

PARENTAL ROLES IN PROVISION OF PLAY AND LEARNING  
MATERIALS AMONG CHILDREN WITH PHYSICAL CHALLENGES A  
CASE STUDY OF JOYTOWN SPECIAL SCHOOL, KIAMBU COUNTY.

BY

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**DECLARATION**

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

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## **DEDICATION**

I dedicate this work to all teachers who handle children with physical challenges in Kenya.

## **ACKNOWLEDGEMENT**

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**ABBREVIATIONS AND ACRONYMS**

APDK Association for the Physically Disabled of Kenya

CBR Community Based Rehabilitation

CP Cerebral Palsy

IDEA Individuals with Disabilities Education Act

KISE Kenya Institute of Special Education

MDG Millennium Development Goals

NGO's Non Governmental Organizations

PWDs Person with Disabilities

UN United Nations

UNESCO United Nations Educational, Scientific & Cultural Organization

UNICEF United Nations Children's Education Fund

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## ABSTRACT

In Kenya there is still a high population of children either born with or who develop physical challenges. These children are often neglected and most do not join school at the expected age. In joining school they encounter several difficulties in their play and learning activities. These children with physical challenges have developmental needs and rights like other children but due to their exceptionality they call for more attention in provision of adequate quality play and learning materials to enhance their holistic development. However, it is apparent that provision of materials to children with physical challenges has not been possible due to various factors which are not yet understood. The purpose of this study was to investigate the role of parents in the provision of play and learning materials to children who are physically challenged. The study sought to establish parents' involvement in provision of play and learning materials and factors influencing the kind of support they offer. The study was carried out in Joytown Primary School for the Physically Challenged in Thika Town. The school was purposefully selected because it is best suited for the study since it caters for children in the category of special needs being addressed in the study that is physical challenges. Case study design was used in order to gather in-depth information about roles of parents in support of children with physical challenges. Target population of the study was 100 children with physical challenges, 200 parents and 4 teachers. Stratified random sampling method was employed to arrive at a Sample size of 30 children with physical challenges, purposive and opportunity sampling to arrive at 30 parents and purposive sampling to arrive at 4 teachers. Therefore, the total sample size was 64. The data were collected using various techniques which included questionnaires for the teachers, interview schedules for parents and observation schedules for children. Collected data were analyzed using both quantitative and qualitative methods. Quantitative methods entailed use of descriptive statistics such as frequencies and percentages which enhanced discussion of qualitative data which was organized into themes and categories and presented in discussion form. Microsoft excel was used to ease data analysis. The study established that parental involvement in provision of play and learning materials is minimal. The major factors which influenced support offered by parents were inadequate finance and complexity of some physical challenges which requires further investigation to establish the most appropriate play and learning materials to suit the needs of the child. It was evident that children were capable of engaging in various plays and learning activities where appropriate play and learning materials were availed consequently enhancing holistic development. The main recommendation of the study is that government should have a budgetary allocation meant specifically for purchase of play and learning materials and maintenance of facilities since it's a noble course which would ensure that children are actively involved in play and learning activities therefore enhancing holistic development molding children with physical challenges to become self reliant and productive citizens.



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## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background of the Study**

Play and learning materials contribute a lot in enhancing development of children especially in their formative years. Play opportunities promotes learning of various physical skills, development of self-confidence, independence and social competence(Witt, 2004). However, play and learning for children with physical challenges requires more support as these children may not have the capability to venture into play on their own. Unlike, non-disabled children they beckon, for more attention especially in the provision of appropriate play and learning materials to enhance their holistic development. This is because their play is complex due to the fact that there are many types of physical challenges with different degrees of severity from child to child. This requires the need for variety and innovative play and learning materials to be provided by stakeholders to make it possible for children with physically challenges to play and learn in ways that their potential is realized. Many children with physical challenges live a life of dependency on their family members and they participate minimally in productive activities even after completing their school (Kamau, 1986) and (Mwathi, 1997). This can be attributed to lack of adequate play and learning materials for children with physical challenges which promotes realization of one's potential while still young.

Globally, efforts are made to meet the needs of persons with physical challenges through enactment of laws such as the Person with Disabilities Act (2003). The UN formally agreed upon the Convention on the Rights of Person with Disability on December 13<sup>th</sup>, 2006. By December, 2010, 96 countries out of the 147 signatories had ratified the convention. Ratification of the convention is a demonstration of the governments of countries that they commit to adopt new national laws and repeal the outdated ones so that persons with disabilities will have equal rights to education, employment and cultural life. Kenya also ratified the convention although a lot is yet to be done in promoting the welfare of persons with disabilities.

According to United Nations Children's Fund (UNICEF, 2008) there are approximately 150 million children with disabilities in the world. The largest proportion of these children is from the developing countries. In the United States the Individual with Disabilities Education Act (IDEA) requires that students with special needs be provided with a free appropriate public education in the least restrictive environment that is appropriate to the children's needs. Therefore, the U.S government provides special education ranging from the least restrictive such as full inclusion to the most restrictive such as segregation in a special school. However, the most dominant model is inclusion which is also adopted in countries like Australia, Denmark and others (Joe, Sue and Stuart, 2001). The model of

inclusion helps children with special needs to adapt faster to life after school since they interact with other normal children unlike with the segregation model.

According to Beach, Bertrand, Forer, Michal, & Tougas (2004) support for people with physical challenges in Canada is advanced due to availability of quality assistive devices. They also indicated that most schools use adaptations such as specially printed examinations for children with visual impairment, in other instances alternative assessment or modification that simplify tests are permitted and some are exempted from the test entirely. Such a practice brings about a sense of achievement at the level of the learner hence developing self-confidence which is very important in enhancing holistic development of a child with physical challenges. However in most developing countries children with physical challenges experience lack of confidence and low self-esteem (Andolo, 2007) due to lack of opportunities which promote realization of their potentials.

Franks (2002) said, "I seriously don't understand it when people say 'I am confined to a wheelchair', the only thing that holds you back is yourself and your imagination. The human spirit cannot be paralyzed, if you can breathe, you can dream". This shows that young children with physical challenges can be helped to develop independence if appropriate measures are undertaken in time since disability does not mean inability. Studies by Janney et al (1995) and Wolery et al (1995) have shown that early intervention could arrest and diminish the effects of

disability in children for example through stimulation of developmentally delayed children, targeted exercises and therapy. Due to the commitment of the government in developed countries in enforcing law and providing adequate play and learning materials children with physical challenges are able to become independent in life.

However, in the Africa region, children with physical challenges face many difficulties such as lack of adequate play and learning materials (Kamau, 1986). This problem is accelerated by poverty in most African countries which lack finances to purchase play and learning materials as well as for adaptation of the environment which is a pre-requisite for play and learning to take place.

Funding in most African countries is by the government, parents, NGO's and other individual sponsors for example in Tunisia, Namibia, Zambia, Uganda, Tanzania, Kenya .However, in Botswana special education is funded entirely by the government (UNESCO, 1993), UNESCO, 2003b).In spite of the support from several stakeholders' financial inadequacies continues to be a major issue.

Consequently many physically challenged live a life of dependency on family members, their prospects in employment are slim, and they are deprived of education, knowledge and awareness (College, 1991) (Kamau, 1986) (Mwathi, 1997). Parents normally bear a great deal of the burden of supporting the child

with physical challenges but due to lack of support from the community and other stakeholders. They also give in to the fact that the child with disability shall be dependent throughout their life. Therefore they fail to put effort in assisting the child to overcome their challenges by providing play and learning materials which would allow the child to engage in play and learning activities.

According to Kenya National Bureau of Statistics (KNBS) (2009) In Kenya, there are about 1.3 million people with disabilities. Among this huge number are children with physical challenges approximated to be about 20,000 (Ministry of Education, 2007) some of these children have been mainstreamed into the main schools others in special schools while some have not joined any school. This population cannot be neglected and they require more commitment from parents, government and other stakeholders in order to secure for them a bright future. However, most of these children are kept at home, denying them an opportunity to attend school where their potential can be developed.

Children with Physical challenges who are privileged to join school do experience a lot of problems due to poor adaptations. Kamere (2004) noted that all the special schools do not have adequate adapted materials which enhance play and learning. Also through a study conducted by Andolo (2007), children with physical challenges reported on the need to be provided with quality mobility and assistive devices to enhance participation in various learning and play activities



independently. This shows that there is a need to provide play and learning materials for children with physical challenges.

## **1.2 Statement of the Problem**

In early childhood education play and learning are inseparable and they stimulate each another. Several studies have proved that play especially during early years promotes learning and holistic development. However, provision of play and learning materials specifically for children with physical challenges is hard, more so, because these children's materials are unique and should in particular meet the required criteria such as soft balls for the fragile bones among other specific needs and specific requirements. This means that parents of children with physical challenges have an extra duty of providing appropriate play and learning materials as well as that of ensuring that, they have provided them with assistive devices which help them to play and to learn. Despite the fact that parents have tried their best to provide their children with physical challenges with play and learning materials, this provision is not adequate. Therefore, the study sought to establish role of parents in provision of play and learning materials and the challenges they experience in providing such materials.

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

The purpose of this study was to investigate the role of parents in the provision of play and learning materials to children with various physical challenges in the early childhood in Joytown Primary School for the Physically Challenged in Thika. The study established the role of parents and factors influencing their support in provision of play and learning materials.

### **1.4 Objectives of the Study**

The following objectives guided the study:

1. To establish parents' role in provisions of play and learning materials.
2. To find out factors influencing provisions of play and learning materials by parents and teachers.
3. To establish activities that children with physical challenges engage in with the play and learning materials provided.

### **1.5 Research Questions**

The following research questions guided the study:

1. What is the role of parents' in the provision of play and learning materials to children with physical challenges?
2. What factors influence parents' ability to provide play and learning materials to their children with physical challenges?
3. What are the activities that children with physical challenges engage in with the play and learning materials provided?

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

The study yielded information on the role of parents' in the provision of play and learning materials to children with physical challenges. These findings should inform policy makers in developing policies that support provision of play and learning materials. Curriculum developers also should gain important information about the relevant materials and facilities that should be recommended in the curriculum being offered to children with physical challenges which can effectively adapt it to suit the play and learning needs of children with physical challenges better.

The findings also can be useful to teachers' training colleges especially Kenya Institute of Special Education (K.I.S.E) where they should emphasize more on development of play and learning materials to promote teacher initiative in provision of materials. Finally, parents and members of the community will be sensitized about the importance of play and learning materials challenging them to improve their support for children with physical challenges.

## **1.7 Scope and Limitation**

The scope and limitation of the study was as follows:-

### **1.7.1 Scope**

The study was conducted in ThikaJoytownSpecial Primary School in Kiambu County. The study concentrated on children with physical challenges in early childhood education. The school was best suited for the study since it caters for children with various physical challenges. It was a case study whose findings could not be generalized to other schools since each is unique. Therefore, similar studies can be carried out in other schools handling children with physical challenges.

### **1.7.2 Limitation**

Challenges experienced during the study were: the unwillingness of some of the parents to avail themselves for interview, language barrier and ignorance among parents'. The study targeted children below eight years old but most of the children in the lower primary were above that age due to delay at home because of their physical challenges consequently the age limit was extended to twelve years.

## **1.8 Assumptions of the Study**

The study assumed that the sample in Joytown Primary School was representative of the children with physical challenges in Kenya. The study further assumed that parents shared genuinely about their experiences in relation to provision of play and learning materials.

### **1.9 Theoretical Framework**

The study employed Albert Bandura social learning theory (1977) which states that behavior is learned from the environment through observational learning. Individuals observed are called models. In a school situation children have teachers' as role models whom they observe and imitate for example if a teacher has a new toy or a puzzle and demonstrates how to utilize it in the class, children later do as they have observed. According to Bandura for this kind of learning to take place the following processes take place;

Children must pay attention to the model while observing and concentrate on the relevant aspect to be learned. The ability to concentrate is influenced by the model characteristics such as attitudes and beliefs. If the child attends to irrelevant aspect little learning takes place. While working with children with physical challenges the teacher must model right attitudes towards utilization of the provided play and learning materials and encourage learner to concentrate on what they are capable of doing rather than what they cannot do.

Attention aids the retention process where the learner codes the information observed into the long term memory. Retention occurs if the learner attempts to do what he or she observed repeatedly. Activities performed during the learning process makes it easier to remember. In a teaching learning situation if children are provided with materials which they can see and manipulate they get to understand much faster and remember.

Whatever is understood is likely to be reproduced at a later time. Reproduction involves imitating or copying the behavior which one has observed. The frequency at which a behavior is reproduced depends on practice and reinforcement. If teachers' or parents' encourage a certain activity like ball game, completing a puzzle and engaging in any other activity with the provided play and learning materials. It's more likely that the child will regularly engage in such an action due to the reinforcement. For example if a child with cerebral palsy completes a drawing and is applauded the learner will put more effort in ensuring he or she completes any task given.

Reinforcement of behavior can either be external or internal and it can be positive or negative. Children with physical challenges may receive approval from the parents, teacher and peers, these people provides an external reinforcement. On the other hand, if a child feels happy, accomplished, satisfied and relaxed after performing an activity he or she is said to be internally motivated. A child may be

motivated by past reinforcement, present or vicarious reinforcement. Negative reinforcement occurs if a child is discouraged by parents, teachers and peers. Also if the child feels that he or she did not meet his or her personal expectation may punish self and withdraw as a result the child may develop low self-esteem.

Children with physical challenges should be assisted by their teachers' and parents' to develop self-awareness to avoid setting very high standards for themselves which may be unachievable during play and learning activities. They should also be encouraged to celebrate their victories by displaying every work they complete like models or drawings to ensure they don't dwell on their failures.

Albert Bandura emphasized on reciprocal determinism which states that an individual behavior is influenced by the environment and characteristics of the person. Therefore, a person behavior, environment and personal qualities all reciprocally influence each other. If the environment of children with physical challenges is well equipped with a variety of play and learning materials, this will influence their involvement in various activities. Also child's ability determines the kind of activities he or she engages in. Therefore, children with physical challenges should be provided with play and learning materials which they can be able to utilize within their range of abilities.

The study also employed Vygotsky (1978) social cultural approach to play. Vygotsky viewed play as the most significant "leading" activity of the

early childhood years. This means that the most significant psychological, physical, social and emotional achievements of the early childhood age occur while children engage in play. For such achievement to be realized by children with physical challenges play and learning materials should be available.

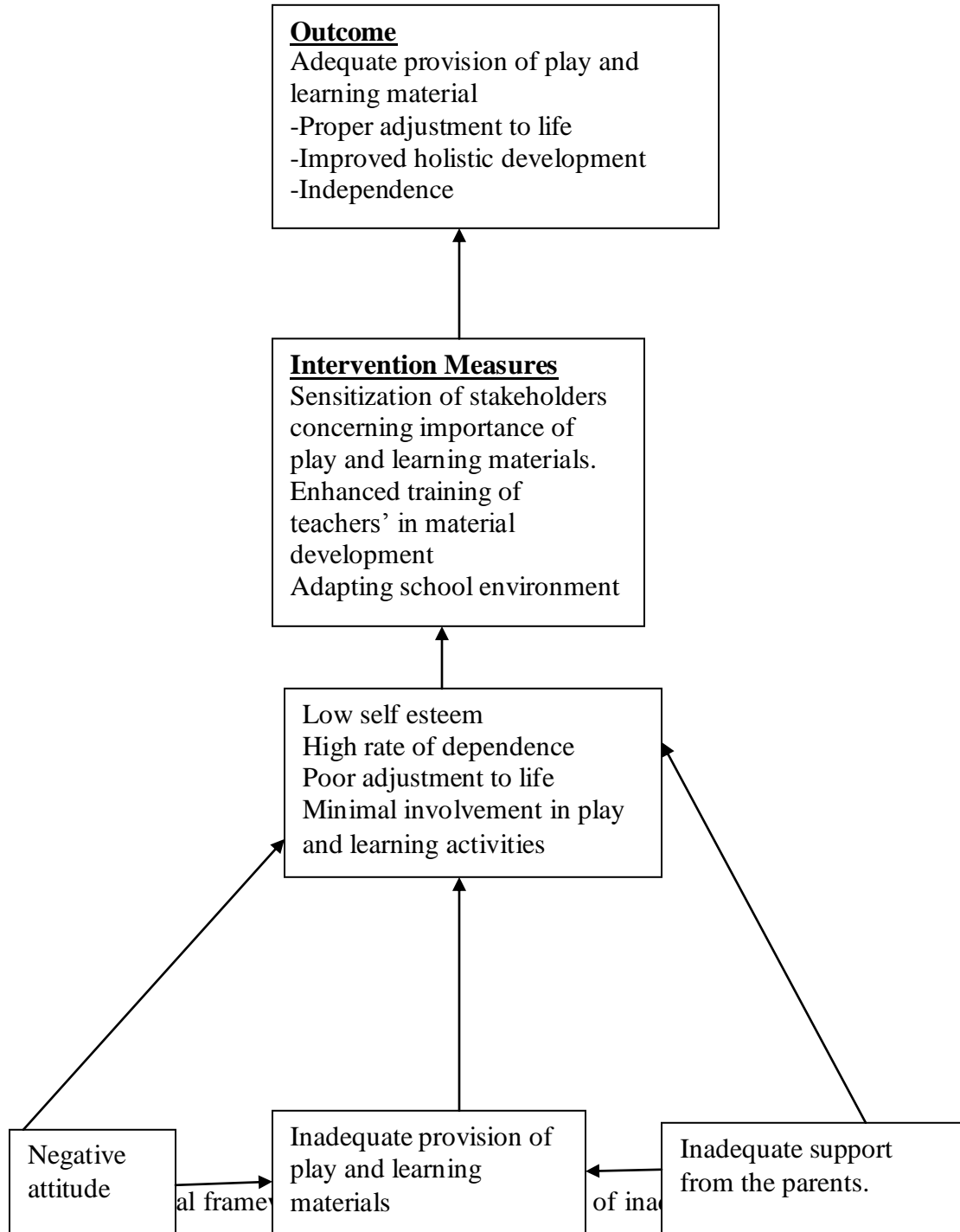
Vygotsky espoused the notion of the Zone of Proximal Development which he defined as the difference between a child's actual and potential levels of development. According to Vygotsky (1978), play creates a broad zone of proximal development, both in cognitive and socio-emotional development. Teachers ought to understand what children can do on their own during play and learning activities and where they need support of knowledgeable others. This ensures that children fully benefit from the activities they engage in.

According to Vygotsky play is a vehicle for a child behaving more maturely than at other times. Also through play children can work at the top of their Zone of Proximal Development. Adequate play and learning material it's therefore, a necessity for play and learning to take place among children with physical challenges. This is due to the fact that their play is complex because of physical limitations which requires prior preparation in provision of appropriate play materials and also ensuring that the environment is conducive for play and learning activities.



### **1.10 Conceptual Frame Work**

**Fig 1.1 Role of parents' in Provision of Play and Learning Materials Among Children with Physical Challenges.**



and learning materials among children with physical challenges. The problem is attributed to inadequate support from parents and also their negative attitude

toward the child with physical challenges. Inadequate play and learning materials implies that children are minimally involved in play and learning activities. Consequently, they tend to develop poorly physically due to lack of exercises and this leads to poor adjustment to life. Also they don't acquire skills expected at different stages of development. This makes them to develop low self-esteem when they compare themselves with their peers hence opting just to be dependent on others on various issues in their life. All these challenges can be overcome through sensitization of stakeholders about the importance of play and learning materials so that they can provide adequate materials. The school administration can be sensitized on importance of prioritizing adapting environment to facilitate play and learning. Finally, enhanced teachers' training which emphasizes on development of material can help to improve teacher's innovation in improvisation of play and learning materials. If such measures are put in place then a child with physical challenges can get opportunity to engage in various play and learning activities which promotes holistic development.

### **1.11 Operational Definition of Terms**

**Adaptive behavior** -The effectiveness or degree with which individuals meet the standards of personal independence and social responsibility expected for age .

**Adapted Material** -Materials and facilities which have been tailored to meet specific needs of physically challenged children.

**Children/child** -In this study a child refers to those in pre-primary and lower primary.

**Disability** -A broader term which encompass various types of impairment such as physical, social or mental conditions which interferes with normal functioning of an individual.

**Assistive Devices** -Any supportive or mobility device material which enable children with physical challenges to participate in play/learning activities for example calipers, weights for children with cerebral palsy, special shoes and others.

**Earlychildhood Education** - Education offered to children with physical Challenges in pre-primary up to standard three.

**Provisions of play/ learning materials** -Availing of adequate or inadequate play/learning materials/facilities

**Play and learning materials**-the term play and learning materials refers to puzzles,balls, toys, books, charts among other materials which help children to play and learn.

**Facilities**-play or learning amenities which make it possible for children with physical challenges to play and learn for example swimming pool, chairs and lockers.

**Physical challenges** -a form of disability which interferes with motor abilities of an individual in various activities for example cerebral palsy, Spina bifida, muscular dystrophy and others.



## **CHAPTER TWO:LITERATURE REVIEW**

### **2.0 Introduction**

This chapter reviewed documented literature which relates to the topic of the study. Reviewed is an overview of children with physical challenges, government support through special schools and how children with physical challenges can be accommodated in the outdoor environment. Also reviewed is the role of parents in the provision of play and learning materials and a documentation of how children benefit from engaging in play and learning activities with the materials provided.

### **2.1 Children with Physical Challenges**

Physical challenge refers to a physical condition that differs from the norm in characteristics to the extent that a modification of school practices is required for the child to develop his or her maximum capacity (Gallagher, 1993). Physical challenges affect normal functioning due to physical limitations that affect use of limbs, hands, trunk control, mobility and strength. These limitations affect mobility such that the individual is forced to use wheelchairs or other orthopedic appliances such as crutches and walkers.

Children with physical challenges are categorized into the following physical disabilities that impede mobility and physical vitality, multiple handicaps and severe problems for example cerebral palsy, brittle bones, spinal bifida, muscular dystrophy and health impairments (Cooks& Gibbs, 2001). Each of these

conditions calls for special attention especially in the provision of play and learning materials and adapting environment to suit the physical and educational needs of children with physical challenges. This calls upon various stakeholders to actively participate in supporting children with physical challenges to ensure that they reach maturity with adequate self-confidence and a maximal ability to compete in the adult world. Stakeholders involved in providing play and learning materials to children with physical challenges include; Government and Parents.

## **2.2 Government Support**

The Government plays a major role in the provision of play and learning materials through financing schools handling children with physical challenges, by offering services through various government agencies such as the ministry of education, schools and other public institutions. The support from Government varies from one Nation to another because of various factors such as economic status and policy formulation and implementation. Support for children with physical challenges in developed countries differs from the support in underdeveloped countries in several ways.

In developed countries like America, attitudes toward special children have moved from rejection and isolation to integration as much as possible (Samuel & James, 1986). The education Act for all children with physical challenges was established and it contains six principles that shape Special Needs Education. These principles are zero reject, nondiscriminatory evaluation, individualized education programs,

least-restrictive environment, due process and parental participation. Consequently America being one of the developed countries have made significant milestones in supporting physically challenged unlike developing countries where physically challenged struggle due to poor implementation of policies that support their wellbeing in life.

In Kenya, Special Needs Education has been developing though incapacitated by lack of funds. Therefore there are many children with physical challenges who rarely receive any support from the government. Such children are deprived education and knowledge which can promote independence. They live a life of dependency and tend to be poorly adjusted to life (College, 1991). The more a child plays and exercises the more the brain and body develops (UNICEF 1999). For children with Physical challenges to play/learn they need extra services in the provision of play and learning materials to compensate for their handicapping limitations. However, in most cases the support for children with physical challenges in provision of play and learning material is questionable since a lot has not been done even in availing play and learning materials and also in adapting the environment.

Adapting play and learning environment for children with physical challenges is a challenge for playground developers and teachers because each disability presents unique considerations. There are three ways of adapting instructions for children



with physical challenges which include changing the following: The actual content of lessons, the specific knowledge being taught, the skills being taught or the environment in order to create an appropriate setting to teach (Joe et al, 2001). Changes in the content and skills can be done without affecting anyone outside the immediate group. However, in Kenya this has not been possible since children with physical challenges are exposed to the same curriculum with children who are not disabled in the regular programmes also there are no additional attempt to provide of play and learning materials above what is provided in regular schools. This makes it difficult for children with physical challenges to benefit fully from their academics.

The government can provide resource room for use by children with physical challenges. Hammill & Brown (1978) defined a resource room as any instruction setting where a child comes for specific period of time usually on regular scheduled basis. Resource room requires a special teacher who consults with the classroom teacher to develop programs that are intended to eventually eliminate the problem that the child may be experiencing. Micro computers have been effective in offering children with physical challenges an opportunity to learn. Browning & Cater (1983) noted that microcomputers are finding new uses on regular basis and it has a variety of application for example computerized communication helps children who cannot communicate to talk with others. McConnell (1982) computers translate Braille into print and print into Braille for

children with severe vision problems. However, in Kenya such provisions are rarely there. As a result early childhood programmes do not lay the expected foundation which facilitates growth and development in the future.

The government should avail several materials and facilities for use by physically challenged which include; computers, powered mobility devices, adapted books, adapted toys, electronic communication system and adapted play and learning environment. Vanderheiden (1982) pointed out that there are a number of very special uses of microcomputers for special children who have lost or have never had the use of their hands, who have never been able to explore their world through physical manipulation. Because of the many ways in which computers aid individuals with physical challenges it is clear that microcomputers hold future vocational potential for children with physical challenges (Taylor et al, 1990). However, early childhood programs for children with physical challenges are not fully equipped with computers and other adapted materials which these children need to learn how to use during their foundational years.

Kenyan government supports children with physical challenges in different ways for instance through provision of schools, employing teachers and by adapting school environment to meet the special needs of the physically challenged. However, there is a lot that still needs to be done because the teachers employed

are few compared to number of children and materials/facilities available are inadequate.

### **2.2.1 School**

In school, the children with physical challenges interact more with the teacher who can influence how the child makes use of materials provided in learning basic skills in life and also in gaining new knowledge. According to Fungladda, Kaewkengwal, Jalayondeja & Tornee (2011) Children with physical challenges long to be normal and to be seen as normal as much as possible. To assist them those in charge of children with physically challenged should focus on what the child CAN do - not CAN'T do. Parents and teachers handling children with physical challenges should establish child's strengths and capitalize on them. This is because they need to feel successful too (Sciarra, 2004). Expectations for the children with physical challenges from both the teachers and parents should be high since they are capable of achieving more in life. Progress made during play and learning activities should be complemented to motivate learners and other children need to be taught about physical disabilities to develop respect and acceptance. Rude remarks, name calling or teasing from other children should never be accepted. Once children with physical challenges are fully understood teachers will be able to develop appropriate play and learning materials to enhance their development in all areas.

To enhance holistic development education programmes should be modified or adapted to meet with developmental needs of children with physical challenges. Schools should provide a setting for self-discovery in order to understand clearly one's weaknesses and strengths (Maslow, 1970). Therefore, education for the physically challenged must be realistically based on the child's ability and likely potentials on leaving school. Acquiring daily-living skills may be as important as academic qualifications. Teachers are supposed to learn about how to balance between independence and over-protection. Overprotection would mean that children are not given the opportunity to try out things on their own and such tendencies accelerate dependence.

Most of the special schools in Kenya are not fully adapted to suit the needs of special children. These children always feel that they should be provided with sufficient medical facilities and equipment to help them cope with life, adjust to life and enhance their mobility without assistance (Andolo, 2007). Other studies by Kamau(1986) and Mwathi(1997) revealed that physically challenged live a life of dependency even after completing school showing that they did not get opportunities that prepared them for independent living. Several adaptations in the environment of physically challenged by the government can enhance play and learning among children with physical challenges (Ndurumo, 1993).

### **2.2.1.1 Accommodating Children with Physical Challenges in theOutdoor Environment**

Opportunities for outdoor play are equally necessary for children with physical challenges. Outdoor play offers a change from the classroom environment and provides opportunities to develop gross motor, self-help, and social skills (Cook & Gibbs, 2001). The key to including all children, regardless of their abilities is to adapt the environment to their diverse needs by providing challenges with differing degrees of difficulty such as balance beams of different lengths, simple obstacle courses or noncompetitive games (Wellhousen, 2002). Outdoor environments usually require different adaptations from those of indoors for example children with physical challenges, playground equipment can be adapted by positioning it so that children can attain maximum range of reach, motion, muscle control, and visual contact. Adapting the outdoor environment for children in wheelchairs can be accomplished by placing equipment lower, or building a sand table at wheelchair height that is sturdy enough to withstand leaning (Kabiru&Njenga, 2007).

Outdoor environment can be arranged to foster all children's creative thought through a variety of planned uses of space, activities, experiences, and materials (Leadbetter&Leadbetter 1993). Teachers who believe in the power of the environment for learning must assume roles that guide children's creative processes. The first step in adapting the environment is to fully understand the

nature and extent of each child's limitations. The next step is adapting environment so that each child can participate in a way that emphasizes abilities rather than disabilities (Hallahan&Kauffman, 2000) For example, children with hearing difficulties often feel frustrated and socially isolated from other learners. As a result, they engage in less pretend play with others and are less likely to use objects symbolically.

Children with physical impairments always require a physical orientation to the classroom including the location of materials, centers and exits (Shepad& Smith, 1983). Environments for these children include an orientation to the classroom from a single focal point such as their table or desk then an orientation to the school after they are familiar with the classroom noting which play materials, equipment, activities and playmates are available during playtime; providing a sensory-rich play environment with a variety of cues such as tactile maps and tape-recording directions placed in key areas of the room, which could be identified through the use of tactile material. Children with limited motor abilities may have problems with large or small muscles and have a slower reaction time than other children. The adaptation for them varies according to the severity and type of disability (Ndurumo, 1993).

Environments for these children should include modifications for writing such as computers, felt-tip rather than soft lead pencils and pads rather than sheets of

paper; playgrounds designs that use smooth pathways and ramps to help them gain access to play areas; wheelchair-height tables and trays so that children can use water tables and manipulative materials (Smith, Palloway, Patton, & Dowdy ,2003). Outdoor environment should have wide gates and wide pathways to access all parts of the playground for children in wheelchairs or those with impaired walking ability.

Accommodations in the outdoor environment for children with physical challenges have not been easy due to the complexity of play for children with physical challenges. The government tries to provide the required facilities like classrooms, text books, playground, medical facilities and others but these do not address the challenges of children with physical challenges children. This is because they encounter challenges and frustration in their day to day school activities due to lack of necessary and relevant equipment or other support services like adapted curriculum, quality mobility devices like wheelchairs and crutches consequently they do not benefit fully from the school system (Kamere, 2004).

### **2.3 Parental Support**

Parents bear a great deal of responsibility in raising a physically challenged child. Discovery that a child has a physical challenge is usually traumatizing for the family which is the first environment where the child learns several basic skills.

Therefore, the response of the parents determines whether the family is going to support the child or not in providing play and learning materials. Gallagher and Bristol (1990) found out that there were approximately twice as many divorces in families with children with physical challenges as in families with children of similar age without disabilities. This is due to the significant greater stress that is experienced by both parents which may contribute to increased tendency for child abuse. In families children with physical challenges are seen as financial drain because of the necessary medical, social, and special educational services. This in turn can cause several conflicts within the family and even separation. With such conflict the special child may not receive the support the need to help them cope with their disability.

In supporting children with physical challenges parents may tend to be overprotective however a compromise has to be worked out between too much and too little independence. Holistic development of the child should be a governing factor while supporting the child. According to (Canadian Council on Learning,2006) play nourishes every aspect of children development and forms a foundation for development of intellectual, social, physical and emotional skills necessary for success in school and life paving way for learning. Therefore, parents who are primary caregivers ought to support play and learning of their children with physical challenges to enhance holistic development. The support



would be possible if parents have developed a positive attitude toward the child with physical challenges.

The extents to which parents accept the child with physical a challenge and encourage self-reliance promote a positive attitude in the child toward play and learning activities (Taub, 2006). If parents find the child to be very helpless they do not provide materials for play due to the belief that children with physical challenges cannot play like the normal ones consequently neglecting their play needs as well as their play needs. This will mean that parents may not be bothered with finding out how to support the child while in school consequently hindering holistic development.

According to Education Bureau (2008) Parents are expected to do the following in support of their children in school; Maintain contact with the school for suitable arrangements for their children in classroom setting such as going up and down the classroom, their participation in the physical education lessons and the arrangement of appropriate desks and chairs for study. Such an involvement ensures that movement of the child within the classroom is taken care of , children participate in outdoor activities and learning facilities are adapted therefore making it possible for the child to learn and play.

Parents are also expected to encourage their children to try their best to do the homework in a neat and tidy way even though their hands are not quick. Any little

progress should be acknowledged to motivate them (Bandura, 1977). Changes in the health state of their children should be communicated as soon as possible to the school because if the child health condition is not clear to the teacher he or she can judge wrongly the child abilities. Parents can also approach the school for supporting their children whenever necessary. However, this kind of involvement of parents in school life of their children is rare.

To enhance the participation of parents in the roles identified above they must develop a right attitude toward the child. Proper attitude can be indicated by the following parental roles. Accepting children with physical disabilities unconditionally, understanding their limitations and degree of disabilities and provide them with learning opportunities to maximize their mobility and develop their intellectual and social potential (Sciarra, 2004). Share the responsibility among family members for taking care of the children with physical disabilities. Let the children with physical disability take up responsibilities to their ability. Excessive indulgence should be avoided since it induces unnecessary dependence. In addition treat the child with physical disability in the same way as other children without overwhelmingly attending to them neglecting all other children leading to unpleasant feelings. Also parents should maintain contacts with parents of other children with physical disabilities and related agencies for sharing experiences and learning skills of parenting and supporting the child both at school and at home. Nevertheless, this does not happen with most of the parents more

often the opposite of the identified roles takes place for example little effort is put to maximize learning opportunities of children with physical challenges. Also while connecting with agencies supporting children with physical challenges parents look for financial support which is rarely forthcoming rather than information on how they can effectively support their children (Andolo, 2007).

Research shows that family involvement improves outcomes for young children and provides opportunities for lifelong success as adults (Kemp, Smith & Segal 2012). If we want today's children to be thinking, healthy, well-adjusted adults and productive citizens of tomorrow's communities, then parents must commit themselves in provision of play and learning materials for children in school. According to (Epstein,2008) the main reason for co-operation between parents and teachers should be to help all young children succeed in school and in later life.

Epstein Model of parental involvement in school illustrates six levels of family involvement which emphasizes that parenting and home support for learning are just as important as other activities that may be more visible to the community. The model shows that it is important to involve parents in the following;

**Parenting:** Supporting families in their role as parents recognizes their importance as the “expert” on their child. Providing child-rearing skills that promote home-environments to support learning builds strong foundations. Inviting parents to

share their perspective helps staff understand and appreciate families and reinforces a parent's sense of belonging.

**Communicating** various communication tools can be used to share school events, play and learning materials required and children progress. This strengthens school and home partnerships. Information shared in “family friendly” terms and in the language used in the home builds their knowledge and let's them know that they belong. Minimizing the use of jargon improves understanding.

**Volunteering** entails creating ways that families can be involved in the school activities or programs. Recruitment geared to their interests reinforces their sense of belonging. Flexible schedules that engage families as volunteers and audiences shows value for their time.

**Learning at home** involves linking families with their children's curriculum through learning activities that can be done at home as homework acknowledges their competence. It helps parents make informed decisions about their child's education.

**Decision making** including families as decision makers, advocates, material developers and committees members values their contributions as stakeholders in the process of their children education.

**Collaborating with the community** Coordinating access to services in the community with family needs makes schools the “focal point” of the community network such that parents consult with the school about materials that should be available to their children.

Research shows that parental involvement is more important to children success at every grade level than family income (Parents Reaching Out, 2008). However many parents report that they feel unwelcome or uncomfortable in their children's schools. This implies that teachers have not fully welcomed parents to be actively involved in support of their children especially in provision of play and learning materials.

Studies by Kamau (1986) and Mwathi(1997) found that majority of the children who are disabled in Kenya are still economically dependent on their families, relatives and friends. This can be attributed to the lack of support which can enhance development of independence at the family level. This happens when members of family believe that nothing can be done to change the lifestyle of the physically challenged. Over dependent on family members makes the child to develop an attitude of helplessness, loss of identity and fails to adjust to life appropriately (Wamocho, 2003).

Through a research study by (Kamere, 2004) on development of special education in Kenya, children with physical challenges reported that they are treated like animals, left alone since most people do not want to stay with them. Also they felt sidelined in the family and parents were not willing to spend too much on them and they are the last to have their school fees paid. This shows that children with physical challenges are not treated like other children and they are not given priority even in catering for their educational needs. Consequently parents may care less about play and learning needs of the child due to prejudices already developed.

## **2.5 Benefits of Play and Learning Materials**

Play and learning material are of great help to children with physical challenges since they allow children to engage in various play and learning activities which in turn enhance holistic development which involves the following:-

### **2.5.1 Physical Development**

Children with physical challenges gain gross motor skills which involve the larger muscles in the body. A disabled child can improve strength, movement, endurance, and muscle tone through exercises that are performed with a therapist's help or the teacher (Joe, 2001). This type of therapy is also recommended for increasing wheelchair mobility. Through fine motor activities children who need assistance with self-help skills such as grooming, fastening clothes, and tying

shoes get help. Children with physical disabilities can practice activities such as cutting with scissors and handwriting with an occupational therapist in the school building. However, a child with physical challenges development is influenced by accessibility of toys and availability of modified play environment (Ndurumo, 1993).

### **2.5.2 Development of Self Care Skills**

Children in every society are expected to develop independence in their performance of everyday living skills. Independence is taken for granted with normal children however with physically challenged there is a lot that needs to be done. Acquisition of daily living skills may be as important as academic qualification (Gordon, 1992). A child control over the environment depends on mastery of daily activities (Amato & Ochiltree, 1986). The ability to feed, dress and care for toileting needs significantly increases a child's control over both home and school environments for example a child who dresses himself or herself does not have to depend on the convenience of the caregiver.

The ability to meet individual needs without seeking help can result in feeling of efficacy and control (Bernheimer, Gallimore, & Weisner 1990). This is the most important consideration in development of basic self-care. Self-dependence is an important developmental task in any culture. Teaching self-care activities provides an opportunity for caregivers to instill positive self-esteem in young children.

Children with physical challenges who have acquired self-help skills do not add significant stress to the family because they develop independence. However, this is not the case in Kenya because majority of physically challenged are dependent on their families.

### **2.5.3 Development of Social Skills**

Play and learning materials enhances interaction among children with physical challenges. Play activities provide children with a great opportunity for learning social skills (Isika, 2011). Surprisingly, many children in special needs education programs do not participate in extracurricular activities, and they miss this important social skills teaching opportunity due to lack of adaptation of their environment. According to Hallan and Kauffman (1991) special schools provide greater security than regular schools but do not expose children to a variety of experiences for socialization. Whenever adequate play and learning materials are provided children acquire a variety of social skills such as friendships, ability to empathize and to make eye contact, turn taking, sharing and healthy competition (Tassoni, 2002). All these skills consequently lead to development of self-esteem and a sense of belonging.

### **2.5.4 Language Development**

As children play with the materials provided to them they practice their language performance by talking to themselves and they tend to use more complex language



in play than in regular conversation (O'Brien et al, 1998). According to Skillern (2008) play provides children with unique opportunities to practice the complex process of living, communicating and developing relationship with others. For example, during pretend play which is very common among young children they do practice the following; explaining, describing, expressing ideas and feelings as well as asking questions. All these activities promote language development which in turn accelerates language and social skills.

### **2.5.5 Emotional Development**

When children with physical challenges are provided with adequate materials for play and learning they experience success more than failures. Play enhances a balanced emotional development since the child functions within established limits and eventually learns to control his or her behavior (Sirvis, 1988). As children manipulate play materials both success and frustrations are encountered in a relaxed atmosphere consequently the reaction is mild. Play allows children with physical challenges to feel that they have power over the environment. Vygotsky (1978) notes that play enhance children's sense of individuality and self-worth. They get an opportunity to release tension and aggression as well as experiencing joy hence developing tendencies to be happy.

### **2.5.6 Cognitive Development**

According to Piaget (1952) children learn best through play and this is possible when adequate and appropriate materials are provided. Through play children with physical challenges acquire knowledge and form ideas about the world around them. Play provokes thought which in turn causes refinement of problem solving skills. Children's reasoning also develops as they encounter a variety of materials which stimulates their thinking (Kagan, 2001).

### **2.6 Summary of Literature Review**

The reviewed literature shows that parents have a great role to play in supporting their children with physical challenges. Their beliefs and attitudes toward a physically challenged child influence the kind of material support which they give. In the family, which is the first environment the child with physical challenges can be helped to develop his or her potential through provision of appropriate materials for play and learning. Reviewed literature focuses more on attitudes of parents' towards children with physical challenges also much of the available literature comprises of recommendations about how parents' can support their children with physical challenges. Therefore, the current study focuses on the roles of parents' in provision of play and learning materials to fill the gap by establishing what parents are doing in relation to provision of play and learning materials.

The school introduces the child to a new environment where there is interaction with the teacher, peers and other support staff in the school. Children with physical challenges can learn like any other normal children where proper accommodations are in place both in the indoor and outdoor environment. Government plays a key role in the provision of facilities and finances required for the smooth running of the school. However, government and parents' support is rarely satisfactory since special schools are constantly seeking support from other stakeholders like the church, APDK and other non-governmental organizations to supplement what they get from parents and the government. The current study shall therefore establish challenges experienced by parents' in provision of play and learning materials.

Despite the fact that there are various entities which support children with physical challenges it is evident that hardly are their play and learning needs adequately met especially in the provision of materials. Many people with physical challenges feel that their education needs could be met more efficiently if they are appreciated and accepted as human beings and given an opportunity to do what they could do. This can happen if they are provided with sufficient play and learning materials/facilities to help them cope with life, adjust to the environment and enhance their mobility without assistance. Reviewed literature shows that children benefit play and learning activities where they are engaged actively such that holistic development is enhanced and they become self-reliant and productive members of the society. However, not many studies have focused on play and

learning of children with physical challenges hence the need for the study to establish what play and learning activities can children with physical challenges engage in actively in order to develop holistically.

## **CHAPTER THREE: METHODOLOGY**

### **3.0 Introduction**

This chapter comprises of the following sections; research design, variables, location of the study and target population. Other aspects of the study addressed are sampling techniques and sample size, pilot study, data collection procedures and data analysis as well as the logistical and ethical considerations.

### **3.1 Research Design**

The study employed a case study which is an in depth study of a particular situation. It is a method used to narrow down a very broad field of research into one easily researchable topic. Even though it doesn't answer a question completely, it gives some indications that allow further elaboration and hypothesis creation on a subject. The case study design adopted helped the researcher to concentrate with a government special school which specifically handles children with physical challenges.

### **3.2 Variables**

The study had the following independent and dependent variables.

#### **3.2.1 Independent Variable**

Independent variables of the study included parents and teachers support towards provision of play and learning materials.

### **3.2.2 Dependent Variable**

The dependent variable in this study was provision of play and learning materials/facilities which are either adequate or inadequate. The study found out the extent to which parents support children with physical challenges in provision of play and learning materials. According to Orodho, (2004) Dependent variable is the circumstance or characteristic that change, disappear or appear when the researcher implements the independent variable. For example when there is adequate support from parents, quality and adequate facilities can be availed to children with physical challenges and if support is inadequate, materials provided will also be inadequate.

### **3.4 Location of the Study**

The study was conducted in Joytownspecial Primary School for the Physically Challenged. The school is located within Thika Municipality in Kiambu County.

### **3.5 Target Population**

The population of the study was 100 children with various physical challenges in pre-primary and lower primary, 200 parents and 4 teachers summing up to 304. Joy town special school was best suited for the study because it is a national public school which specifically addresses education needs of children with physical challenges in Kenya. Therefore, it was purposefully selected.

### **3.6 Sampling Techniques**

This study employed purposive sampling in selecting the school and teachers. Purposive and opportunity sampling was used in choosing the parent to be interviewed since only one parent was interviewed. Stratified random sampling method was used in selecting children in the early childhood education who were subject of the study. This technique was employed to ensure representation of various subgroups in the population. Four subgroups were established which are pre-school children, standard 1, standard 2 and standard 3 children. The researcher picked 30% from each stratum to get a representative sample of 64. According to Gay (1981) a minimum of 20% is enough to represent a given population.

#### **3.6.1 Sample Size**

The size of the sample for the study was 30 children with various physical challenges in the early childhood education, 30 parents or guardians and 4 teachers. The sample size was obtained as illustrated below:-

**Fig 3.1 Sampling Grid for Children**

Stratus	Target Population	Children Sampled (30%)
Pre-school	25	7
Standard 1	24	7
Standard 2	21	6
Standard 3	30	10
Total	100	30

The parents and teachers of the children sampled automatically became subject of the study. Therefore, the total sample size was 64.

### **3.7 Research Instruments**

Data collection instrument that were used in the study included questionnaires observation schedules and oral interviews.

#### **3.7.1 Questionnaire**

Structured questionnaires were constructed for the teacher each with two sections. Section A gathered demographic information while section B enabled the researcher to gather information about provisions that are made by parents (see Appendix I)



### **3.7.2 Observation Schedule**

An observation schedule was constructed to help the researcher establish activities that children engage in with various play and learning materials provided. Children were observed as they played and learned either within the classroom or outside the classroom. It was also used to observe play and learning facilities provided for use by children with physical challenges.(Appendix III&IV).

### **3.7.3 Interview Schedule**

Interview schedule was constructed to gather direct information from the parents about how they are supporting their children with physical challenges and also find out the challenges which they encounter in providing play and learning materials (See Appendix V). Parents were interviewed in two days with the help of a field assistant on a visiting day and closing day when they came to pick their children. Parents were informed about the planned interview in advance to enhance their cooperation when they arrived to school.

### **3.8 Pilot Study**

Research instruments were pre-tested in the same school. The group used for pilot study was not used in the main study but the same research instruments were used. An interval of two weeks before the main study ensured that pilot group did not influence information given by the subjects of study.

### **3.8.1 Validity**

Content validity of the research instruments was established through consulting experts who advised on development of appropriate questions for questionnaires, interview guide and the observation schedule. The researcher further ensured that items in the research instrument covered all the variables of the study. This was very important since it ensured that accurate data obtained in the study represented variables of study because an instrument can yield reliable data which is not necessarily valid.

### **3.8.2 Reliability**

The reliability of the data obtained was tested by use of test-re-test method where the researcher administered the questionnaire twice to the same subjects on two separate occasions at an interval of two weeks. Also peer review was used where the researcher discussed through responses after pilot study with other two master students. Some questions in the interview schedule were modified and others deleted. An interview schedule for children was also dropped since majority of the children suffer from cerebral palsy and it was difficult to communicate with them.

### **3.9 Data Collection Procedures**

The data were collected by the researcher using questionnaire, observation schedules and interview schedules. The researcher was visiting the school every day the whole of second term for observation of children in various activities

either inside or outside the classroom. The purpose of the study was explained to respondents when issuing questionnaires to them. Parents were interviewed in two days. First day was during the visiting day which is normally there the first Saturday of every month. The second day was closing day and the researcher interviewed parents with the help of a field assistant.

### **3.10 Data Analysis**

Collected data was analyzed using both qualitative and quantitative data analysis methods which included descriptive statistics such as calculation of frequencies and percentages. The first thing was to edit collected data to ensure that it was complete and free from errors. The data were then organized into themes and categories guided by research questions then presented in discussion form. Microsoft Excel was used to enhance data analysis and results were presented using tables and graphs.

### **3.11 Logistical and Ethical Considerations**

The researcher got a letter from the Graduate School of Kenyatta University which was presented to the District Education office in order to get a research authorization letter. The letter was then presented to the Head teacher Joytown Primary School, Thika. Consent for observation of children was granted by the class teachers. Confidentiality was observed to ensure that respondents did not experience any negative effects because of the study.

## **CHAPTER FOUR: Data Analysis, Results and Discussions**

### **4.0 Introduction**

In this chapter the researcher presents the results obtained in four sections which are demographic information about the subjects under study, parental roles in provision of play and learning materials, factors influencing parental and teachers support in provision of play and learning materials and activities that children engage in with the play and learning materials provided.

### **4.1 Demographic Information about the Subjects under Study**

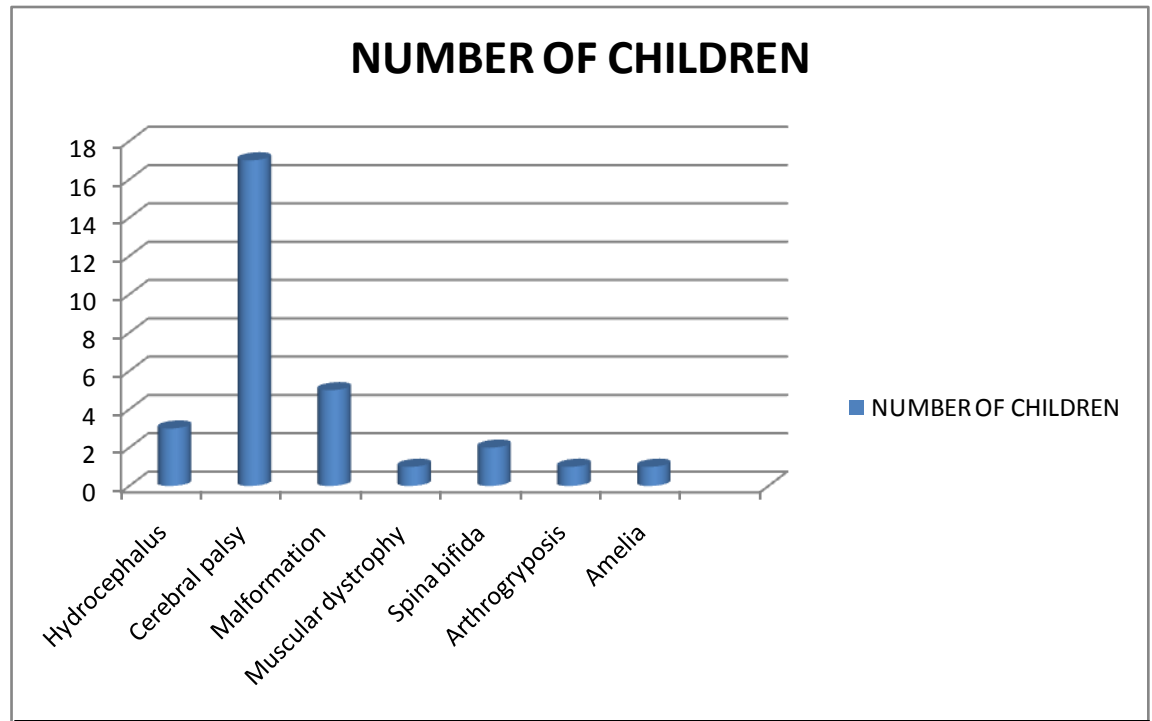
From the 30 children sampled for the study, the following categories of physical challenges were distributed as follows; 17(57%) cerebral palsy, 5(17%) malformation, 3(10%) hydrocephalus, 2(7%) spina bifida. Others disabilities were arthrogyrosis, Amelia and muscular dystrophy each represented by 1(3%) of the children. The information is as illustrated in the table below.

**Table 4.1 Types of Physical Challenges Present among Sampled Children**

PHYSICAL CHALLENGES	NUMBER OF CHILDREN
Hydrocephalus	3
Cerebral palsy	17
Malformation	5
Muscular dystrophy	1
Spina bifida	2
Arthrogyrosis	1
Amelia	1
Total	30

The table above shows that majority of the children sampled suffer from cerebral palsy as further elaborated by the graph below.

**Fig 4.1 Types of Physical Challenges Present among Sampled Children**



From the graph above it is clear that majority of children in JoyTown Special School suffer from Cerebral palsy since more than 50% of children sampled had the condition. This poses a great challenge to material developers since cerebral palsy varies in severity from one child to another and also depends on the part of the brain that was affected.

Teachers who were subject of the study 3 out of 4 confessed that they have done a special education course only one of them had not done a special education course. All of them reported that development of learning materials was emphasized on in

the course of their training. This shows that majority are well prepared to handle children with special needs in play and learning activities.

#### **4.2 Parental roles in Provision of play and learning materials**

The theme above was derived from the first objective which was to establish parents' role in provisions of play and learning materials. The responses were derived from both the parents and teachers.

##### **4.2.1 Play and Learning Materials provided by Parents**

Parents' responses for various questions in the interview schedule were as follows; Question 3 (which play and learning materials do you provide for your child at home and at school). Majority of the parents interviewed that is 70% reported that they provide mobility/assistive devices such as calipers, walkers, wheelchairs and crutches which enable their children to participate in various play activities at home and 53% provides devices for use at school. Therefore, about 17% of the parents do not provide any mobility or assistive devices for their children at school. This show that once the child is at school the teacher takes the responsibility of providingsome children with mobility or assistive device to use at school.

About 23% of the parents provide balls for play activities at home and 6% provides for use at school. 20% of the parents provide toys at home while none provides toys for use in school. 6% of the parents provide charts and 3% of the

parents provide books for learning at home. Parents reported not to provide any toys, books and charts for use at school. It appeared that parents were not bothered with provision of play and learning materials which their children may need to use while at school to enhance their active participation.

A few of the parents' that is 13% confessed that they do not provide any learning and play materials for their children and they were unaware about play and learning materials that their children may require. Only 10% of the parents reported to have special facilities like parallel bars developed which allows the child to exercise in order to strengthen muscles that are rarely used. Such provisions show support which motivates the child to try other play activities. Such parents revealed that they sought advice from therapist attending to their children about what they can do at home to enhance active involvement of their children in activities which can help to improve their physical condition hence making it possible for them to engage in various play and learning activities. The table below illustrates materials identified by parents as what they avail to their children.

**Table 4.2 Play and learning materials and devices Provided by parents both at Home and at School.**

PLAY AND LEARNING MATERIALS		FREQUENCY x/30	PERCENTAGE
Balls	HOME	7	23%
	SCHOOL	2	6%
Toys	HOME	6	20%
	SCHOOL	0	0%
Books	HOME	1	3%
	SCHOOL	0	0%
Charts	HOME	2	6%
	SCHOOL	0	0%

As per the responses it was clear that parents concentrated more with provision of mobility or assistive devices and little attention is given to play and learning materials. The little attempt made in provision of play and learning materials is generally at home. This shows that they are not concerned about play and learning activities that the child is engaged at school.

Question 7 (how does the government support in provision of play and learning materials). Majority of the parents that is 90% were unaware about how the government supports them in providing play and learning materials to their children despite the fact that their children are in government sponsored school benefiting from free primary education. Only 10% acknowledged that government



supports them especially in provision of learning materials since they do not buy books which their children are provided with once they are in school.

From Question 12 (where else do you get support for providing all the required learning and play materials to your child?) About 67% of the parents reported that they do not get support from other sources apart from the family. 33% had support from outside the family that is from individual sponsors and organizations like APDK as well as the community. However, they all reported that the support received is quite inconsistent and insignificant for example one respondent confessed she obtains Kshs2000 per year from APDK and other services are offered at a cost.

Question 5 required parents to give their own view about whether their children are provided with adequate play and learning materials at school and at home. About 70% of the parents felt that their children are not provided with adequate play and learning materials both at home and at school. They cited lack of appropriate mobility and assistive devices as the major challenge, 30% were satisfied with materials provided both at home and at school and 3% did not know whether their children are provided with adequate materials or not. It emerged out again that parents were merely concerned with provision of mobility and assistive devices.

#### **4.2.2 Rating of Parents' Involvement in Provision of Play and Learning Materials by Teachers'**

Question 5 required teachers to rate parents' involvement in the provision of play and learning materials using the terms good, average and below average. The results were as follows; 25% of the teachers felt that their involvement is good while 75% rated their involvement as average. This information is as illustrated in the table below.

**Table 4.3 Rating of parents' Involvement in provision of play and learning materials by teachers'.**

REMARKS	Good	Average
PERCENTAGE OF TEACHERS	25%	75%

The information above shows that teachers are not satisfied with what the parents are doing in provision of play and learning materials since majority rated them as averagely involved while as more is expected from them.

#### **4.2.3 Researcher's Observation**

From the observation schedule, the school has several play and learning facilities/material which include adequate classrooms that are self-contained with washrooms to cater for the needs of those children with incontinence; play

ground; swimming pool; therapy room; swings; climb and slide; and others. Learning facilities were not fully adapted to cater for different physical conditions for example you will find a child with cerebral palsy on a very slippery table which would make it more difficult for the child to write or draw due to spastic movements, some lockers were too high for children sited on a wheel chair and some classes did not have adequate space to facilitate free movement within the classroom. Therapy room was equipped with several play and learning materials like puzzles, drawing books and crayons, balls and others all of which engaged children actively while waiting for the therapist to attend them individually.

Teachers' were actively involved during classroom activities and it was evident that they concentrated more on academic activities. They were not concerned with outdoor activities, an area that should be addressed daily in pre-school. Teachers' reported that they lacked appropriate play materials like mattresses, well maintained playground, like balls as well as quality mobility devices which would allow children to engage in play activities once in the playground. Children tended to be inactive during break time since they cannot engage in any play activities on their own without supervision. This indicated that there are inadequate personnel for supporting these children. Consequently some of the facilities like swings, climb and slides are not optimally utilized and they are poorly maintained.

Most classes lacked adequate play and learning materials for engaging children who experience difficulties in writing. Out of the four classes that the researcher observed only pre-school had a variety of materials while in the other classes that is standard one to three you would find a segregated group of children that stayed idle during class time activities. There was like giving company to others as they participate in various learning activities.

#### **4.3 Factors Influencing Provision of Play and Learning Materials.**

The second theme was derived from the second objective which was to find out factors influencing provision of play and learning materials by parents'. The researcher sought to identify challenges experienced by parents in the provision of play and learning materials. This was established through questionnaire for the teachers and interview schedule for parents. The following factors were identified by both the teachers and parents

- a) Inadequate finance
- b) Diversity of needs and complexity of physical challenges
- c) Negative attitude
- d) Limited expertise in material development

##### **a) Inadequate Finance**

Teachers reported that play and learning materials are expensive therefore school is unable to meet the cost due to limited budget. Therefore, they are provided with very few resources for material development. Pre- primary class is given priority

consequently other classes hardly get play and learning materials like manila papers, plasticine, toys and others. Teachers' also reported that most of the children come from poor backgrounds where parent struggle to meet with the educational needs of their children with physical challenges. Therefore, parents in most cases are not able to purchase play and learning materials that may be needed in school

About 87% of the parents interviewed reported that lack of finance was a major factor that impedes their support of their children. This is because of the extra requirements to meet the health needs of children with physical challenges. As a result they don't bother with the play and learning of the child at home or even when at school. Some of the parents reported that they struggle to meet medical costs and also in purchasing assistive devices which their children are required to have. Consequently such children may not play or learn even if they are provided with play and learning materials since they are immobile and lacks necessary assistive devices. The finding is in line with Kamere, (2004) study which established that economic problems were impeding support of children in their education.

#### **b) Diversity of Needs and Complexity of Physical Challenges**

Teachers reported that severity of physical challenges vary a lot from one individual child to another and the situation poses a great challenge to

them since they should consider each child in material development. The school also admits children with diverse physical conditions all of which require individual attention. In some cases teachers are unable to establish the condition that a child has even with the help of medics. Such a situation leaves the teacher unaware of what to do to enhance play and learning of the child.

### **c) Negative Attitude**

Both parents and teachers felt that the community and parents tend to be negative toward children with physical challenges since they view them as individuals who cannot achieve anything in life. Consequently they neglect their play and learning needs both at school and also at home. About 33% of the parents reported how they do not get support from other family members and they cannot be able to hire a caregiver who can assist in supporting the child in play and learning. Therefore, with time the child becomes isolated even due to negative remarks from other members of the family which makes the child to develop a negative self-concept hence minimizing attempts to interact with other children during play activities.

Also about 23% of the parents reported that they experienced family problems due to wrong perception of the child with physical challenges. As a result some parents are raising their children single handedly after separation; other children are deserted by their real parents who move on with their lives leaving the special

child with the grandparents. Due to wrong perception little effort is put in supporting these children especially in provision of play and learning materials.

The finding is supported by (Kamere,2004) who established that parents and other members of the community had a negative attitude towards children with physical challenges.

#### **d) Limited Expertise in Material Development**

In cases where some resources were availed teachers felt that they are not competent enough to develop materials. Also most of the teachers felt that the task of developing materials is time consuming and overwhelming to them because of other duties which they should address in the school. They felt it would be helpful if the school had a specialist in material development to assist in development of play and learning materials for all children.

### **4.4Activities Which Children with Physical Challenges Engage in with the play and Learning Materials Provided.**

This theme was derived from the third objective which was to establish activities that children with physical challenges engage in with the play and learning materials provided. This was established through some questions for teachers, interview schedule for parents and also through observation by the researcher.

#### **4.4.1 play and Learning Activities**

Majority of the parents that is 87% reported that quality mobility devices helps their children to be active both at home and also in school for example adapted shoes for a child with crab feet enables the child to participate in all kinds of play and learning activities without difficulties and the child even supports other children inside and outside the class. At home the child interacts with other children as they engage in various play activities.

In the therapy room children were provided with several play and learning materials such as rocking horse which allowed them to engage in pretend play. They would act racing the horse and this really amused them. Other activities included completing puzzles, reading picture books, building blocks and cycling. These activities enhanced learning and also promoted acquisition of physical skills due to strengthening of muscles and this in turn stimulates play even when outside the room.

#### **4.4.2 Reading and Writing Activities**

Through observation reading and writing activities were evident among children in pre-primary and lower primary once they were provided with writing materials such as pencils and books. In pre-primary children with cerebral palsy who



experience great difficulties in writing would be provided with puzzles to complete which appeared much easier to handle than a pencil and a book. At other instances the teacher would place weight on their hand to reduce spastic movements. However, the device would do little in enhancing the child ability to write since the learner would slow down and technically fail to write anything. Therefore, the teacher preferred giving such children puzzles and plasticine which would help them to be calm during the learning process.

#### **4.4.3 Drawing and Coloring**

Children would also engage in drawing and coloring activities when provided with drawing papers/books, pencils and crayons. Such an activity was observed in pre-school, standard one and in the therapy room. However, there were some cases in which individual children would just put the material provided into their mouth and eat the paper or pencil. This called upon the teacher to be very vigilant. It was clear that majority would enjoy the activity since their work would be displayed with their names indicated. This made them more enthusiastic during the learning process.

#### **4.4.4 Social Interaction**

It was evident that children interacted more amongst themselves and even with the teacher during an ongoing activity. They would share their achievement for

example showing the rest what they have modeled, drawn or a completed puzzle. At times the teacher would require them demonstrate to others how they successfully manage to complete their work. Such incidents boosts confidence for self-expression and this in turn promotes development of self-esteem.

#### **4.5 Researcher's Observation**

Most of the activities identified were observable in pre-primary class and in the therapy room. Therefore, in other classes that are standard one to three children involvement in play and learning activities was very minimal. Available materials in those classes incorporated charts, shop corner and science corner with various materials which were rarely utilized. Teachers' would concentrate more with the work to be covered as per the syllabus sidelining children who could not cope up with the learning activities like reading and writing. Consequently, such children tended to be very inactive during the learning process. Other children would struggle a lot due to lack of the essential adaptations for example a child with Amelia was not provided with a head pointer even though the teacher felt that it would make the learning process much easier for the child.

Outside the classroom children rarely participated in any play activity especially during break time. They would just stand along the corridors idly. Therefore, the expected norm of children playing while outside the classroom was not observable. The scenario was attributed to poor play facilities which may simply

cause accident and lack of personnel to supervise children as they play. Failure to engage in play and learning activities means that development of children with physical challenges is not optimally stimulated.

## **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.0 Introduction**

In this chapter the researcher summarized the study while making conclusions about the study findings. Main recommendations based on findings of the study

are precisely outlined. The researcher further identified gaps left out in the study which would need further consideration through research

### **5.1 Summary**

The study focused on the roles of parents in provision of play and learning materials which has been a challenge to the schools handling children with physical challenges. Study findings were in line with the objectives of the study. The first research objective was to establish role of parents in provision of play and learning materials. The study established that majority of the parents 70% concentrate on provision of mobility and assistive devices and little attention is given to play and learning materials. About 10% of the parents confessed that they don't provide any play and learning materials and they are not aware of the materials that should be availed to their children.

Inadequate finance emerged as the major factor that influence provision of play and learning materials by parents. Teachers reported that majority of the children come from poor backgrounds where parents are likely not to bother with provision of play and learning materials due to many other issues they may be experiencing in life. Other factors identified were negative attitude toward children with physical challenges by parents and other members of the community, wrong perception of the child with physical challenged, diversity and complexity of

physical challenges as well as limited expertise from teachers in material development.

It was evident that children are engaged in various play and learning activities with the materials availed to them like reading and writing, drawing and coloring, completing puzzles, building blocks, pretend play and others. However, in instances where no play and learning materials were provided they would be very passive.

## **5.2 Implications of the Findings**

Parents are not actively involved in provision of play and learning materials while as, they are primary caregivers in the life of their children. This means that children with physical challenges will continue to have inadequate provision of play and learning materials if parents don't change and become actively engaged.

Majority of the Parents concentrate more with provision of assistive devices and lacks awareness of play and learning materials which their children need. This means that if parents and teachers do not work together parents will continue to provide assistive devices and lack awareness of other play and learning materials which their children need. Therefore, the input of the parent who clearly understand strengths and weaknesses of his or her child with physical challenges as well the input of the teacher who is knowledgeable about appropriate play and

learning materials for the child and how the parent can support will continue to be deficient. However if they work together they would reinforce each other's effort since both learning play activities takes place both in school and at home.

Lack of finance emerged as the major factor which influences provision of play and learning materials since majority of children with physical challenges come from poor background. This means that if parents do not get support from other stakeholders such as Government, NGO's, church and others inadequacies in provision of play and learning materials for children with physical challenges will persist. Implying that children will continue to be inactive during class time and also when they are outside the classroom. Therefore, education may never become a reality for children with physical challenges and the value of it is reduced to mere schooling where they just pass time and do not fully benefit so as to become self-reliant and productive members in the society.

### **5.3 Conclusion**

The researcher established that provision of play and learning materials by parents is wanting. This is because most of them concentrate on provision of mobility and assistive devices neglecting play and learning needs of the child due to the perception that the child may not be able to play and learn.

Lack of finance emerged out as a major factor that influence provision of play and learning materials for children with physical challenges. Other factors identified were negative attitudes toward children with physical challenges, wrong perception of children with physical challenges which leads to abandonment of the child, eventually causing lack of support in provision of play and learning materials. Complexity and diversity of physical challenges also came out as a challenge because physical challenges vary with severity from one child to another therefore the kind of support required during play and learning activities also vary from one individual child to another. In some cases teachers felt that they do not know what play and learning material can be provided to assist the child in overcoming their limitation during play and learning.

Through observation it was evident that children with physical challenges engage in various forms of play and learning activities with the materials provided. According to (Kabiru& Njenga,2007) play activitiesenhance holistic development therefore children with physical challenges can be prepared to become self-reliantand productive members of the society if we give them opportunities to play and learn.

#### **5.4 Recommendations**

- Parents should be sensitized onthe importance of play and learning materials to their children with physical challenges. This would make them

to be actively involved in school life of their children in order to learn more from teachers about how to support their children in play and learning. Therefore, reinforcing teacher's effort even when the child is at home.

- Schools should ensure there are adequate play and learning materials for children with physical challenges in all classes. Also play ground should be well maintained and children provided with mattresses to facilitate outdoor activities.
- The government should employ more personnel in special schools because these children need supervision throughout. Facilities for play and learning activities may be available but without the help of teachers these children may never use them. This was evident during break time where children would just stand or sit along corridors and they could not use the swings since there was no one to assist them.
- Government should have a budgetary allocation meant for purchase of play and learning materials per term. This would boost provision of materials for children with physical challenges as well as their maintenance.



- Education, Assessment and Resource Centre (EARC) officers should conduct regular seminars for teachers handling children with physical challenges to enliven their material development skills. Through such seminars teachers should share difficulties they encounter in supporting learning and play activities in order to address the issues as a team.

### **5.5 Recommendations for Further Research**

Similar research should be carried out in other special schools handling children with physical challenges to establish whether experiences in the provision of play and learning materials are the same.

A study should be conducted to find out how activities and materials can be effectively adapted to meet with the play and learning needs of children with various physical challenges and especially for children with cerebral palsy. This is because children with physical challenges are neglected and their conditions can be complex and also vary from one individual child to another.

A study should be conducted to evaluate effectiveness of exclusive model in facilitating play and learning of children with physical challenges in Kenya.

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**APPENDICES**

**APPENDIX I**

**QUESTIONNAIRE FOR TEACHERS**

**SECTION A**

1. Which are the types of physical challenges in your class?

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2. Have you done a special education course? Yes\_ No\_

3. In the course of your training was development of learning materials emphasized.

SECTION B

4. How do parents support in provision of play and learning materials.
  
5. Generally how can you rate the support of parents in provision of play and learning materials

Good----- Average----- Below Average-----

6. What are the factors that influence the kind of support that you get from the parents?

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7. a) List down materials that you develop for use by children inside or outside the classroom?

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c) What are the challenges that you experience when developing the materials identified.

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8. What are activities that children engage in with the provided play and learning materials?

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8. What are the possible consequences of the inadequacies to the children?

i)

## **APPENDIX II**

### **OBSERVATION CHECKLIST**

Observation of the school

1. Facilities that facilitates outdoor play amongst lower primary children.

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2. Facilities/Materials within the classroom which enhances play and learning.

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3. General state of facilities Provided

Good  Average  Below Average

Materials/Facilities	Good	Average	Below Average
Classrooms			
Pavements			
Playground			

Mobility& assistive devices- Crutches			
Wheel Chair			
Calipers'			
Walkers			
Swimming pool			
Play ground			
Teaching aids(charts)			
Play materials (balls)			

### **APPENDIX III**

#### **OBSERVATION OF CHILDREN**

1. Physical challenges present amongst lower class children

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2. Play and learning materials provided for each physical challenge identified

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3. Quality of the materials provided

Good

Average

Below Average

4. Activities that children engage in with the availed play and learning materials.

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5. Support from the teachers

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6. Support from the house mothers

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7. Adaptations made in the environment to enhance play and learning.

**APPENDIX IV**

**INTERVIEW SCHEDULE FOR PARENTS**

1. What is the physical condition of your child?
2. How old is your child?

3. Which play and learning materials do you provide for your Child?
  - a) At home
  - b) At school
4. Do you think the child benefits from the materials provided? Yes—No—  
If no why?  
  
If yes how?
5. Do you think the materials provided for the child are adequate
  - a) At home  
Yes—No—
  - b) At school  
Yes—No—
6. If No what is lacking?
7. How does the government support in the provision of learning and play materials?
8. Where else do you get support for providing all the required learning and play materials to your child?
9. What kind of support do you get from the parties identified above?

10. What are some of the challenges you experience in providing play and learning material to your child?
11. Are there some tasks that your child can accomplish on his/her own at with the play and learning materials provided?
- a) Home
  - b) School

**APPENDIX V****BUDGET**

ITEM	QUANTITY	COST
Proposal printing,	30@ 1000	30,000

photocopying and typing		
Binding	30@40	1,200
Research instruments	350@6	2,100
Transport	6months	30,000
Thesis printing , photocopying and typing	10@ 3000	30,000
Binding thesis	4@2000	8,000
TOTAL		Kshs101,300

**APPENDIX VI**  
**TIME SCHEDULE**

PHASE	ACTIVITY
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Phase I (Aug 2010-Dec 2010)	Proposal development and development of instruments
Phase II (Jan 2011-Feb 2011)	Proposal presentation and doing corrections
Phase III (March 2011)	Piloting and validation of the instruments
Phase IV (April-June, 2011)	Data collection
Phase V (July, 2011)	Data analysis
Phase VI (August, 2011)	Writing chapter 4&5
Phase VII (March, 2012)	Defense of the thesis
Phase VIII (April, 2012)	Corrections
Phase IX (April, 2012)	Preparing final copies for presentation to external examiner