of the PE programme stated:

> "Some parents do not know what is taught and what is not taught in pre-school.
> [T 81]

This teacher's comment shows that some parents were not aware of what was taught in pre-school and this implies that the parents may not know the value of different activity areas and hence the lack of support. The lack of support either through lack of provision of PE learning materials, non-payment of school fees or poor attitude towards PEwould affect the sustainability of the implementation of the PE programme.

From the interview schedules with headteachers, 30 (50%) of them indicated that parents had a positive attitude towards PE while 30 (50%) indicated that they had a negative attitude towards PE. Those parents who had a positive attitude cooperated and appreciated the school programmes as the pre-school knew what was best to offer the children. They provided play materials when requested, they donated play materials, provided their children with PE attire and attended schools' sports days. Those parents who had a negative attitude saw PE as a waste of time. They preferred the pre-schools to give more time to academic activity areas. They complained of play injuries and that their children got dirty because of PE. The headteachers however pointed out that some parents were not aware of the importance of PE. The headteachers especially from the private pre-schools did not expect the parents to provide play materials once they paid the school fees. One of the Nairobi private pre-school headteachers narrated how some parents gave instructions that their children should not go for PE as they would get dirty and get infections:

> "One parent gave instructions that her children should not go for PE but stay in class during the PE lesson. The children were disappointed and frustrated and decided to carry sand with tins to play with at home. The parent found out and instructed that the children should not carry sand with them home. The children decided to carry the sand with polythene bags instead of the tins. The parent found out that the children were still carrying sand and gave more instructions. The children then decided to look for other ways of carrying the sand. The girl would tie a belt on her petticoat at the waist and the brother would pour sand inside the petticoat and she would carry the sand home. When the parent discovered this, she gave up and allowed the children to go for PE." [H 59]

The results of the study on administrators support of the PE programme shows that 74 (74.75%) teachers reported that administrators supported PE programme while 56 (56.57%) reported that parents supported the PE programme. This implies that the administrators were supportive towards the achievement of PE

programme objectives while the parents were fairly supportive of the PE programme. Mobarak (2013) posits that the school is considered to be one of the most important educational institutions which work towards the achievement of the integrated, comprehensive and balanced student development from every aspect and administrators should therefore, strive to provide an enabling learning environment for the achievement of educational objectives.

Teberg (1999) and Desimone et al., (2004) further point out that administrative support is necessary for successful curriculum implementation as teachers need encouragement and assistance to achieve objectives. However, Rutomoi and Too (2012) observed that most primary school headteachers showed less concern for the pre-school section in their schools. Once they were able to get the schemes of work, lesson plans and records of work covered from the teachers, they seemed contented. They made little or no effort to personally go into the classes to assess how the teachers taught or the areas that required attention. Wai-Yum's (2003) study also found that one of the major problems faced by teachers in curriculum implementation is lack of support and encouragement from the administrators and parents.

In pre-schools in Kenya, parents and local communities are expected to meet the large proportion of the investment by supporting infrastructure development, paying teachers, equipping schools with learning and play facilities, supporting feeding and health programmes (Mbugua, 2004;Abagi, 2008). However, this is hindered by various factors such as poverty, lack of financial resources, lack of interest and lack of understanding of the need to invest in pre-schools by the parents and the local communities (Abagi, 2008).Studies have revealed low support and negative attitudes of educational administrators, parents, inspectors of schools and the government towards PE programmes and this has led to poor implementation of

the programmes (Madeje, 1981; Okoko, 1998; Nyonje, 2004). Despite the challenges faced in the teaching of PE in pre-schools, the Ministry of Education, Science and Technology (MoEST) is implementing the Community Support Grants (CSGs) to enhance the capacity of parents and communities to improve and sustain the quality and access to ECE services. The ECE centres supported by CSGs have benefited from the MOEST Community Support Grants (Abagi, 2008). These Community Support Grants can help in the provision of the infrastructure required for the teaching of PE in pre-schools.

Concerning the DICECE officers' services to the pre-schools, majority of the headteachers 48(80%) indicated that the officers rarely visited the pre-schools to check on the teaching of the activity areas. The officers were mostly seen in the pre-schools during teaching practice assessment of teacher trainees. It was reported by 12(20%) of the headteachers that the DICECE officers visited their pre-schools occasionally to do inspection, check the schools' and teachers' records and give recommendations.

The DICECE officers are expected to regularly inspect pre-schools and the implementation of all the programmes in pre-schools. The officers said that they were not able to visit pre-schools as often as they should as the pre-schools were very many, compared with the work force available. They further stated that some private pre-schools were not enthusiast about their visits. They also pointed out that their visits to the pre-schools were hampered by logistic problems such as availability of transport to the various schools. The DICECE officers had this to say:

> The number of pre-schools today is very huge against a limited work force. As much as we would want to visit pre-schools regularly, this is a big challenge for us. Again, we have transport problems which hinder our mobility to the various pre-schools in our county. [D 3]

> Pre-schools are mushrooming at a very high rate and some do not follow the ECDE guidelines. These pre-schools do not like being inspected yet their standards are low. [D 2]

These DICECE officers' comments show that the officers faced various challenges in the delivery of their services such as huge workload and transport problems. This implies that, the services that the DICECE officers were expected to deliver to the pre-schools such as the inspection of pre-schools' infrastructure was not effectively done.

Results of the study on the sustainability of the implementation of the PE programme show that DICECE officers rarely visited pre-schools for inspection and supervision. The results are similar with Alwar's' (1995) who noted that supervision of schools was not conducted as it was supposed to be thus teachers had relaxed in their preparation for teaching and in the way they delivered content. Wawire (2006), Rutomoi and Too (2012) also observed that inspection and supervision from DICECE officers were inadequate. Wawire (2006) further noted that pre-schools with teacher trainees benefited from supervision by DICECE trainers. The policy review report (2005)revealed that DICECE officers did not organize seminars and meetings regularly because the DICECE centres lacked accommodation, boarding facilities and a clear management structure. However, Abagi (2008) noted that DICECE training centres were functioning well despite the challenges related to training facilities and accommodation. Abagi (2008) recommended that the capacities of quality assurance personal at the district level needed to be strengthened through in-service courses and workshops to enhance supervision and advice on ECE issues, and motorcycles for inspection were also needed.

The Organization for Economic Co-operation and Development/Development Assistant Committee (2008) point out that the sustainability criterion focuses on the effects of the programme over the long term.

The criterion is concerned with the maintenance, financial and economic viability of keeping the programme going despite the challenges. The sustainability criterion addressed the product component of the CIPP model used in this study which interprets attainments. It looked at whether the gains of the beneficiaries were sustained (Stufflbeam, 1983). The findings on the fifth objective on the sustainability of the implementation of the pre-school PE curriculum tend to show that, the implementation of the PE curriculum was sustainable in some aspects and not in others. The teachers and the headteachers tried to overcome the challenges faced in the teaching of PE in order to make the teaching of PE sustainable. Majority of the teachers, headteachers and the DICECE officers indicated that it was worthwhile to teach PE despite the challenges as PE was beneficial to the children. Some administrators and parents supported the PE programme and their support was essential in the sustainability of the implementation of the PE programme.

The results also revealed that pre-schools faced various challenges such as lack of PE learning materials and equipment due to lack of sufficient funds in the pre-schools. Some administrators did not support the achievement of the PE programme as they did not provide adequate PE learning materials or funds to purchase the PE learning materials. Some parents also did not support the PE programme as they did not provide PE learning materials or pay school fees which was used to purchase the PE learning materials.

Mincic, Smith and Strain (2009) point out that administrative support is key for achieving as well as sustaining the implementation of a programme. Administrators can provide a number of supports to help personnel responsible for implementing a programme overcome challenges along the way.

4.8 Summary of Key Findings

The findings of this study reveal that all stakeholders appreciate the value of PE in children's lives, but their putting theory into practice is a hurdle. The MoEST does not conduct adequate inspection and supervisory initiatives to assist in evaluating the implementation of pre-school PE curriculum in Nairobi and Nyeri counties. Policy and delivery of the pre-school PE curriculum is inefficient as some pre-schools do not teach PE. Pre-schools in Nairobi and Nyeri counties have also been established with no provision of play facilities and this goes against the registration rules of establishing pre-schools. Professional documents such as syllabi, teachers' handbooks, schemes of work and lesson plans are not regarded as essential tools for planning teaching of PE in some pre-school in Nairobi and Nyeri counties.

Pres-school teacher preparation does not provide adequate pedagogical foundation as pre-school teachers do not relate the achievement of national goals of education and ECE objectives with classroom teaching. Children games and physical activities handed over from generations to generations will die off as children from Nairobi and Nyeri preschools are not being exposed to a variety of physical activities and games.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the summary, conclusions and recommendations for practice, policy and further research made from the findings of the study. The summary is presented based on the research objectives used in the study.

5.2 Summary

The purpose of the study was to conduct a comparative evaluation of the implementation of the PE curriculum in pre-schools in Nairobi and Nyeri pre-schools.. This was necessitated by the need to establish the nature of the implementation of the PE curriculum in the Nairobi and Nyeri pre-schools bearing in mind that, the recognition of the importance of physical activity has reached a new height globally. More so, the increase in childhood obesity and other lifestyle diseases have made it imperative to keep a track of children's involvement in physical activities.

To carry out the evaluation on the implementation of the PE curriculum in Nairobi and Nyeri pre-schools, the evaluation criteria consisting of relevance, efficiency, effectiveness, impact and sustainability was used. The study employed across-sectional survey design. Stratified and simple random sampling was used to select a sample of 120 teachers, 60 headteachers, 60 parents, 120 pre-school pre-unit children and 4 DICECE officers for the study. The following research instruments were used to collect data; questionnaires, interviews, observations, resource checklists and documentary analysis. Descriptive and inferential data analysis (frequencies, percentages) and content data analysis were used.

5.2.1 The Relevance of the Implementation of the PE Curriculum in Pre-school

The study found that there was no difference between the Nairobi and Nyeri pre-schools teachers' views on the need of the PE programme in the ECE curriculum and on the PE curriculum and the needs of the child. Majority of the teachers 99 (100%) indicated that it was necessary to have PE as one of the activity areas in the ECE curriculum. This view was shared by the headteachers 60 (100%) and 46 (77%) of the parents interviewed. However, it was noted that 28 (47%)of the parents who shared this view were from Nairobi county compared to 18 (30%)from Nyeri county where some parents were not aware that PE was taught at pre-school. All the teachers99 (100%) also expressed the view that the PE curriculum addressed the needs of the child, that is; the physical, social, mental and emotional needs. This view was similarly shared by the headteachers and the DICECE officers who said that, PE addressed the holistic development of the child.

The findings revealed that 85 (85.86%) of teachers indicated that the PE objectives were clear, relevant and achievable. However, Nairobi pre-schools had a higher percentage of teachers (90%) who reported that the PE objectives were clear, relevant and achievable than teachers (81.3%) from Nyeri pre-schools. The teachers' views were supported by the DICECE officers who also indicated that, the PE objectives were clear, relevant and achievable. Out of the 99 (100%) teachers, 5 (5.05%) stated that the PE objectives were not clear, relevant and achievable as they were not age appropriate. These were teachers from 3 (3.03%) Nairobi private and 2 (2.02%) from Nyeri private pre-schools. This implies that private pre-schools had a challenge with the PE objectives. This may be as a result of not using the syllabus as a reference. Out of 9 (9.09%) teachers who did not respond to the item, 7 (7.07%) teachers were from Nyeri pre-schools. This implies that teachers from Nyeri pre-

schools had a challenge with the PE objectives as some did not teach PE while others did not use the syllabus as a reference.

The findings on teachers' views on the PE syllabus activities and the achievement of the PE objectives revealed that majority of the teachers from Nairobi and Nyeri pre-schools 89 (89.9%) indicated that the PE syllabus activities were geared towards the achievement of the PE objectives. However, Nairobi pre-schools had a higher percentage of teachers (94%) who reported that the PE syllabus activities were geared towards the achievement of the PE objectives than (85%) teachers from Nyeri pre-schools. Out of 10 (10.10%) teachers who reported that the PE syllabus activities were not geared towards the achievement of the PE objectives, 7 (7.07%) teachers were from Nairobi and Nyeri private pre-schools. This implies that private pre-schools had a challenge with the PE syllabus as some teachers did not relate the PE syllabus content with the PE objectives.

The findings also revealed that, majority of the teachers 86 (86.87%) from Nairobi and Nyeri pre-schools were of the view that the PE syllabus activities were age appropriate and that they addressed the needs and interest of the child. However, Nairobi pre-schools had a higher percentage (90%) of teachers who reported that the physical activities provided in the PE syllabus activities were age appropriate and that they addressed the needs and interest of the child than (83%) teachers from Nyeri pre-schools. Only4 (4.04%) of the teachers stated that the physical activities were very challenging for the children while others were not challenging at all. Out of 9 (9.09%) teachers who did not respond to the item, 7 (7.07%) were teachers from Nyeri pre-schools. This may imply that some teachers from Nyeri pre-schools had difficulties with the PE syllabus content or they did not teach PE and could not respond to the item.

The study found majority of the teachers from Nairobi and Nyeri pre-schools 96 (96.97%) felt that there was need of PE to be taught like other activity areas.The teachers' views were supported by the DICECE officers and a majority of the headteachers 59 (98.33%). From the parents' interviews, 48 (80%) of the parents also supported the view that PE needs to be taught in pre-school. However, 3 (3.03%) teachers from Nyeri private pre-schools indicated that children did not need to be taught PE like other activity areas as they would learn physical skills on their own. This implies that some teachers especially from Nyeri private pre-schools did not see the need of PE instructions.

The findings revealed that majority of the teachers from Nairobi and Nyeri pre-schools were of the view that, acquisition of movement skills ensured the achievement of PE and ECE objectives. However, Nairobi pre-schools had a higher percentage (96%) of teachers who reported that the acquisition of movement skills ensured the achievement of PE and ECE objectives than (89.6%) teachers from Nyeri pre-schools. Out of 6 (6.06%) teachers who did not respond to this item, 5 (5.05%) teachers were from Nyeri pre-schools. This may imply that some teachers from Nyeri pre-schools did not teach PE or did not relate the acquisition of movement skills with the achievement of PE and ECE objectives.

5.2.2 The Efficiency of the Implementation of the PE Curriculum in Pre-school

The findings revealed that majority of teachers from Nairobi and Nyeri pre-schools 93 (93.94%) stated that PE was taught in their pre-schools while 6.06% stated that it was not taught in their pre-schools. Out of the 6 (6.06%)teachers who indicated that they did not teach PE in their pre-schools, 4 (4.04%) were from Nyeri pre-schools, 3 (3.03%) from private and 1 (1.01%) from public pre-schools while 2 (2.02%) were from Nairobi pre-schools, 1 (1.01%) from private and 1 (1.01%) from

welfare pre-schools. This implies that a higher percentage of pre-schools which did not teach PE were from Nyeri county and from private pre-schools. However, the observation schedules portrayed different results as some 18 (18.18%) of the public pre-schools from Nairobi and Nyeri counties which claimed to teach PE did not while some 6 (6.06%) of the private pre-schools were very keen on the teaching of PE as teaching PE involves giving instruction and not just allowing children to go to the playground while the teacher stands at the corner of the field.

It was also found that there were guidelines for teaching of PE in pre-schools. This was affirmed by 47 (78.33%) of the headteachers while 13 (21.67%) of the headteachers said they were not aware of the guidelines. However, despite some headteachers acknowledging that there were guidelines, they admitted that they did not follow them. The DICECE officers attested to the fact that some pre-schools did not adhere to the guidelines and thus the varied time allocation for PE in both Nairobi and Nyeri pre-schools.

The findings revealed that majority of the teachers from Nairobi and Nyeri pre-schools 94 (94.95%) stated that PE was included in the pre-school timetable. Only 5 (5.05%) teachers indicated that PE was not timetabled in their pre-schools; 3 (3.03%) teachers were from Nyeri private pre-schools, 1 (1.01%) from a Nairobi private pre-school and 1 (1.01%) from a Nairobi welfare pre-school. These results show that, out of the 5 (5.05%) of the teachers who indicated that PE was not included in their pre-schools time-table, 4 (4.04%) were from private pre-schools from Nairobi and Nyeri counties. This implies that some private pre-schools from Nairobi and Nyeri counties did not include PE in the school timetable and thus PE was not taught in these schools.

The results of the study also revealed that majority of the teachers from Nairobi and Nyeri pre-schools 55 (55.56%) reported that PE lessons were used to

teach other activity areas while44 (44.44%) reported that the PE lessons were not used to teach other activity areas. Nyeri pre-schools had a higher percentage of teachers (66.67%) who reported that PE lessons were used to teach other activity areas than Nairobi pre-schools (45.09%).This implies that more pre-schools in Nyeri county used the PE lessons to teach other activity areas than pre-schools from Nairobi county. Teachers stated that the PE lessons were used to teach other activity areas or to prepare children for standard one interviews.

The study found that Nyeri pre-schools had more adequate PE learning facilities than Nairobi pre-schools. Although more teachers (17.65%) from Nairobi pre-schools indicated that learning facilities for PE in their pre-schools were very adequate than (4.17%) teachers from Nyeri pre-schools, more teachers (70.83%) from Nyeri pre-schools indicated that learning facilities in their pre-school were adequate than (37.25%) teachers from Nairobi pre-schools. More teachers (35.25%) and (9.80%) from Nairobi pre-schools indicated that learning facilities in their pre-school were inadequate and very inadequate than teachers from Nyeri pre-schools who indicated that the learning facilities were inadequate (18.75%) and very inadequate (6.25%) respectively. The results showed that teachers from public pre-schools both in Nairobi and Nyeri (84.85%) indicated that learning facilities in their pre-schools were very adequate and adequate. This was observed particularly in public pre-schools within public primary schools although these were fields that were also shared with the primary schools. This was the case especially in Nyeri public pre-schools and this could be due to the availability of land in rural settings. Teachers from private pre-schools both in Nairobi and Nyeri 55 (55.56%) also indicated that learning facilities in their pre-schools were very adequate and adequate. However, in Nairobi, the higher percentage of teachers (27.78%) who indicated their pre-schools had inadequate and very inadequate learning facilities

were from private pre-schools. Some of the Nairobi welfare pre-schools 3 (3.03%) also indicated that their pre-schools had very inadequate learning facilities.

The findings revealed that (64.58%) and (10.42%) of teachers from Nyeri pre-schools reported inadequate and very inadequate availability of PE learning materials than (45.10%) and (9.80%) teachers from Nairobi pre-schools. More teachers, 2 (3.92%) and 21 (41.18%) from Nairobi pre-schools reported very adequate and adequate availability of PE learning materials than 1 (2.08%) and 11 (22.92%) from Nyeri pre-schools. These results may imply that availability of PE learning materials was a bigger challenge for Nyeri pre-schools than Nairobi pre-schools. Results from the observation schedules revealed that Nairobi and Nyeri private pre-schools had more permanent and fixed play structures than public pre-schools. This may be as a result of a higher school fees structure in private pre-schools than in publicpre-schools. It was also observed that some play items such as 'bladder' were unknown to some teachers. This implies that some children games may become extinct due to lack of opportunities to learn them in pre-schools.

The results of the study revealed that majority of the teachers from Nairobi and Nyeri pre-schools 83 (83.84%) improvised play materials while 16 (16.16%) did not improvise. Out of the 16 (16.16%) teachers who indicated that they did not improvise play materials, 9 (9.09%) were from private pre-schools; 3 (3.03%) from Nairobi and 6 (6.06%) from Nyeri pre-schools, 4 (4.04%) from public pre-schools; 3 (3.03%) from Nairobi and 1 (1.01%) from Nyeri pre-schools, and 3 (3.03%) from Nairobi welfare pre-schools. This implies that majority of the teachers who did not improvise play materials were from private pre-schools. Teachers were found to improvise less costly play items such as ropes and balls but teachers from Nairobi pre-schools were found to improvise items that required more funds such as seesaws,

slides and swings. This implies that teachers did not improvise a wide range of play items to provide varied play opportunities.

The findings revealed that majority of the teachers from Nairobi and Nyeri pre-schools 76 (76.77%) indicated that the pre-school administrators provided a conducive teaching and learning environment for the acquisition of movement skills while (23.23 %) of the teachers indicated that the pre-school administrators did not provide a conducive teaching and learning environment for the acquisition of movement skills. Nyeri pre-schools had a higher percentage of teachers (79.17%) who indicated that the pre-school administrators provided a conducive teaching and learning environment for the acquisition of movement skills than (74.51%) teachers from Nairobi pre-schools.

The study found that 50 (50.51%) of the teachers from Nairobi and Nyeri pre-schools reported that the parents supported and contributed towards PE learning resources to enable the learning of movement skills, while 44 (44.44%)teachers reported that the parents did not support or contribute. The results revealed that a higher percentage of teachers (56.86%) from Nairobi pre-schools reported that, parents from their pre-schools did not support nor contribute towards PE learning resources.

The results of the findings revealed that almost all the teachers 98 (98.98%) were professionally trained in ECE apart from one and this implies that they were trained to teach PE as it was one of the areas covered in ECE teachers' training. Majority of the teachers92 (92.93 %) both from Nairobi and Nyeri pre-schools indicated that they felt competent and confident to teach PE, while 7 (7.07%) did not feel competent and confident to teach PE. These teachers were 2 (2.02%) from Nairobi public pre-schools, 2 (2.02%) from Nairobi private pre-schools, 1 (1.01%) from a Nairobi welfare pre-school, 1 (1.01%) from a Nyeri public pre-school and 1

(1.01%) from a Nyeri council pre-school. Out of the7 (7.07%)) teachers who indicated that they did not feel competent and confident to teach PE, 5 (5.05%) were from Nairobi pre-schools. This implies that more teachers from Nairobi pre-schools did not feel competent and confident to teach PE.

The findings revealed that majority of the teachers 96 (96.97%) both from Nairobi and Nyeri pre-schools stated that they enjoyed the teaching of PE while 3 (3.03%) stated that they did not enjoy the teaching of PE. The3 (3.03%)) teachers were form varied pre-schools; 1 (1.01%) from a Nairobi private pre-school, 1 (1.01%) from a Nairobi welfare pre-school and 1 (1.01%) from a Nyeri public pre-school. Majority of the teachers 74 (74.75%) both from Nairobi and Nyeri pre-schools also indicated that they had not attended seminars or workshops in the teaching of PE during their teaching career while 25 (25.25 %) stated they had attended seminars and workshops in the teaching of PE. The 25 (25.25%) teachers were from varied pre-schools; 8 (8.08%) from public pre-schools, 12 (12.12%) from private pre-schools, 4 (4.04%) from council pre-schools and 1 (1.01%) from welfare pre-schools. Nyeri pre-schools had a higher percentage of teachers (27.08%) who indicated that they attended seminars and workshops in the teaching of PE than teachers (21.57%) from Nairobi pre-schools. This may imply that more PE seminars and workshops were organized in Nyeri county or teachers from Nyeri pre-schools were more willing to attend PE seminars and workshops.

The study found that majority of the teachers81 (81.82%) from Nairobi and Nyeri pre-schools stated that when teaching the movement skills, they explained the activities, demonstrated, instructed and supervised, while 10(10.10%) attended and supervised, 4 (4.04%) never attended, 2 (2.02%) stood at the side of the field, 1(1.01%) attended sometimes while 1(1.01%) gave the play resources and stayed in the classroom. Nyeri pre-schools had a higher percentage of teachers (85.42%) who

explained the activities, demonstrated, instructed and supervised than teachers (78.43%) from Nairobi pre-schools. On the other hand, more teachers (13.73%) from Nairobi reported that they attended and supervised when teaching movement skills in PE than teachers (6.25%) from Nyeri pre-schools. Majority 88 (88.89%) of the teachers from Nairobi and Nyeri pre-schools and from all the categories of the pre-schools used both free and directed play, 4 (4.04%) from Nyeri pre-schools used free play while 3(3.03%) from Nairobi pre-schools used directed play. Nairobi pre-schools had a higher percentage of teachers (90.20%) who indicated that they used both free and directed play than teachers (87.5%) from Nyeri pre-schools.

The study also found that majority of the teachers 68 (68.69%) from Nairobi and Nyeri pre-schools reported that the children were not assessed in PE while31 (31.31%) reported that they assessed children in PE. Out of the 31 (31.31%) teachers, 20 (20.20%) were from Nairobi while 11 (11.11%) were from Nyeri pre-schools. This implies Nairobi pre-schools had a higher percentage of teachers (39.22%) who assessed children in PE than Nyeri pre-schools (22.9%). However, none of the Nairobi welfare and Nyeri council pre-schools assessed children in PE.

5.2.3 The Effectiveness of the Implementation of the PE Curriculum in Pre-school

The study found that the children were exposed to a variety of physical skills such as running, jumping, skipping, hopping, throwing and catching. Majority of the teachers89 (89.90%) reported that children enjoyed performing physical skills while8 (8.08%) reported that children did not enjoy performing physical skills. These were children mostly in baby class who had not been exposed to physical activity before joining pre-school. The 8 (8.08%) teachers who reported that children did not enjoy performing physical skills were from Nyeri pre-schools. More teachers

(96.08%) from Nairobi pre-schools indicated that children enjoyed performing physical skills than teachers (83.33%) from Nyeri pre-schools.

The findings revealed that study found that majority of the teachers 90 (90.91%) indicated that children acquired and performed different movement skills while5 (5.05%) reported that children were not able to acquire and perform different movement skills. These may be children who required more organized playtime or those who were left to learn on their own. More teachers (96.08%) from Nairobi pre-schools indicated that children acquired and performed different movement skills than teachers (85.42%) from Nyeri pre-schools. The 5 (5.05%) teachers who indicated that children were not able to acquire and perform different movement skills were from Nyeri pre-schools. Majority of the headteachers 55 (91.67%) from Nairobi and Nyeri counties also indicated that the children acquired and were able to perform varied movement skills. The DICECE officers from Nairobi and Nyeri counties also said that in pre-schools where PE was effectively taught, the children acquired and performed varied movement skills. The lesson observations also revealed that children were able to acquire and perform some of the movement skills but more practice was needed for some skills to be acquired.

5.2.4 The Impact of the Implementation of the PE Curriculum in the Pre-school

The findings revealed that the teachers, headteachers, parents and DICECE officers from Nairobi and Nyeri pre-schools and counties all affirmed that PE benefitted the child through the acquisition of social skills, the enhancement of physical growth and development, the promotion of physical fitness and health, enhancement of relaxation, language development, and development of emotional control and promotion of cultural values.

The results of the findings revealed that majority of the teachers 85 (85.86%), indicated that teaching PE contributed to the achievement of the PE objectives, 1(1.01%) of the respondents indicated that teaching of PE did not contribute to the achievement of the outdoor activities objectives while 13(13.13%) did not respond. Out of the 13 (13.13%) teachers, 6 (6.06%) were from Nairobi and 7 (7.07%) were from Nyeri pre-schools. Majority of the headteachers33 (55%) also indicated that the teaching of PE contributed to the achievement of the PE objectives while 15 (25%) indicated that PE objectives were not fully achieved as some objectives were achieved while others were not and more time was required in the teaching of PE.

The findings also revealed that majority 80 (80.81%) of the teachers indicated that teaching of PE contributed to the achievement of the ECE objectives and the national goals of education, none of the teachers indicated that PE did not contribute to the achievement of the ECE and the national goals of education. However, 19 (19.19%) of the teachers did not respond. These were 10 (10.10%) teachers from Nairobi and 9 (9.09%) teachers from Nyeri pre-schools. This implies that the teachers who did not respond to the item were both from Nairobi and Nyeri pre-schools.

5.2.5 The Sustainability of the Implementation of the PE Curriculum in Pre-school

The study found that the challenges teachers and headteachersfrom Nairobi and Nyeri pre-schools faced in the implementation of PE include lack of PE facilities and equipment, inappropriate facilities, lack of administrative and parental support, negative attitude of teachers and parents towards PE, stubborn children, limited PE time and unfavourable weather. However, 69 (69.70%)of the teachers from Nairobi and Nyeri pre-schools indicated that they improvised play materials to be able to overcome the challenge of inadequate play equipment, 13 (13.13%) encouraged and

motivated children to participate in play, 6 (6.06%) used break time for PE and 5 (5.05%) talked to the parents. Despite the challenges faced in the teaching of PE, 96 (96.97%) teachers indicated that PE should be taught as it enhanced the holistic growth and development of the child.

The findings showed that majority of the teachers from Nairobi and Nyeri pre-schools 74 (74.75%) indicated that the pre-schools administrators were supportive towards the achievement of the PE programme objectives, 24 (24.24%) indicated that the administrators were not supportive while 1 (1.01%) did not respond. Out of the 25 (25.25%) teachers who reported that the administrators did not support the achievement of the PE objectives and the teacher who gave no response, 17 (17.17%) were from Nairobi pre-schools and 8 (8.08%) were from Nyeri pre-schools. This implies that more administrators from Nairobi pre-schools did not support the achievement of PE programmes objectives.

The study found that 56 (56.57%) of the teachers from Nairobi and Nyeri pre-schools stated that parents supported the PE programme, 38 (38.38%) stated that parents did not support the PE programme while 5 (5.05%) stated that parents were not involved or requested to support the PE programme.Out of the 56 (56.57%) teachers who stated that parents supported the PE programme, 32 (32.32%) were from Nyeri pre-schools. This implies that there was more parental support of the PE programme in Nyeri pre-schools.

5.3 Conclusions

PE is a relevant activity area in the ECE curriculum as it enhances the holistic growth of the child. This was affirmed by majority of the implementers and stakeholders from Nairobi and Nyeri pre-schools and counties as they reported that there was need for the PE programme in the ECE curriculum. In theory PE is viable

as the PE curriculum, objectives and syllabus are appropriate as they address the need of the child. PE should continue to be taught like the other activity areas as acquisition of movement skills ensures the achievement of the PE and the ECE objectives.

The policy and delivery of pre-school PE programme is wanting as the programme in the pre-schools is not managed efficiently in some aspects and this affects the implementation of the programme. Lack of teaching of PE lessons especially in Nairobi and Nyeri private pre-schools, inadequate time allocation both in Nairobi and Nyeri pre-schools, use of PE lessons to teach other activity areas especially in Nyeri pre-schools, inadequate PE learning facilities especially in Nairobi private and welfare pre-schools, inadequate PE learning materials especially in Nyeri pre-schools and lack of improvisation of play materials especially in Nairobi and Nyeri private pre-schools, lack of administrators support in provision of play resources in both Nairobi and Nyeri pre-schools and lack of parental support in provision of PE learning resources especially in Nairobi pre-schools affected the implementation of the programme as adequate teaching time and practice, adequate play space and play materials are essential for motor skill learning.

Teachers' academic and professional qualifications, training and teaching experience are vital for efficient implementation of the PE programme but the professional development of the teacher, lesson preparation, assessment of learning outcomes and a positive attitude and commitment to the activity area are also very crucial and affects the efficiency of the implementation of the PE programme. This was evident as lack of attendance of seminars and workshops by teachers from both Nairobi and Nyeri pre-schools and lack of children assessment in PE affected the efficiency of the implementation of the PE programme.

Pre-schools in Nairobi and Nyeri counties exposes children to various physical skills and children have a positive attitude towards physical activities. Pre-school children also acquire and perform different movement skills after being exposed to a well structured PE programmes. This was affirmed by the implementers and the stakeholders as they reported that children acquired and enjoyed performing physical skills during PE.

The PE programme has a positive impact on the pre-school children as it enhances their physical growth and development, it enhances their socialization skills, it promotes their physical fitness and health, their learning and skills acquisition.The teaching of PE both in Nairobi and Nyeri pre-schools also contributes to the achievement of PE objectives, ECE objectives and the national goals of education in Kenya as PE enables the pre-school children to relax and enjoy, develop socialization skills, coordinate different parts of the body, develop personal talents, appreciate culture and environment. It also fosters nationalism and unity, promotes positive attitude towards health, promotes the development of moral values and social responsibility.

Teaching of PE in Nairobi and Nyeri pre-schools faces various challenges that affect the sustainability of the implementation of the PE programme. This was evident as lack of administrators' and parental support towards the achievement of the PE objectives programme in Nairobi and Nyeri pre-schools affected the sustainability of the implementation of the PE programme.

5.4. Recommendations

Based on the conclusions, the study recommends the following:

5.4.1 Sensitization on Relevance of PE

The Ministry of Education, Science and Technology should organize seminars and workshops to create awareness and to sensitise all the implementers and stakeholders of pre-schools on the importance of PE in the lives of young children. This will ensure that all the implementers and stakeholders appreciate the importance of PE and advocates for its teaching which in turn will lead to the achievement of the PE and ECE objectives.

The pre-schools administrators in Nairobi and Nyeri counties should use educational talks in their schools and during schools open days, parents days, and sports days to sensitise teachers, pre-school children, parents and the community on the relevance of PE and the need to support PE programmes.

5.4.2 PE Teaching Policy

The Ministry of Education, Science and Technology should formulate a clear policy on the teaching of PE in pre-schools as PE is an integral part of a child's growth and development.

Quality assurance and the inspectorate units should ensure that inspections are done to ensure the policy is adhered to in all Nairobi and Nyeri pre-schools. This is especially in terms of time allocation, frequency and actual teaching of PE.

Quality assurance and the inspectorate units should engage in continuous and systematic evaluations of PE programme in order to enhance the management and service delivery of PE programmes in all Nairobi and Nyeri pre-schools.

5.4.3 Provision of PE Learning Facilities and Equipment

The Ministry of Education, Science and Technology, in partnership with the pre-schools, parents and the community should assist in the provision of PE learning facilities, equipment and references. The Ministry of Education, Science and Technology should ensure that the requirements for pre-schools' registration are adhered to in terms of provision of adequate PE facilities and equipment. The NACECE and DICECE officers should also organize more seminars and workshops on play material production to equip the teachers with the necessary skills for improvisation of play materials. Pre-schools administrators in Nairobi and Nyeri pre-schools should invite parents and the community to pre-schools' PE resources workshop days to sensitise the them on the need of their support in the provision of PE learning materials.

5.4.4 Teachers Taining Programmes

The teacher training programmes should aim to inculcate the value of physical activity in the teacher trainees as teachers' attitude and actions can make a positive difference in the lives of their learners. The programme should train the teacher trainees to relate the PE objectives, ECE objectives and the National goals of education so as to tailor the PE activities towards the achievement of these objectives and goals.

5.4.5 In-service Programmes for PE teachers

The Ministry of Education, Science and Technology, the NACECE and DICECE officers should regularly organize PE seminars and workshops for Nairobi and Nyeri pre-schools teachers. These seminars and workshops should update the teachers on the new and upcoming trends in the teaching of PE in order to promote the efficiency of the implementation of the PE programme. Issues on importance of

PE, planning for PE teaching, instructions for PE and assessment of PE should also be addressed in the seminars and workshops.

5.5 Recommendations for Further Research

Based on the conclusions of the study, further studies need to be carried out in the following areas:

i. Studies on evaluation of the implementation of the PE curriculum in pre-schools in other counties in Kenya.
ii. Studies on evaluation of the implementation of the PE curriculum at the primary and secondary levels of education in Kenya.
iii. Studies on the effects of the implementation of the PE curriculum in pre-schools, using the longitudinal design as this will pick up long-term changes.
iv. Studies on the efficiency of the headteachers on supervision and implementation of the PE curriculum in the pre-schools and the primary and secondary levels of education in Kenya.
v. Studies on the role of the headteachers, teachers and parents on the sustainability of the PE programme in the pre-school.
vi. Studies on the effects of participation in PE programmes on the physical, mental, social and emotional development of pre-schoolers in Kenya.

REFERENCES

Abagi, O. (2008). Technical support for the development of an implementation strategy forECD element of the National ECD policy framework and ECD service standardguidelines: Final situation analysis report. Nairobi: MoE/UNICEF.

Aballa, L. A. (2010). Prevalence and risk factors for obesity among school aged children in Nairobi. Unpublished M. Public Health Thesis. Kenyatta University. Nairobi: Kenya.

Adeogun, A.A. (2001). The principal and the financial management of public secondary schools in Osun state. *Journal of Educational System and* Development. 5(1), pp. 1-10.

Ajisafe, M.O. (1997). Some hints on the status of physical education in Africa. ICSSPE BULLETIN No. 23

Ajzen, I. (1985). From intentions to actions: A theory of planned behaviour. In J. Kuhi &J.Beckman (Eds.)*Action-control: From cognition to behaviour*. (pp. 11-39).Berlin:SpringerVerlag.

Ajzen, I. &Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behaviour.* Englewood Cliffs, NJ: Prentice-Hall.

Akiiki, M.B.K. (2009). Comparative assessment of syllabi and implementation of physical and sport programs in primary and secondary schools in Kenya and Uganda. Unpublished Ph. D. Thesis, Kenyatta University, Nairobi: Kenya.

Alkin, R. C. (1972). *Evaluation Theory Development: Evaluating Action Programmes.Readings in social actions and evaluation*, Boston: Allyn& Bacon.

Alwar, A. (1995). *Early Childhood Development in Kenya: A situational Analysis onCommunityparticipation and proposal for cost-effective community mobilization.*Nairobi: MoE./World Bank.

American Youth Policy Forum. (2006*). Helping youth succeed through out-of-school time programmes.* Washington, DC: American Youth Policy Forum.

Anderson, G. & Arsenault, N. (2002). *Fundamentals of Education Research*. London:Rout Ledge Falmer.

Annarino, A.A., Cowell, C.C.&Hazelton, W.H. (1980). *Curriculum Theory and Design in Physical Education.* St. Louis, USA: C. V. Mosby Company.

Bailey, R. (2006). Physical Education and Sport in Schools: A review of benefits andoutcomes.*Journal of School Health*, 76 (8), 397-401.

Bauer, K. W., Patel, A. S. M., Prokop, L. A.& Austin, S. B. (2006). Preventing chronic disease. Public Health Research, Practice and Policy.Retrieved http://www.cdc.gov/pcd/issues

Best, J.W. &Khan, J.V. (1998). *Research in Education.* Boston: Allyn and Bacon.

Boulmetis, J. & Dutwin, P. (2005). *The ABCs of evaluation: Timeless techniques for programme and project managers.* (2nd ed.). San-Franciso: Jossey-Bass.

Branyon, J. (2002). Teaching ABC's. A naturalistic four-case study of curricular enactment strategies used by four Kenyan pre-school teachers. Unpublished Ph.DDissertation, University of Southern Carolina.

Brotherson, S. (2009). Developmentally appropriate child care and education for young children.*Extension Bulletin* FS-1413. NDSU Extension Service, North Dakota StateUniversity, Fargo, ND.

Bruce, T. (1991). *Time to play in early childhood education.* London: Hodder and Stoughton.

Bucher, C.A.& Prentice, W. E. (1985). *Fitness for college and life.* St. Louis: Times Mirror/Mosby College Publishers.

Butera, G., Czaja, C. Daniels, J., Goodman, G., Hanson, M., Libera, J. & Palmer, S. (2009). Factors that influence the implementation of a new pre-school curriculum:Implications for professional development.*Early Education and* Development, 20(3), 456-481.

Carribbean Community Secretariat (CARICOM), (2011). Physical Education and Sports policy for schools (Saint Lucia).Retrieved from http://www.caricom.org/jsp/community_organs/physedpolicy_Ic.jsp?Menu

Centres for Disease Control and Prevention. (2006). *Physical education curriculum analysis tool*. Atlanta: Author.

Centres for Disease Control (CDC/National Center for Health Statistics (NCHS). (2011). Healthy people 2010 leading health indicators at a glance. Retrieved from: http.//www.cdc.gov/ncns/healthy_people/hp2010/hp.

Chen, C. (2009). A case study in the evaluation of English training courses using a version of the CIPP model as an evaluation tool. Doctoral Thesis. Durham University.Retrieved from: http://etheses.dur.ac.uk/2912/1/2912-742.pdf.

Chege, M. (2007). Risk factors for type 2 diabetes mellitus among patients attending a rural Kenyan hospital. *African Journal of Primary Health Care and Family Medicine*, 2, No. 1.

Coleman, K.J., Tiller, C.L., Sanchez, J., Heath, E. M., Suyo, O., Milikeen, G.K. &Dzewathowski, D. (2005). Prevention of the epidemic increase in child riskof overweightin low-income schools: The EL Paso coordinated approach tochild health.*Arch Pediatric Adolescent Medicine* (159), 217-224.

Coon, D. (1997). *Essentials of Psychology.*Belmont: Brooks/Cole Publishing Company.Council on Physical Education for Children (COPEC). (2003). Physical activity for children: A statement of guidelines.Retrieved from: http://extensionmissouri.edu/fnep/806files/PHYSICALACTIVITYFORCHILDRENdoc.

Cubillon, L. & Brown, M. (2003). Women into educational leadership and management: international differences?*Journal of Education Administration,*41(3):278-292.

Dale, D., Corbin, C. B. & Dale, K. S. (2000).Restricting opportunities to be active During schooltime: Do children compensate by increasing physical activity levels afterschool?*Research Quarterly for Exercise and Sport*, 71(3), 240-248.

Dauer, V.P.& Pangrazi, R.P. (1983). *Dynamic Physical Education for Elementary schoolchildren.* Minnepolis. Minnesota, USA: Burgress Publishing Company.

Desimone, L., Payne, B., Fedorvicius, N., Henrich, C.C., & Finn-Stevenson, M. (2004).Comprehensive school reform: an implementation study of pre-schoolprogrammes in elementary schools.*The Elementary School Journal*, 104(5), 369-389.

Difiore, G.J. (2010). The shape of physical education, health and wellness programs in high-need middle schools. Doctoral Dissertation, New York University.

Dowda, M., Pate, R. R., Trost, S. G., Joao, M., Almeida, C. A. & Sirad, J. R. (2004). Influences of pre-school policies and practices on children's physical activity. Journal of Community Health, VOL 29 Issue 3 , 183-196.

Dowda, M., James, F., Sallis, J. F., McKenzie, T. L., Rosengard, P. & Kohl, H.W. (2005).Evaluating the sustainability of SPARK physical education: a case study of translatingresearch into practice. *Research Quarterly for Exercise and Sport;*March 2005; 76,1; Research Library Core pg 11.

Drewe, S. B. (2001). *Socrates, sport and students. A philosophical inquiry into physical education and sport.* New York: University Press of America

Dwyer, T., Coonan, W.E., Leitch, D.R., Hetzel, B, S. & Baghurst, R. A. (1983). An investigation of the effects of daily physical activity on the health of primary school students in South Australia. Internal Journal of Epideniology, 12 (3), 308-313.

Esmail, Y. B.(1993). Physical Education and health-related fitness levels of secondaryschoolstudents in Kenya.Unpublished Master's Thesis. Spring-Field College.

Etnier, J. L., Salazaw, W., Laners, D. M. , Petruzzello, S. J., Han, M. & Nowell, P. (1997). The influence of physical fitness and exercise upon cognitive functioning: A meta-analysis. Journal of Sport and Exercise Physiology, 19 (3), 249-277.

Fahey, T.D. (2000). *Fit and well.* London: Mayfield Publishing Company.

Fairclough, S. & Stratton, G. (2006). A review of physical activity levels during Elementaryschool Physical Education. *Journal of Teaching in Physical* Education, 25, 239-257.

Faucette, N. & Patterson, P. (1989). Classroom teachers and physical education: Whatthey are doing and how they feel about it. *Education,* 110, 108-114.

Fisher, A., Reilly, J.J., Kelly, L.A., Montgomery, C., Williamson, A.&Paton, J. Y. (2005). Fundamental skills and habitual physical activity in young children. *Medicine and Science in Sports and Exercise,* 37(4), 684-688.

Fraenkel, J. & Wallen, N. (2002). *How to Design and Evaluate Research in Education.New York: McGGraw Hill.*

Gakuru, O.N. (1979). Pre-school education and access to educational opportunities inNairobi. Unpublished M.Ed Thesis. University of Nairobi. Nairobi: Kenya.

Gallahue, D. L. (Eds) (1993). *Developmental Physical Education for Today's Children.* Madison, USA: WCB Brown & Benchmark Publishers.

Gallahue, D.& Ozmun, J. (1996). *Understanding motor development: Infants, Children, adolescents, adults* (4th ed.). Boston: McGraw-Hill.

Gallop National Omnibus. (1998). *Physical education omnibus study*. Ottawa: CAHPERD.

Galloway, J. (2007). *Fit kids-smarter kids.* Oxford: Meyer and Meyer.

Gatumu, J. C. (2010). Headteachers' task in the implementation of Pre-school curriculumin Kenya. *Ife Psychologia,* Retrieved from:Faqs. Org/Articles.

Gicheri, R. K. (2010). Factors affecting chidren's outdoor play in pre-schools in Langata division, Nairobi. Unpublished ECE project. University of Nairobi, Nairobi: Kenya.

Govender, K., Manyamba, C., Naicker, C. & Frank, R. (2009). An evaluation of the impactandsustainability of the 'Young Heroes Programme': A physical educationintervention for public primary schools serving marginalized communities in Kwa Zulu-Natal and Gauteng. A paper presented at the International Sport andDevelopment Conference-Beyond 2010 at the University of the Western Cape,Cape Town South Africa.

Graham, G., Holt/Hale, S.& Parker, M. (2004). *Children moving: A reflective approach to teaching physical education* (6th ed.). Boston: McGraw-Hill.

Grogan, G. (1993). Making a career: *The state of states on career development in early care and education.* Boston: ERIC/ECE.

Hammond, R. (1973). *Evaluation at the local level In B.R. Worthen & J.R. Sanders (Eds.)Educational evaluation: Theory and practice*. Belmont, CA: Wadsworth.

Hardman, K. (1995). Whiter School Physical education? *An international overview Journal of the Internal Council for Health, Physical Education, Recreation,Sport, and Dance*, 32(2),5-11.

Hardman, K. & Marshall, J. J. (2000). Physical education in schools preliminary findings of a worldwide survey. A paper to the Berlin World Summit on physical education in ISCPES Journal Volume XXXVI No.3.

Hardman, K. (2008). Physical education in schools: a global perspective. *Kinesiology*, 40 (1), 5-28.

Hardman, K. & Green, K. (2011). *Contemporary issues in physical education.* Verlay:Meyer and Meyer.

Harrison, J.M. (1983). *Instructional strategies for Physical Education*. Iowa: MW. C. Brown Company Publishers.

Haskell, W. L. (1994). J. B. Wolffe Memorial Lecture. Health consequences of physical activity: Understanding and challenges regarding dose-response. *Medicine and Science in Sports and Exercise*, 26, 649-660.

Healthy Active Kids Kenya. (2011). *Kenya's 2011 report card on the physical activity and body weight of children and youth.* Kenya: Author.

Higuchi, M. (2010). Lifestyle Diseases: Access to chronic diseases care in low-and-middleincome countries. Retrieved from: UN Chronicle.

Howes, C. (1997). Children's experience in center-based childcare as a function of teacher background and adult-child ratio.*Merill-Palmer Quarterly*.

Ignico, A. (1992a). Effects of a competency based instruction on kindergartener children's gross motor development. *Physical Educator,* 48, 188-191.

Ignico, A. (1992b). Physical Education for Head Start children: A field-based study. *Early Childhood Development and Care*, 77, 77-82.

Jamah, A. (2010). *Health Crisis:* What's your child eating? Watch out for killer diabetes.The Daily Nation, June 1, 2010 pg 10.

Jenkinson, A.K. & Benson, C.A. (2010). Barriers to providing education and physical activity in Victorian state secondary schools. *Australian Journal of Teacher Education,* 36 (1), 1-17

Kabiru, M. & Njenga, A. (2009). *Foundations of early childhood development and education and curriculum development.* Nairobi: Focus Publishers Ltd.

Kamau, J. W., Wanderi, M.P., Njororai, W. W. S. & Wamukoya, E. K. (2011). Prevalence of overweight and obesity among primary school child in Nairobi province, Kenya. *African Journal for Physical Health Education, Recreation and Dance*, 17 (2).

Kason-Opitex, A. (2011).Definition of evaluation and its types. Available Atwww.funduszestrukturaine.gov.p1/.../Ewaluacjakwestieogo1neen1.doc.

Katana, M. S., (2005). Community participation in the management of pre-school education: A case of Malindi district, Kenya.Unpublished M.Ed Thesis. Kenyatta University, Nairobi: Kenya.

Kenya Institute of Curriculum Development, (1984). *Guidelines for Pre-school Education in Kenya.*Nairobi: JomoKenyatta Foundation.

Kenya Institute of Curriculum Development, (2008). *Early Childhood Development and EducationSyllabus.Nairobi*: Kenya Institute of Curriculum Development.

Kenya Institute of Curriculum Development, (2008). *Handbook for Early Childhood DevelopmentEducation Syllabus.*Nairobi: Kenya Institute of Curriculum Development.

Kiganjo, G.M. (1987). An investigation into problems encountered by Physical Educationtutors in the implementation of the P.E. curriculum in Kenyan TeachersTraining colleges. Unpublished M.Ed Thesis. Kenyatta University. Nairobi: Kenya.

Kinoo, M.N. (1999). A critical study of methods and materials used to teach History and government in secondary schools in Kenya. Unpublished Ph.D. Thesis,KenyattaUniversity, Nairobi: Kenya.

Kinoti, J.W. (1998*).* Effects of the diploma Physical Education programme on the health-related fitness levels of teacher trainees- the case study of KSTC. UnpublishedM.EdThesis,Kenyatta University. Nairobi: Kenya.

Kinuthia, F. (2009). Determinants of pre-school teachers' attitudes towards teaching inThika Municipality, Kenya.Unpublished M.Ed Thesis, Kenyatta University, Kenya.

Kinyua, A.K. (2001).An evaluation of the implementation of environmental Education integrated curriculum in the primary teacher training colleges InKenya. Unpublished PhD Thesis, University of Nairobi. Nairobi: Kenya.

Kipkorir, L.I.& Mwaura, L. (1988). *Towards a brighter future: The decades of Developmentin Early Childhood Care and Education*. The Hague Netherlands. Bernard Van Leer Foundation.

Kipkorir, L.I.& Njenga, A,W. (1993). Early Childhood CentresProgrammeming Resources for Early Childhood Care and Development.Paper presented for theEFA Forum. New Delhi.

Kivuva, L.A. (1997). Professional qualities of teachers in ECE: A comparative study of urban pre-schools institutions by sponsorship.Unpublished M.Ed Thesis, Kenyatta University. Nairobi: Kenya.

Kothari, C. R. (2004). *Research Methodology, Methods and Techniques*. New Delhi: New Age International Publishers.

Kwenya, G.K. (2003). An overview of pre-school education (ECD) in Kenya. A Paperpresented to the visiting team from Magadi on the 4th April, 2003 at KIE,NACECE.

Kyallo, F., Makokha, A. & Mwangi, A. M. (2013). Overweight and obesity among public and private primary school children in Nairobi, Kenya. *Scientific Research*, Vol.5, 85-90.

Macfaden, T. & Bailey, R. (2002). *Teaching physical Education 11-18. Perspectives and challenges.* London. Continuum.

Madeje,B.V. (1981). Evaluation of the implementation of Physical Education programme in Dar- es-Salaam city primary schools. Unpublished M.Ed Project. KenyattaUniversity. Nairobi: Kenya.

Maina, A.W. (2011). Challenges facing the provision of pre-school education in NorthKinangop Division of Nyandaruacounty, Kenya.Unpublished M.Ed Thesis,Kenyatta University. Nairobi: Kenya.

Mahar, M.T., Murphy, S. K., Rowe, D. A., Golden, J,. Shields, A.T. & Raedeke, T.A. (2006). Effects of a classroom-based program on physical activity and on-task behaviour. *Medicine and Science in sports and Exercise*, 38, 2086-2094.

Mahindu, J.K. (2011). Influence of play on the development of pre-school children's social skills in Kabete zone, Kenya. Unpublished M.Ed Project, University of Nairobi, Nairobi: Kenya.

Makatiani, M. I. (2008).A Comparative Study of Policy Implementation in Early Childhood Teacher Education institutions in Kenya. Unpublished PhD Thesis. Kenyatta University. Nairobi: Kenya.

Makoti, N. (2005). Terms and conditions of service and their relationship to motivation of pre-school teachers in Kwale District.Unpublished M.Ed Thesis,Kenyatta University. Nairobi: Kenya.

Martin, M.W., Martin, S.&Rosengard, P. (2010). PE2GO: programme evaluation of a physical activity programme in elementary schools. Available at http://www.ncbi.nim.nin.gov/Pubmed/20864765.

Mbugua, T. (2004). Early Childhood Care and Education in Kenya. Retrieved from http://www.freepatentsonline.com/article/childhood.../116223365.html

McKenzie, T. L., Sallis, J. F.&Prochaska, J.J., Conway, T.L., Marshll, S.J. & Rosengard,P. (2004). Evaluation of a two-year middle-school Physical education intervention:*M-SPAN, Med Science SportsExercise.*2004; 36:1382-8.

Mcwillaims, C., Ball, S., Benjamin, S., Hales, D., Vaughn, A.& Ward, D. (2009). Best-practice guidelines for physical activity at child care.*Pediatrics.* 2009: 124:1650-1659.

Mincic, M., Smith, B. J. & Strain, P. (2009). Administratorstrategies that support high fidelity implementation of the pyramid model for promoting social-emotional competence and addressing challenging behaviour. Retrieved from: http://opi.mt.gov/pdf/MBI/12sessional/Admin Handout2.pdf

Ministry of Education, Science and Technology (MOEST). (2005). *Sessional paper No.1 of 2005 on A policy Framework for Education, Training And Research.*Nairobi*: G*overnment Printers.

Ministry of Foreign Affairs of Denmark. (2006). Evaluation guidelines. Retrieved Fromwebsite: http//www. netpublikationer.dk/um/7571/html.

Mobarak, A. (2013). Obstacles facing PE at schools in al Madenah, Al Munawarah. *European Scientific Journal*: 2013 Vol 9, No 13.

Moyles, J. (1989). *Just playing? The role and status of play in early childhood education.*Milton Keynes: Open University Press.

Mugenda, A.G. (2008). *Social science research: Theory and principles*. Nairobi: AppliedResearch and Training services.

Mugenda, O. M.& Mugenda, A. G. (2003).*Research Methods. Quantitative & Qualitative Approaches.* Nairobi: African Centre for Technology Studies.

Muijs, D. (2004). *Doing qualitative research in education with SPSS*. London: Sage Publications.

Muindi, D.M. (1998). A Study of the relationship between performance in physical skills and academic achievement among pupils in primary education in Kenya.Unpublished Ph.d Thesis. Kenyatta University, Nairobi: Kenya.

Mukala, B.H. (2002). Motivational factors that affect primary school pupils participationinorganized sport in Shinyalu Division of Kakamega District, Kenya.Unpublished Med Thesis, Kenyatta University. Kenya.

Mulusa, T. (1988). *Evaluating: Education and Community Development Services.* Nairobi: CADS, University of Nairobi and DeutcheStiffund, Fu InternationalEntwicklong.

Muniu, R. (1986).An evaluation of the effectiveness of the Physical Education curriculum in Diploma colleges. Unpublished M. Ed Thesis. Kenyatta University, Nairobi: Kenya.

Mweru, M. (2000). Gender stereotyping in selection and use of play materials by childrenin selected Nairobi City Council schools.Unpublished MEd Thesis. Kenyatta University. Nairobi : Kenya.

Nachmias, C. F.& Nachmias, D. (1996). *Research methods in the social sciences*. London: St. Martin's Press.

Nalletamby, E.C. (1987). A Comparative study of selected fitness factors, dietary components and self perception on rural and urban eleven year olds in Kenya.Unpublished Ph.d Thesis. Bringham Young University.

Nasibi, M.W. (2005).*Early Childhood Education. Teaching at Pre-school*. Nairobi: Nehema Publishers.

National Association for the Education of Young Children (NAEYC). (1988). *Positionstatement on standardized Testing of young Children through 8 years of age.* Washington D. C. NAEYC

National Association for Sport and Physical Education. (2004). *Moving into the future: National content standards for physical education.* (2nd ed.). Reston, VA: Author.

National Centre for Early Childhood Education (NACECE). (1993). *Early Childhood Care and Education: A report on the Samburu Community based ECCD project.*Nairobi. KIE

National Council of Teacher of Mathematics (NCTM). (1978). *Curriculum and evaluationstandards for school mathematics*.Reston, VA: NCTM.

Ndegwa, M. W. (2005). Factors influencing pre-school teachers' attitude towards child-centred and teacher-centred teaching methods in Nairobi. Unpublished M.Ed Thesis, Kenyatta University. Nairobi: Kenya.

Ndwiga, J. (2005). Resource management in schools.UnpublishedM.Ed Thesis, KenyattaUniversity, Nairobi: Kenya.

Neugebaurer, R. (1999). Recruiting and retaining men in your center. In inside child care.*Trend Report*, 151-154. Redmond, WA.

Ng'asike, J.T. (2004). Teachers' use of play as medium for bridging pre-school children'smathematical experiences. A study of Kasarani Division. Unpublished M.Ed Thesis,Kenyattta University. Nairobi. Kenya.

Ngome, C. (2002). *Quality of training and attrition of ECD teachers in Kenya.* Nairobi. MoEST.

Ngumo, R.W. (1995). A Study of the effect of a small area games programme on the health related fitness of secondary school students in Kenya.Unpublished M.Ed Thesis.Kenyatta University, Nairobi: Kenya.

Njoki, E.M. (2007). Factors that affect the quality of pre-school physical education programmes in Sagana zone, Kirinyaga district. Unpublished ECE project, University of Nairobi: Nairobi.

Njunge, C. (2009). *Lifestyle:* The fat baby next door: How junk food is creating colony of overweightchildren.The Daily Nation. June 7 2009, 2-3.

Numminen, P. (1995). *APM-Inventory: Manual test booklet for assessing pre-school children's perceptual and fundamental motor skills*. Jyvaskyla: LIKES

Nyonje, R.O. (2004). An assessment of teachers' participation in PE programmes in publicprimary schools in westlands division, Nairobi.Unpublished M.Ed Thesis, University of Nairobi, Nairobi: Kenya.

Organization for Economic Co-operation and Development (OECD). (2004). Women and men in OECD Countries: Labour market.Retrieved from: http://www.oecd.org/gender/38172488.pdf.

Organization for Economic Co-operation and Development (OECD). (2006). *Startingstrong II: Early Childhood Education and Care*. OECDPublishing. doi:10.1787/9789264035461-en.

Organization for Economic Co-operation and Development (OECD/Development Assistant Committee (DAC). (2008). *DAC principles for evaluation of* development assistance.Paris.OECD.

Okoko, J.M. (1998). Implementation of Physical Education to the mentally retarded: Constraints encountered by the teachers in Nairobi. Unpublished M.Ed Thesis,Kenyatta University, Nairobi: Kenya.

Omwenga, K.C. (1992). A study of the attitude of pre-school teachers and Standard 8 children towards basic pre-vocational skills in Langata Division. Unpublished M.Ed Thesis,Kenyatta University. Nairobi: Kenya..

Onwonga, J. N. (2005). Status of physical education in Butere division secondary schools, Kenya. Unpublished M.Ed Thesis. Kenyatta University, Nairobi: Kenya.

Onywera, V. (2010). Childhood obesity and physical inactivity threat in Africa: Strategies for a Healthy future.Retrieved from http:/index.php Health/fitness/144.

Pangrazi, R. P. (1998). *Dynamic Physical Education for Elementary Children*. Boston,USA: Allyn and Bacon.

Parajers, M. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62 (3), 307-332.

Pate, R. R., Pfeiffer, K. A., Trost, S. G., Ziegler, P. & Dowda, M. (2004). Physical activity among children attending pre-schools. Pediatric 114, 1258-63.

Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. California: Sage Publication, Inc.

Pho, D. (2009). Serious Fun: Physical Education at Guan Ai. RCEF Newsletter ChinaEducation Foundation. April 2009, No. 24.

Pica, R. (2008). "Learning by leaps and bounds: Why motor skills matter*".Young Children* 63(4): 48-49.

Prosper, M.H., Moczulski, V.L., Qureshi, A., Weiss, M.&Bryars, T. (2009). Healthy for Life/PE4ME: Assessing an intervention targeting childhood obesity.*Californian Journal of Health Promotion,* 2009, Volume 7 (Special issue) Nov 16, 2009.

Provous, M. N. (1971). *Discrepancy evaluation.* Berkeley: McCutcheon.

Read, K., Gardner, P. & Mahler, B.C. (1993). *Early childhood programmes. Human relations andlearning.* New York: Harcourt Brace College Publishers.

Republic of Kenya. (1992). Report of the National Conference of Education for All heldon 27th-30th July 1992 in Kisumu, Kenya. Nairobi: Government Printer.

Republic of Kenya. (2005). *The UNESCO/OECD Early Childhood Policy Project:The Background Report of Kenya*. Nairobi: Kenya.

Republic of Kenya. (2006). *National Early Childhood Development Policy Framework,* June 2006. Nairobi: Government Printer.

Riley, J. (2007). *Learning in the early years 3-7.* London: Sage Publications Ltd.

Rintaugu, E.G. (2005). Socialization of secondary school athletes into sports in Kenya.Unpublished Ph.D Thesis, Kenyatta University. Nairobi: Kenya.

Robinson, M., Beith, K. &Pullan, L. (1998). *Early Years Care and Education.* Oxford:Heinemann Educational Publishers.

Rosewater, A. (2009). The 2009 Team-up for Youth monograph series; Learning to playandplaying to learn:Organized sports and educational outcomes. Retrieved from:*http://www.teamupforyouth,org*

Rossi, P. H., Lipsey, M. W. & Freeman, H. E. (2004). *Evaluation: A Systematic Approach.* California: Sage Publications, Inc.

Rutman, L. (1977). *Evaluation Research Methods: A Basic Guide*. California: Sage Publications.

Rutomoi, J.& Too, J. K.(2012). Factors influencing the choice of apparatus used by Pre-schoolteachers in Baringo County, Kenya. Retrieved from: http://www.hrmars.com/admin/pics/789.pdf

Sallis, E. (2002). *Total quality management in education.* (3rd Ed.). Quick Silver Sterling, Virginia, USA: Stylus

Sallis, J.&McKenzie, T. (1991). Physical education's role in public health. *ResearchQuarterly for Exercise and Sport*, 62(2), 124-137.

Sallis, J.F., McKenzie, T.L., Kolody, B., Lewsi, M., Marshall, S. & Rosengard, P. (1999). Effects of health-related physical education on academic achievement:ProjectSPARK.*Research Quarterly for Exercise and Sport, AAHERD*, Vol.70, No. 2, 127- 134.

Sanders, K. (2002). Viewpoint: Men don't care?*Young Children,* 57(6), 44-48.

Seefeldt, V. (1984). Physical fitness in pre-school and elementary school-aged children.*Journal of Physical Education, Recreation and Dance*, 55(9), 33-40.

Seefeldt, C. & Barbour, N.(1994). *Early childhood education: An introduction*. New York: Macmillian Publishing company.

Seefeldt, V. & Vogel, P. (1987). Children and fitness.:A public health perspective: A response.*Research Quarterly for Exercise and Sport*, 58(4), 331-333.

Shephard, R. J. (1996). Habitual physical activity and academic performance. *Nutrition Reviews*, 54 (4), 532-536.

Sibley, B. A. & Etneir, J. L. (2005). The relationship between physical activity and cognition in children: A meta-analysis. *Pediatric Exercise Science,* 15, 243-256.

Sifuna, D.N. (1975). *Revolution in Primary Education: the new approach in Kenya.* Nairobi: East Africa Literature Bureau.

Simiyu, W.W.N. (1990). Assessment of the Physical Education learning resources in selected secondary schools in UasinGishu District. Unpublished M.Ed.Thesis,Kenyatta University. Nairobi: Kenya.

Solomon, M. A. (2003). Student issues in physical education classes: Attitudes, cognition and motivation. In S. J. Silverman & C. D. Ennis (Eds.). *Student learning in physical education: Applying research to enhance instruction.* (2nd ed., pp. 147-164). Champaign, IL: Human Kinetics.

Stufflebeam, D.L., Foley, W.J., Gephart, W.J., Guba, E.G., Hammond, R. L., Merriman, H.O. & Provus, M.M. (1971). *Educational evaluation and decisionmaking.* Itasca, IL: Peacock.

Stufflebeam, D.L. (1983). The CIPP model for programme evaluation. In G.F. Madaus,M. Sriven, and D.L. Stufflebeam (Eds.), *Evaluation models,* Boston: Kluwer-Nijhoff.

Stufflebeam, D.L. & Shinkfield, A.J. (1985). *Systematic Evaluation.* Massachusetts, USA: Kluwer-Nijhoff publishing Company.

Sutton, S. (1998). Predicting and explaining intentions and behaviour: how well are we doing?*Journal of Applied Social Psychology*, 28, pp. 1317-1338.

Swadener, B.B., Kabiru, M,&Njenga, A. (2000). *Does the village still raise the child? ACollaborative study of child rearing and early education in Kenya*. New York:State University of New York Press.

Symons, C. W., Cinelli, B., James, T.C. & Groff, P. (1997). Bridging student health risks and academic achievement through comprehensive school health programs. *Journal of School Health* 67 (6), 220-227.

Tanga, D. (2013). China's young in crisis of declining fitness. Retrieved from: http://www.thejakartpost.com/news/2013/01/22/chinas-young-crisi- declining-fitness html

Taras, H. (2005). Physical activity and student performance at school. *Journal of School Health*, 75, 214-218.

Teberg, A.S. (1999). Identified professional development needs of teachers in curriculumreform. Paper presented at the Annual Meeting of the American Educational Research Association.Montreal: Quebec.

Tokmak, H.S., Baturay, H. M. & Fadde, P. (2013). Applying the context, input, process, product evaluation model for evaluation research, and redesign of an online Master's programme.Retrieved from: http://www.irrodl.org/index.php/irrodl/article/view/1485/2536.

Tomporowski, P.D., Davis, C.L., Miller, P.H.&Naglieri, J.A. (2008). Exercise and children's intelligence, cognition, and academic achievement,*EducPsychol* Rev, 20,111-131.

Thosmon, J. R. C., & Hsu, S. H. (2013). *Global perspectives on physical education and after-school sport programs.* University Press of America.

Trost, S. G. & Van der Mars, H. (2010). Why we should not cut physical education. *Health and Learning.* Vol 67, No 4, 60-65.

United Nations Children's Fund (UNICEF) /United Nations Environment Programme(UNEP). (1990*). Children and the environment:The state of the environment 1990.*UNEP and UNICEF, E90XX USA 2, Geneva.

UNESCO. (1978) *International charter of physical education and sport*. UNESCO.

United Nations. (1989). *UN convention on the rights of the child.* New York: UN General Assembly.

US Department of Health and Human Services. (2009). *Physical activity guidelines for Americans.* Washington DC: US Department of Health and Human Services.

Vivies-Rodriguez, M.E. (2005). Pre-school Physical Education: A case study of the factors that Influence movement instruction to Pre-school children. Unpublished Ph.DThesis,The Florida State University College of Education.USA.

Vygotsky, L.S. (1978). *Mind and society. The development of higher mental processes.*Cambridge, M.A.: Havard University Press.

Waithaka, E. (2005). The level of job satisfaction of pre-school teachers in Thika Municipality.Unpublished M.Ed Thesis, Kenyatta University. Nairobi. Kenya.

Waithaka, E. N. (2009). Children's involvement in informal play activities in Kenya: A case of Kiambu East and Kiambu West Districts.Unpublished PhD Thesis, Kenyatta University. Nairobi. Kenya.

Wai-Yum, W. (2003). The dilemma of early childhood teachers required to carry out acurriculum implementation process: case studies.*Early Child Development and Care*, 173(1), 45-53.

Wanderi, P.M. (2001). Traditional games of the people of Mount Kenyan region. A cultural Education.Unpublished Doctoral Thesis, Kenyatta University. Nairobi: Kenya.

Wanyama, M.N. (2011). The challenges of teaching physical education. Juxtaposing the experiences of physical education teachers in Kenya and Victoria. Unpublished M.Ed Thesis. University of Melbourne. Australia.

Wardle, F. (2004). The challenge of boys in our early childhood programmes. *Early Childhood NEWS*, 16(1), 16-21.

Warren, J. M., Henry, C. J. K.&Lightowler, H. J. (2003).Evaluation of a pilot school programme aimed at the prevention of obesity in children.*Health PromotionInt*.2003;18:287-96.

Wasanga, M. C. (1987). A study of attitudes of primary school pre-schoolteachers: Attitudes towards social studies, GHC in central Division, Machakos. UnpublishedM.Ed Thesis, Kenyatta University.

Wasonga, T.A. (1989). A comparative study of a proposed physical fitness programmeas depicted in the fitness levels of fifteen and sixteen year olds in a Kenyan secondary school. Unpublished M.Ed Thesis, Kenyatta University, Nairobi: Kenya.

Watson, M. (2003). *Learning to trust: Transforming difficult elementary classrooms through developmental discipline*. San Franciso: Jossey-Bass.

Wawire, V.K. (2006).Factors that influence the quality and relevance of early Childhood education in Kenya: multiple case studies of Nairobi and Machakos.Unpublished PhD Thesis, Kenyatta University. Nairobi: Kenya.

Wellhousen, K. (2002). *Outdoor Play Everyday: Innovation play concepts for early childhood.* Canada: Delmar Thomson Learning.

Wesangula, D. & Wanja, J. (2009). Health; Doctors sound the alarm as diabetes cases rise among young people.Sunday Nation, 13th September pg 4-5.

Wetton, P. (1988). *Physical Education in the Nursery and Infant School*. London: Routledge.

Whitebread, D. (1996). *Teaching and learning in the early years*. London: Routledge.

Wikipedia, the free encyclopedia, (2013). Nairobi County. Retrieved from: http://en.wikipedia.org/wiki/Nairobi

Wikipedia, the free encyclopedia, (2013). Nyeri County. Retrieved from: http://en.wikipedia.org/wiki/Nyeri_county

Wilkins, J.L., Graham, G., Parker, S., Westfall, S., Fraser, R. G. & Tembo, M. (2003). Time in the arts and physical education and school achievement. Journal of Curriculum Studies, 35, 721-734.

Willgoose, C.E. (1974). *The curriculum in Physical Education*. New Jersey: Prentice-HallInc.

Wood, E. & Attfield, J. (2005). *Play, learning and the early childhood curriculum*. London: Sage Publications Ltd.

World Bank. (1989). *Sub-Saharan Africa: From crisis to sustainable growth.* WashingtonD. C.: World Bank.

World Health Organization. (2004). *Changing history. The world health report.* Geneva: WHO.

World Health Organization. (2005). *Preventing chronic diseases: a vital investment*. Geneva. WHO.

World Health Organization.Physical inactivity; a global public health problem. Retrieved from: http://www.int/dietphysicalactivity/factsheetinactivity/en/index.html.

World Health Organization. (2010). *Global recommendation physical activity for health.* Geneva. WHO.

Worthen, B. R. & Sanders, J. R. (1987). *Educational Evaluation.* New York: Longman.

Wuest, D. A. & Bucher, C. A. (1999). *Foundations of Physical Education and Sport.* Boston: WCB McGraw-Hill

APPENDICES

APPENDIX I: TEACHER QUESTIONNAIRE

(Relevance, efficiency, effectiveness, sustainability, impacts of theprogramme)

This study is on the teaching of PE in pre-schools. The purpose of this questionnaire is to obtain information on the approaches used in teaching PE, resources available, utilization of resources and challenges encountered in the teaching of PE. Do not indicate your name on the questionnaire. Your co-operation and assistance in completing this questionnaire will be highly appreciated. Kindly answer all the questions honestly.

Please answer the questions by ticking (√) in the brackets or write in the spaces provided.

County:_____ School:_____No. of children_____

Type of school: Public( ) Private( )

SECTION A: Teacher's background information

1. Gender Male ( ) Female ( )

2. Age in years
(i) Under 20 ( ) (ii) 21-30 ( ) (iii) 31-40 ( ) (iv) Above 40 ( )

3. Teaching experience
(i) Less than 12 months ( ) (ii) 1-2 years ( ) (iii) 3-4 years ( ) (iv) 5 years andabove ( )

4. Highest academic qualification**s**
(i) KCPE/CPE ( ) (ii) KCSE/O-Level ( ) (iii) A-Level ( ) (iv) Any other (specify)

5. Professional qualification
(i) Certificate ( ) (iii) Degree ( ) (v) In-service short courses ( )
(ii) Diploma ( ) (iv) Untrained ( ) (vi) other (specify)_____

6. Type of training
(i) Montessori ( ) (ii) K.H.A ( ) (iii) DICECE ( ) (iv) Other (specify) _____

SECTION B: Teaching and Learning of PE in pre-schools

7.a) Do you think it is necessary to have outdoor activities/PE as one of the activity areasin the ECE curriculum? Yes ( ) No ( )
Give reasons for your answer.

b) Does the PE curriculum address the needs of the child (physical, mental, social,and emotional)? Yes ( ) No ( )
If your answer is no, give reasons for your answer.

8.a) Are the PE objectives in the syllabus clear, relevant and achievable?
Yes ( ) No ( ) Give reasons for your answer.

b) Are the activities provided in the PE syllabus geared towards the achievement of theobjectives?Yes ( ) No ( ) Give reasons for your answers.

c) Are the physical activities provided in the PE syllabus age appropriate and dothey addressthe interest of the child? Yes ( ) No ( ) If your answer is no, give reasons for your answer.

9. a) Does PE require to be taught like the other activity areas for the children acquirethe physical skills? Yes ( ) No ( ) Give reasons for your answer.

b) Does the acquisition of movement skills ensure the achievement of the PE and ECEobjectives? Yes ( ) No ( )

10.a) Is PE taught in your pre-school? Yes ( ) No ( )
If the answer is yes, how often and for how long?
If the answer is no, give reasons for your answer.

b) Is PE indicated on the time-table? Yes ( ) No ( )

c) Is the PE lesson used to teach other activity areas? Yes ( ) No ( )
If the answer is yes, why?

11. a) Indicate the status of the availability of learning facilities in your pre-school.
(i) Very Adequate ( ) (ii) Adequate ( ) (iii) Inadequate ( ) (iv)Very inadequate ( )

b) Indicate the status of the availability of learning play materials in your pre-schools.
(i) Very Adequate ( ) (ii) Adequate ( ) (iii) Inadequate ( ) (iv) Very inadequate ( )

c)Specify how your pre-school acquires learning resources for PE.
(i) Buys ( ) (ii) Made by teachers ( ) (ii) Borrowed ( )
(iv) Hired ( ) (v) Made by parents ( ) (vi) Donati ( )
(vii) Other (specify)_____

d) If the learning resources are donated, specify from who.
_____

e) If the learning resources are borrowed/hired
specify._____

f) What problems do you encounter in the acquisition of learning resources for teachingmovement skills in PE?

g) Have you prepared any materials in your pre-school for teaching movement skills inPE? If yes, list some. If the answer is no, give reasons.

12. a) Are you professionally trained to teach PE? Yes ( ) No ( )

b) Do you feel competent and confident to teach PE? Yes ( ) No ( )
Give reasons for your answer.

c) Do you find teaching PE is enjoyable? Yes ( ) No ( ) Give reasons.

d) Have you attended any in-service course, seminar/workshop in the teaching of PE?
If your answer is no, give reasons to your answer.

e) If the answer is yes, indicate the areas in PE that it emphasized on during the seminars.

f) In your opinion, is there need for seminars/workshops in PE? Give reasons for your answer.

13.a) Which approach do you use when teaching movement skills in PE?
(i) Attend and supervise ( ) (ii) Attend sometimes ( )
(iii) Attend rarely ( ) (iv) Never attends ( ) (v) Stands at the side of the field ( ) (vii) Gives materials and stays in the classroom ( )
(v) Explain activities, demonstrates, instructs and supervises ( )

b) Which teaching approach do you use when teaching movement skills in PE?
Free play ( ) Directed play ( ) Both free and directed play ( )
Give reasons for your choice.

14. a) Does the administration provide a conducive teaching and learning environment for the acquisition of movement skills? Yes ( ) No ( )
Give reasons for your answer.

b) Do the parents support and contribute towards the provision of PE learning resourcestoenable the learning of movement skills? Yes ( ) No ( )
Give reasons for your answer.

15. Do you assess children performance in PE? Yes ( ) No ( )
If the answer is yes, indicate how the assessment is done.
If the answer is no, give reasons for your answer.

16.a) List some of the physical skills you engage the children in during PE lesson.
b) Do the children enjoy performing the skills? Yes ( ) No ( )
If the answer is no, explain why.

c) Are the children able to acquire and perform different movement skills?
Yes( )No ( )
Give reasons for your answer

17 . a) What challenges do you face when teaching PE in your pre-school?

b) How do you overcome these challenges and what suggestions would you offer to overcome the challenges in your pre-school?

c) Do you think it is worthwhile to teach PE inpre-school? Yes ( ) No ( )
Give reasons for your answer.

d) Is the administration supportive towards the achievement of the PE programme objectives? Yes ( ) No ( )
Give reasons for your answer.

e) Are the parents supportive of the PE programme? Yes ( ) No ( )
Give reasons for your answer.

18. a) What are the benefits of teaching PE to pre-school children (physically socially, emotionally and mentally)?

b) Does teaching of PE contribute to the achievement of outdooractivities objectives? Yes ( ) No ( )
Give reasons for your answer.

c) Does teaching of PE contribute to the ECE objectives and the national goals ofeducation? Yes ( ) No ( ) Give reasons for your answer.

Thank You.

APPENDIX II: INTERVIEW SCHEDULE FOR PRE-SCHOOLS HEADTEACHERS

(Relevance, efficiency, effectiveness, sustainability, impacts of theprogramme)

The purpose of this interview is to obtain information on the teaching and learning of Physical Education in pre-schools. Your co-operation and assistance will be highly appreciated.

Name of pre-school:_____ Type of pre-school: _____

1. Do you think it is necessary to have outdoor activities/PE as one of the activity areas inthe ECE curriculum? Does the PE curriculum address the needs of the child?
2. In your opinion, does PE require to be taught like the other activity areas or can thechildren acquire the physical skills on their own?
3. Is there a government policy on the teaching of PE in pre-schools?
4. What is your school's policy? How often is PE taught and for how long?
5. In your opinion, are the teachers interested in teaching PE? Do they engage children inphysical activities? What kind of preparation do they involve themselves in for PElessons?
6. Which in-service courses, seminars/workshops on the teaching of PE have your teachers attended?
7. Comment on the availability of learning resources for PE in your pre-school in terms of facilities, equipment, reference books and storage facilities.
8. What are the major sources of funds for the purchase of resources in your pre-school?Are they adequate? Does your school improvise resources?
9. What is the attitude of parents towards PE and how do they assist in the provision of learning resources in PE?
10. What support do you receive from the DICECE office in promoting effective teachingof PE? How often do the pre-school inspectors visit the pre-school to assist theteachers?
11. In your opinion, are the objectives of PE achieved in your school?
12. What is the children attitude towards learning of PE? Are the children able to acquireandperform varied movement skills?
13. What problems does the pre-school face in the teaching and learning of PE?

How do you overcome those challenges?

14. Despite the challenges, is the teaching of PE worthwhile and sustainable?

15. Do children benefit from learning PE? How?

16. Does teaching of PE help in the attainment of PE, ECE objectives andnational goals ofeducation?

APPENDIX III: INTERVIEW SCHEDULE FOR PRE-SCHOOL CHILDREN PARENTS

(Relevance, efficiency, effectiveness, sustainability, impacts of the programme)

The purpose of this interview is to obtain information on the outdoor activities or the physical activities area in the pre-school curriculum. Your co-operation and assistance will be highly appreciated.

1. How many of your children are enrolled at the pre-school?

2. What is your highest level of education?

3. What is your occupation?

4. Do your children engage in play at home? What play activities do they engage in?

5. Does the pre-school offer PE to your children and is PE relevant in pre-school?

6. In your opinion, should PE be taught at pre-school or does it take time forother activityareas?

7. Does the pre-school have a sport day? In your opinion, do you think a sport day is necessary?

8. How are parents involved in the sport day?

9. In your opinion, are the PE facilities and equipment in the pre-schooladequate or aremore resources required?

10. How does the pre-school expect the parents to contribute or to assist inthe provision of PE facilities?

11. What have your children learnt from the PE taught at the pre-school? Have the children acquired and developed physical skills?

12. Do the children like learning movement skills in PE?

13. In your opinion, should the pre-school continue teaching PE to the children?

14. How have your children benefitted from learning PE?

APPENDIX IV: INTERVIEW SCHEDULE FOR DICECE PERSONNEL

(Relevance, efficiency, effectiveness, sustainability, impacts of theprogramme)

The purpose of this interview is to obtain information on the teaching and learning of Physical Education in pre-schools. Your co-operation and assistance will be highly appreciated.

1. In your opinion, what is the importance of PE in pre-schools? Should PE be taught in pre-schools?

2. Comment on the PE syllabus. How clear and relevant are the PE objectives? Does itaddress the needs of the pre-school children? Are the objectives achievable?

3. What is the MOEST policy on the teaching of PE in pre-schools? In your opinion, isthe policy being implemented in the pre-schools?

4. What is the role of the DICECE office in the implementation and teaching of PE in thepre-schools? What kind of support do you offer the pre-schools in order to enhance the teaching of PE?

5. How often do the inspectors visit pre-schools to assist the teachers?

6. In your opinion, are the pre-school teachers adequately prepared for the teaching of PE? Are they motivated and enthusiastic about the teaching of PE?

7. What teaching approaches do pre-school teachers use when teaching PE.

8. In your opinion, do the pre-schools have enough learning resources for effective teachingof PE?

9. How effective is the teaching of PE in the pre-schools? Do children enjoy learning PE?Do the children acquire and perform varied movement skills?

10. What are the challenges facing the teaching of PE in the pre-schools and how can theybe addressed?

11. Despite the challenges, is teaching of PE worthwhile and sustainable?

12. How do children benefit from learning PE?

13. Does teaching of PE help in the attainment of PE, ECE objectives and national goals ofeducation? How?

APPENDIX V: OBSERVATION SCHEDULE

(Efficiency and effectiveness of the programme)

Name of School: Type of School: County:

Class: Date: No. of Children:

Topic/Sub-topic:

1. Preparation for teaching Comments
a)Scheme of work
-Relevance to syllabus
-Theme and objectives clearly stated?
-Content and learning activities appropriate?

b)Lesson plan
-Format
-Time allocation
- Appropriateness of learning resources

2. Lesson Presentation
-Introduction: warm up activities
-Lesson development: free and directed activities
* Teaching methods/approaches
* Mastery and sequence of content
* Class management: organization, control/discipline, teacher-childrenrelationship
* Children involvement/participation
* Conclusion: cool down activities

3. Teaching resources
- Type of resources
- Variety and utilization
- Adequacy and improvisation

4. Personal factors
- Attire
- Communication skills
(command of language, clarity, voice projection)
-Teacher participation, involvement, innovation, Confidence, devotion and enthusiasm

5. Children skills acquisition:
a) Static balance on right and left foot (maximum time 40 seconds)
Completes task, cannot remain in one place, must touch floor with raised foot to retainbalance

b) Dynamic balance (total time in units of 0.10 seconds taken to jump sideways with feettogether over a 25 x10cm platform attached to floor)
Completes task, movement jerky

c) Running forward 10 metres
Completes task, movements jerky, arm swing regular

d) Standing board-jump (length 1.0cm)
Completes task, movements jerky, motor control and coordination

e) Throwing and catching ball combination
Completes task, pattern is smooth, wrong foot forward, uses straight hand, does not watchball, cannot catch ball because of poor hand coordination

f) Throwing at a 2m target
Completes task, no coordination, accuracy skills, estimation skills

g) Kicking a ball at a 5m target
Completes task, no coordination, accuracy skills, use of force

APPENDIX VI: RESOURCE CHECKLIST

(Efficiency of the programme)
A checklist on availability of learning resources used in the teaching of PE in pre-schools.
Name of school:_____

	INSTRUCTIONAL RESOURCES	Availability		Quantity		Quality
		Available	Not available	Adequate	Not adequate	A.Good B.Poor
	Playground					
	Tunnels					
	Climbing ladders					
	Climbing frames					
	Climbing ladders					
	Swings					
	See-saw					
	Slides					
	Balance beams					
	Balls					
	Tyres					
	Rings					
	Hoops					
	Ropes					
	Logs					
	Bladders					
	Bean Bags					
	Skittles					
	Playing blocks					
	Batons					

APPENDIX VIII: DOCUMENT ANALYSIS GUIDE

(Efficiency and effectiveness of the programme)

Document	Statement	Comments
(i) Timetables	- Are they available?	
	- What is the time allocation?	
	- Is it the recommended time?	
	- Are there extra PE lessons?	
(ii) Syllabus	-Is it available? Is it used in the pre-school?	
(iii) Schemes of Work	- Are they available?	
	- Do they follow the approved syllabus and format?	
	- Are the schemes of work up to date?	
	- Is the content appropriate and adequate?	
	- Are the resources indicated relevant and adequate?	
	- Are the schemes of work endorsed?	
(iv) Lesson Plans	-Are they available?	
	- Do they follow the scheme of work?	
	- Do they follow the required format?	
(v) Records of Work	- Are they available?	
	- Are they in line with the schemes of work?	
	- Are they up to date?	
	- Are they checked and signed by head teacher or the d/ teacher?	
(vi) Progress records	-Are they available? Are they up to date?	
	- Are they checked and signed by head teacher or d/ teacher?	
(vii) References	-Are they available?	
	-Are they adequate?	