ENVIRONMENT AND ACADEMIC PERFORMANCE OF PHYSICALLY HANDICAPPED LEARNERS IN REGULAR SCHOOLS OF RUIRU DIVISION, THIKA DISTRICT KENYA.

BY
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A RESEARCH REPORT SUBMITTED TO THE INSTITUTE OF OPEN AND DISTANCE LEARNING IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE BACHELOR OF DEGREE IN PRIMARY EDUCATION OF KAMPALA INTERNATIONAL UNIVERSITY.

NOVEMBER, 2010.
DECLARATION

I, Helen Msalari, hereby declare that this research report paper is my own original work. It is not a duplicate of a similarly published work of any scholar for academic purpose nor has it been submitted to any other institution of higher learning for the award of Certificate, Diploma or Degree. I also declared that all the materials mentioned in this paper which are not my own work have been duly acknowledged.

SIGNATURE

HELEN MSALARI

DATE

22/09/2010
APPROVAL

This research report has been submitted with my approval as the University Supervisor

SIGNATURE: __________________________

NAME: OCHIENG MOSES (Supervisor)

DATE: 22/09/2010
DEDICATION

I wish to dedicate this research to my beloved last born son Wesley Mulama, all teachers of Gatongora primary and all other family members, who directly or indirectly created an enabling environment around me to accomplish the task of this research to come up with this report.
ACKNOWLEDGEMENT

I wish to convey my special gratitude to my lecturers in the institute of Open and Distance learning at Kampala International University led by the Director of the IODS.

I also recognize the educational assessment and research center (EARC) co-coordinator Thika District.

Special thanks to education specialists, regular teachers, parents and pupils without which this research will not be.

Finally, to my colleagues at Kampala International University community for their welcoming moral support and inspiration.

May God bless them all
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ABSTRACT

This research report contains five major chapters as follows:-

Chapter 1 Introduction
The research investigated effect of environment and academic performance of physical handicapped learners in regular school and suggests solutions to these problems under recommendations in chapter five.

Chapter II. Review of Related Literature
The researcher reviewed related literature on the following sub headings:-

Types of learners with physical handicap
Orthopaedically impaired, Neurological disabilities and those with health disabilities.

The resources used to support learners with physical handicap are adaptive devices such as standing tables, hand pointers, book turners and others.

The methods of supporting learners with physical handicap under medical intervention, physiotherapy, occupational therapy.

How the learners relate to teachers and factors that lead low academic performance were also check.
Chapter II Methodology

The researcher used qualitative research approach for the study. This was appropriate as it clearly shows specific number of occurrences of variable that were investigated. Descriptive survey design was employed. The researcher used questionnaire to collect data from the teachers who interacted with the learners. Thirty schools scattered all over the division were used for the study. At least one teacher in charge of SNE sampled from these thirty schools.

Chapter 4. Findings

From the data it was found out by the researcher that the effects of environment on academic performance of the learners with physical handicap were due to lack of support from teachers, parents and peer. Negative attitude between the teachers and the learners, lack of appropriate education resources and lack of conducive environment for learning.

Chapter 5 Conclusions

The researcher concluded that the learners with physical handicap can perform well in academic work when the challenge facing them are addressed seriously especially by the government, teachers, parents and the community at large.
CHAPTER ONE

1.0 BACKGROUND INFORMATION
People with disabilities all over the world were considered socially and physically less capable. They were not easily accepted and regarded as part and parcel of the family and the community. They were neglected and rejected. They were regarded to be caused by witchcraft, curses or as a punishment from gods for wrong doing. They were isolated and their needs were not adequately provided for by the families and communities. Randik: (2000)

In some African communities they were thrown into the bush. The people of Sparta of Greece used to kill babies with distinct disabilities features. This was condemned by philosophers as Plato and Socrates. They were given names such as Cripple, Dump, Idiot, Moron and Embecile. It is the negative altitude which has made children with special needs and their families to be segregated.

Some people with individuals with disabilities started teaching them at home. Such people include St. John of Bervesly, Didynus, Juan Martin Pablo Bene of hermany.

In the 19th Century some institutions to house people with disabilities was put in place. In the institutions rehabilitation and medical care was done with the hope that the disabled would be brought back to normal life.

The emphasis has been laid time and again by the government and inclusive education whereas learners regardless of individual differences or diversity learn together in the same regular schools. It is the government's need that each and every child must go to school regardless of
After independence in Kenya, and especially after the provision of universal free primary education, the number of learners with physical handicap admitted in regular primary school increased. Despite this high enrolment, there are still effects of environment on the academic performance of learners with physical handicap in regular schools in Ruiru Division, Thika District Kenya.

1.1 STATEMENT OF THE PROBLEM
The researcher is set out to investigate environment and academic performance of physically handicapped learners. The learners with physical handicap have the following difficulties: motor functioning, communication, intellectual functioning and low academic achievement. Under motor functioning, the physical status of the child is affected and may include both legs and arms. Gross motor and fine motor abilities can be greatly impaired, thereby limiting not only movement but also their functional use as walking, jumping, writing, holding eating utensils and so on. Other physical involvements include partial or complete paralysis of the affected body parts.

Communication difficulties are experienced particularly by children who are cerebral palsied. These children have problems with muscles related to the control and production of speech and sounds. They often have labored speech and sometimes produce speech that is difficult to comprehend.

The physical handicapped are of normal intelligence, however, the cerebral palsied, some of whom have brain damage when assessed are frequently found to be performing in the mental retardation range.
The disability has a depressing effect on their academic achievement for various reasons. Most important is their ability to manipulate reading and writing materials. Constant absence from school due to illness, and in some cases, absence from class in order to attend physiotherapy sessions.

1.2 PURPOSE OF THE STUDY
The purpose of the study is to identify the effects of environment on academic performance of physically handicap learners in regular schools and suggest solutions to these problems.

1.3 MAJOR OBJECTIVE
This is to investigate the effects of environment and academic performance of physically handicapped learners.

1.4 SPECIFIC OBJECTIVES OF THE STUDY
The study will focus on the following objectives:

1. To investigate types of physical handicap learners in regular primary schools
2. To identify resources and methods used to support learners with physical handicap in regular primary schools
3. To determine the relationship between learners with physical handicap and teachers in regular primary schools.
4. To determine factors that contributes to low academic performance among learners with physical handicap in regular primary schools.
5. To identify the impact of environment on academic performance of learners with physical handicap in regular primary schools.
1.5 RESEARCH QUESTIONS
1. What are the types of physical handicap learners in regular primary schools?
2. Which are the resources and methods used to support learners with physical handicap in regular primary schools?
3. How do learners with physical handicap relate with their teachers and peers in regular primary schools?
4. What factors contribute to low academic performance on physical handicapped learners in regular schools?
5. What are the impacts of environment on academic performance of learners with physical handicap in regular primary schools?

1.6 SCOPE OF THE STUDY
The study was conducted in regular primary schools in Ruiru Division, Thika District Kenya. It was based on environment and academic performance of physically handicapped learners. It determined the following issues: types of physically handicapped learners, resources and methods used to support those learners, how they relate with teachers and others, and what contributes to their low academic performance.

It was conducted between January and July 2009.

1.7 SIGNIFICANCE OF THE STUDY
The researcher findings will help in creating awareness among the stakeholders on the effects of environment on academic performance of learners with physical handicap. The government will modify the curriculum to suit learners with physical handicap. They will adopt the curriculum of pre-service teachers so that at the end of their training. They can cater
for the “normal” and disabled children. They will adopt learning environment to cater for learners of various disabilities inclusive of those with physical handicap. They will see into it that more funds are required to cater for children with physical impairment seminars and in service courses for teachers may also help.

The parents will be made aware of the types, causes and intervention measure to alleviate the challenges these learners are facing.

It will help the students to accept their condition and manage their conditions. It will also help teachers to accept these learners in regular schools show them love, care and assist them in all the areas.

The researcher will know more on the effects of environment on academic performance of the learners with physical handicap.

It is my hope that at the end of the research, positive attitude and awareness will be created towards learners with physical handicap through the dissemination of these results.

The study was based on Bickenbach’s theory of disability and the environment (1999) which states that disability is not simply a manifestation of a person’s impairment, but rather a complex phenomenon, created in part by features of the physical and social world. It is the environment that acts to facilitate integration or contribute to isolation, influencing a person’s ability to participate in a society.

The recognition of the environment’s influence on the experience of disability and implementation of disability discrimination acts in various countries have led to the development and implementation of programmes and initiatives for improving the environment
experience by a person with disabilities.

The concept of universal design, where the underlying principle is the design of products, buildings and environment that are useable by all people (Mace Etal, 1991) Issues such as accessibility underpin the design of articles that make up the physical world, from building and forms of transportation to computer and internet access and products used in the hopes.

Integration of students with disabilities into mainstream or regular educational settings. Enabling students with disabilities to participate in a regular education setting is thought to improve rather than hinder both academic and social learning. (Center and Curry 1993. Wang and Baker 1986). Furthermore it improves their chances of participating in the future, instead of setting them on “a straight pathway to a segregated life”. (Uditsky 2002)

Schemes for the provision of aids and equipment, where individuals receive cost free or low cost equipment to help their performance of daily activities, such as self-care and mobility in and outside the house, and facilitate participation in sport, work, education and other activities.

Improvement of standards for accessible public transport. Transport is a fundamental human right. Including having ready access to safe and disability-friendly forms of public transport, but remains a common problem for people with disabilities. (AIHW 2002). There have been recent developments in Australia, such as the implementation of the disability standards for accessible public transport, passed by parliament in October 2002.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 INTRODUCTION

The definition of children with physical and health impairment has for along time been an imprecise affair with different terms such as the crippled, the physical disabled, and the physical handicapped the orthopaedically impaired and the neurologically impaired being used. Ndurumo (1993).

Public Law 94 – 143 refers to physically handicapped children as those with orthopaedic and health problems and defines them as:

Orthopaedically impaired means a severe orthopaedic impairment which adversely affects a child educational performance. The term includes impairments caused by congenital anomaly such as clubfoot. Impairments caused by disease such as poliomyelitics and impairment from other causes such as fractured, burns that can cause contractures. Other health impaired means limited strength, vitality or alertness due to Chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell, anaemia, haemophilia epilepsy, lead poisoning, leukemia or diabetes which adversely affects child’s educational performance.

Ndurumo (1993)

Kennedy (1990) of Kenya Institute of Education defined physically handicapped children as those:
With physical, neurological and chronic health impairments. They have problems in performing one or more motor activities due to muscular skeletal disorder, neurological and chronic health impairment. The motor activities affected may include movement writing and speech.

In general these are the children who require aids, wheelchairs, prostheses, helmets, book readers, page turners, writing aids adapted tables and others.

The researcher also agree with both definitions that physically handicapped children can be classified as those who have muscular skeletal disorder, neurological and chronic health impairment.

2.1. TYPES OF LEARNERS WITH PHYSICAL HANDICAP

According to Ndurumo (1993) physical impairment are classified into three major groups namely Orthopaedically impaired which includes poliomyelitis, Amputations, Arthrogryposis multiplex congenital, clubfoot, osteogenesis imperfecta, congenital dislocation of the hips, scoliosis and leprosy. The second category is the Neurological disabilities. This includes cerebral palsy, spina bilida, spinal cord injury, muscular dystrophy, childhood muscular atrophy.

The third category is those with health disabilities. This includes Epilepsy, juvenile disbets mellitus, Haemophilia, sickle cell anaemia, Asthma, and Burns.
2.2.0. RESOURCES USED TO SUPPORT LEARNERS WITH PHYSICAL HANDICAP.

According to Ndurumo Michael (1993) learners with severely handicap need adaptive device to cope in the school environment and the society at large. These devices may include standing tables, mobile boards, hand pointers, book turners, line readers incontinence aids, adapted games, special scissors and so on. These aids assist children to work. Otherwise they would remain passive or wait until the teacher comes around to perform task for them such as turn over page of a book. Show which line to read or to hold a ruler for them to draw a line and so on.

2.2.1 METHODS OF SUPPORTING LEARNERS WITH PHYSICAL HANDICAPPED IN REGULAR PRIMARY SCHOOLS.

Most of the conditions leading to physical impairment are congenital, children are born with and they have no cure.

However, with adequate intervention strategies, these children can be helped to lend full and productive lives in the society.

Intervention is the support given to learners with special needs to help them cope up in the society. Intervention is carried out in order to prevent or minimize the effect of impairment on child development. Ndurumo (1993). The researcher looked at the intervention in medical and
psychological intervention.

MEDICAL INTERVENTION

Children with physical, neurological and particularly those with health impairment need medical supervision from time to time. Some of the children have seizures or convulsions, especially children with neurological impairments. Those who have health impairments may need to be given drugs at subsidized rate per day, while others may require rest periods. The importance of the following is vital doctor's instructions. Their educational programmed, especially daily scheduled, needs to be structured in such away that children with health impairment get an adequate amount of rest and time to take drug which are vital for them. To prevent disabilities, emphasis should be placed on immunization, primary health care and improved nutrition. Ndurumo (1993).

PHYSIOTHERAPY

The professional who administers physiotherapy is known as physiotherapist. According to Goldensen (1978), the physiotherapist evaluates individual motor functioning capabilities and their limitations. After that physiotherapy exercises are designed to alleviate pain, correct or minimize muscular deformities increase strength and mobility and improve general health. Physiotherapy exercise is important because disability may reduce the functional use of the affected part and make the individual passive.

According to Golden (1978). Physiotherapist also train teachers and parents in the amputation and elevation skills, use of braces, crutches, prosthesis and other assistive and supportive
devices. The physiotherapy may design a programmed for each child for the teacher and where necessary for the parents to use with the child and monitor progress from time to time.

**OCCUPATIONAL THERAPY**

According to Langley (1979), the occupational therapists role is to facilitate arm, head, hand and mouth movements based on the evaluation of children’s functional development level. The best time to start working with children is when they are young and in pre-school programmed and the child’s social status with his peers. Another factor could be functionality or none.

Functionality of the affected body parts. The more non-functional the affected, the severe the psychological effect it has no the child.

Pless and Reghmann (1971) reviewed they literature on the psychological and social conclusions:- The more severe the physical handicap the greater the risk of psychological and social maladjustment. Children with permanent disorders tend to have frequent psychological maladjustment compared to children whose impairment is transitory or short term. Children who are chronically ill tend to be more maladjusted compared to those who are healthy. Children who are chronically ill tend to have more school related social problems, isolated and tend to be more truant.

Regarding how physically handicapped individuals react to their handicaps, Jourard (1958) observed that any of these reasons might occur. Denial or refusal to acknowledge that the disability exists or that it improves any limitations whatsoever. Resignation or giving up seeing the situation as hopeless and teaching to help on self or be helped. Regarding
oneself as the victim of injustice perpetuated by other and pushing the others by hostility or withdrawal, showing arrogance or rebellion, rejecting help or empathy, making that is why it is better for early identification of learners with physical impairment.

The curriculum should be modified to suit learners with physical impairment.

2.3 RELATIONSHIP BETWEEN LEARNERS WITH PHYSICAL HANDICAP AND TEACHERS IN REGULAR PRIMARY SCHOOLS

There has been poor attitude between the non-handicapped and the handicapped learners. They have been labeled “wasiqijeza” in Kiswahili meaning “those incapable of doing anything”. Thus an attitude was immediately applied to the disabled even before their competence was taken into account. Ndurumo (1984) observed that the attitudes are powerful because they permeate the society and depending on the severity of the impairment, are more handicapping than the handicap itself. Thus it is little wonder that a social intervention between a disabled person and a non-disabled person is usually strained. Lewandowski and Cruickshank (1980) listed the variables that affect the psychological development of physically disabled children. These are the severity of the disability: the age of its onset, the degree of it visibility, the support and encouragement the child gets from his parents and others, the attitude of people towards the disabled, aggressive demands and remaining aloof viewing the disability as punishment for real or imagined infraction of family or societal rules. Becoming dependent and demanding because remaining helpless seems the only way to assure attention, affection and care.

According to the researcher’s view, we should avoid generalization about the disabled that they cannot develop psychologically. Instead we should encourage interaction with peers and teachers.
2.4 FACTORS THAT CONTRIBUTE TO LOW ACADEMIC PERFORMANCE

Academic achievement of physically handicapped children follow the same pattern as the intellectual functioning since it cannot be said that physically handicapped children are mentally retarded as a result of their disability. It cannot be said either that their academic achievement is significantly below an acceptable level. However it should be noted that the handicap has a depressing effects on their academic achievement for various reasons. Most important is their ability to manipulate reading and writing materials, constant absence from school due to illness and in same cases absent from class in order to attend physiotherapy sessions.

Children whose arms and fingers are not affected by paralysis and whose cases are not associated with brain damage are from the educational point of views mildly to moderately involve. As such they can perform as well as their non-handicapped counter parts provided the curriculum and environment are reviewed to accommodate their needs. This should help them to handle materials like their peers.

Those with brittle bones or muscular dystrophy should be fitted with devices to help them. The society is advised to accept them like any other children. Ndurumo(1993).

2.5 THE SCHOOL ENVIRONMENT AND ITS EFFECT ON LEARNERS WITH PHYSICAL HANDICAPPED.

According to Ndurno Michael (1993) Barrier – free access means that the building must be accessible to the physically handicapped who use wheel chairs, crutches and calipers. A part
from the buildings being accessible pavements and other physical or structural environments also need to be accessible. It is time to say that educational programs are not accessible until the buildings and classrooms are accessible.
CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This Chapter contains the outline of the methods and the procedures that the researcher used to obtain the relevant data. The data is pertaining to the environment and academic performance of learners with physical handicapped in regular schools of Ruiru Division, Thika District – Kenya.

3.1 RESEARCH DESIGN

The researcher adopted both qualitative and quantitative research approach was appropriate as it clearly show a specific number of occurrences of variables investigated. It was also easy to be used in a short time. The data collected was easily analyzed, summarized interpreted and subsequently presented in labels of frequencies.

Descriptive survey design was employed for the study because it helped in knowing the environment and academic performance, existing conditions and situations of physically handicapped learners in regular schools.

3.2 SAMPLING PROCEDURE

Simple random sampling was used to get the number of schools. This was convenient way of getting good information because the sample was small and time for carrying out the study was limited.

The names of 90 (ninety) primary schools targeted for the study were written in ballot box. 30
(thirty) ballot papers were picked of the box one by one and each time recorded the name at the school that were picked. This automatically qualified to provide respondent for the study.

In getting the sample population, the researcher used purposive sampling techniques where he deliberately chooses the respondent he thought would best serve the purpose of the study.

From the 30 (thirty) schools that were sampled, one teacher in charge of learners with special needs in education was sampled.

3.3 SAMPLE POPULATION
The study targeted all the 90 (ninety) regular primary schools in the Ruiru Division. In each and every school a teacher in charge of learners with special needs in education was targeted.

The teachers were preferred because they are involved in handling the learners directly and they stay with the learners more than the parents. The teachers come in contact with the effects of environment on academic performance of all the learners with physical handicapped in regular schools.

They can provide way forward to alleviate these challenges. They can implement the policies provided by the government on the matter.

Thirty schools were sampled from the ninety schools. Each of the thirty schools was represented by one teacher in charge of special needs. This was representative enough as it represented one third of the population schools.
3.4 INSTRUMENT

The researcher made questionnaire was used for this study because this was a valid tool. The targeted schools were far apart from one another and widely distributed all over the division and more so the study was to be accomplished within a limited duration of time.

The questionnaire had three sections namely introduction preliminaries and the main body of the questionnaire. The introduction was all about the purpose of the study. The preliminary section was to gather information on the respondent. The questionnaire had Yes / No responses. It had also open ended responses. It had twelve questions which were based on all the five objectives and research questions of the study.

The research tool was tested for validity and reliability by carrying out pilot study on few schools from neighboring Division of Thika District.

Each instrument was administered on the sampled thirty schools and data collected was critically analyzed.

3.5 PROCEDURE

The researcher was compelled to carry out researcher and write -up as one of the requirement for the award of Bachelor in Special Needs Education.

The procedure was as follow:-

The researcher thought of three titles. There were taken to the supervisor, they were thoroughly discussed and one was chosen as being the most reseachable. The researcher went
into the books where he got a theory where he based his research as it was required for a comprehensive research.

The proposal and draft questionnaire was prepared. These were taken to the supervisor for approval which was done after thorough going through by the supervisor.

The pre-testing (piloting) of the questionnaire in some of the Divisions in Thika District for validity and reliability was carried out and it emerged successful. The researcher seeks permission.

The data was collected form the thirty schools organized and analyzed in statistical techniques.

The write-up was done for the submission of the research report to the supervisor.

3.6 DATA ANALYSIS

According to the concise Oxford Dictionary as cited in Peter (1996), data means facts assumptions or premises from which interferences may be drawn; research essentially deals with generating, collecting, collating, analysis data and drawing interference from them.

According to Hitchcock and Hughes (1989), analysis is what the researchers do with data in order to develop explanations of events so that theories and generalizations about the causes, reasons and processes of any pieces of social behavior can be developed.

Analysis looks for major properties of any event or set of events. For the purpose of this study, statistical analysis was adopted using mathematical techniques on the research approach that was quantitative.

The results of this study were tabulated in frequencies and percentages. The tables were also presented into figures in form of bar graphs.
4.0 INTRODUCTION

In this chapter, the data are presented and analyzed. The results of the study are recorded and the raw data extracted from the questionnaire. The data are arranged according to the objective of the study when presenting the results from the table the frequency and percentage are used. This was later converted into figures.

Table 4.1: Shows there are learners with physical handicap in regular schools

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20</td>
<td>66.7%</td>
</tr>
<tr>
<td>No</td>
<td>10</td>
<td>33.3%</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

The table above clearly shows that there are learners with physical handicap in the regular schools that 66.7%.

Table 4.2: Population of learners with physical handicap in regular primary schools

19
<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>70</td>
<td>58.23%</td>
</tr>
<tr>
<td>Boys</td>
<td>50</td>
<td>41.67%</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

The result from the table clearly shows that 58.23% of the learners with physical handicap are girls and 41.67% are boys.

Figure 4.1: Population of learners with physical handicap in regular primary schools
Table 4.3: Shows type of learners with physical handicap

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthopedic</td>
<td>18</td>
<td>60%</td>
</tr>
<tr>
<td>Neurological</td>
<td>5</td>
<td>17%</td>
</tr>
<tr>
<td>Health Disabilities</td>
<td>7</td>
<td>23%</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

The table above shows that most of the learners with physical handicap are falling under orthopedic disabilities 60% followed by Health disabilities 23% then Neurological disabilities 17%.

Figure 4.2: Shows types of learners with physical handicap
Table 4.4: EDUCATIONAL RESOURCES USED IN TEACHING LEARNERS WITH PHYSICAL HANDICAP

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resources</td>
<td>8</td>
<td>44.4</td>
</tr>
<tr>
<td>Teaching &amp; learning resources</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>Compensatory devices</td>
<td>3</td>
<td>16.6</td>
</tr>
<tr>
<td>Communication devices</td>
<td>1</td>
<td>5.7</td>
</tr>
<tr>
<td>General Education resources</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100</td>
</tr>
</tbody>
</table>

The above item was intended to find out the various resources used to teach learners with physical handicap.

It's clearly evident from the above tabulated data that most of the resources used are mainly Human, Teaching and Learning resources which is 44.4% and 33.3% respectively. However, since resources which are used by minimal are compensatory resources 16.6% and communication resources 1%. The general education resources such as models and specimen are not used at all.

Figure 4.3: Educational resources used in teaching learners with physical handicap
Table 4.5: Shows how the educational resources are acquired

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locally made</td>
<td>20</td>
<td>66.7</td>
</tr>
<tr>
<td>Commercially bought</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

The tables above shows that most of the resources used in teaching learners with physical handicap are locally made 66.7% although few are commercially bought as it is indicated in the table 33.5

Figure 4.4: Shows How the Education Resources are Acquired
Table 4.6: Shows support to learners with physical Handicap

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Support</td>
<td>16</td>
<td>59%</td>
</tr>
<tr>
<td>Medical Support</td>
<td>11</td>
<td>41%</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>100%</td>
</tr>
</tbody>
</table>

The above item was meant to investigate the type of support given to learners with physical handicap. It reveals that 59% of the learners get educational support given by teachers and 41% get medical support.

Figure 4.5: Shows the type of support given to learners with Physical Handicap
Table 4. 7: Generally Teachers Love and friendly to physical handicap learners

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>12</td>
<td>44</td>
</tr>
<tr>
<td>Agree</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>Not sure</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>2</td>
<td>7.5</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>2</td>
<td>7.5</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>100</td>
</tr>
</tbody>
</table>

The table above shows how teachers relate with physical handicap. Most of the respondents, 44% disagree with the statement by saying that teachers do not relate well with learners with physical handicap because of lack of awareness and the skills since most of the teachers in regular schools are not trained on special needs education. 30% of the respondents agree with the statement that teachers relate well since they were not keen observers. There were also mixed reaction since 7.5% of the respondents strongly disagree and 7.5% of the respondents strongly agree.
Table 4.8: How relationship between teachers and learners with physical handicap can be strengthened

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>20</td>
<td>66.7</td>
</tr>
<tr>
<td>Guidance and counseling</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

The question above shows how the relationship between teachers and learners with physical handicap can be strengthened in regular schools. Most of the respondent that is 66.7% revealed that through training teachers in special needs education the relationship between teachers and learners with special needs will be strengthened since they will have the skills and technical knowledge on how to handle them. Guidance and counseling 33.3% can also assist in
creating awareness about the needs of learners with physical handicap and how they can be assisted.

Figure 7: 4.8. Relationship between teachers and learners with physical handicap can be strengthened.

Table 6: 4.9. Shows environmental factors affecting the physical handicap learners.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings</td>
<td>16</td>
<td>53.3</td>
</tr>
<tr>
<td>Pavements</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Teachers</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

The above item was intended to find out the environmental factors that affect learning of
learners with physical handicap. It is evident that buildings 53.3% are not modified to accommodate learners with physical impairment in the school that is paths contribute 33.3%. The way teachers handle the learners with physical handicap also affect them. This contributes to 23%.

Figure 8: Shows environmental factors affecting the physical handicap learners.
Table 7: 4.10. Shows how the environment can be modified to suit learners with physical handicap.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of ramp</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Widening of doors</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Leveling of the ground</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

The above item was intended to find out how the environment factors can be modified to suit learners with physical handicap. It was revealed that most of the respondent knew how the environment can be modified.
Figure 9: 4.10. Shows how environment can be modified.

Table 8: 4.11. Shows how physical handicap learners reform in academic works

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above average</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>Average</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>Below average</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

It shows that learners with physical handicap perform average in academic work.
The above item was intended to find out how teachers can improve the academic performance of learners with physical handicap. It was evident that 33.3\% of the respondent talked of modification of the environment to suit the needs of the learners. 20\% of the respondent gave adoption of the curriculum. 16\% talked on guidance and counseling.

Training of teachers and provision scored 10\% respectively while medical intervention on the learners with physical handicap scored 6\% from the respondent.
Figure 11: 4.12. shows how to improve the academic performance.
CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION.

5.0 CHAPTER OVERVIEW
Disability, even though once regarded as a curse to humanity is not inability. The concern is on the environment and academic performance of physical handicapped learners in regular schools. This prompted a research which has now unearthed causes for the same and has established the attitudes of people towards the education of the physical disabled. The discussion in this research picks the major issues in the findings and describes them based on tabular presentations of data. Recommendations are made in line with the environment and academic performance of the learners, attitudinal concern and the alleviation of the problem of disability.

5.1 DISCUSSION
According to the literature review there has been poor altitude between the learners with physical handicap, the teachers and other learners. They have been labeled and given name such as “Wasiojiweza”. Those incapable of doing anything. While according to data collected, the information from the public analyzed and interpreted is clear evidence that 75% of the teachers had a positive attitude towards the disabled as they satisfied the researcher by filling the questionnaires as required. However, 25% did not respond and this could be attributed to negative attitude towards the disabled. A small percentage claimed that they did not have the physical handicapped children in their
schools. This was 33.3% whereas 67.7% said they had some attending schools. Out of these learners with physical handicap, 70% are girls while 30% are boys. It is most likely that those children in schools are only the mildly impaired ones as there are no cases of severely physically impaired children. The small percentage showing school attendance indicates that most of these children are in the village due to ignorance and negative attitude towards the disabled by the community.

On how such children interact with peers, it was pointed out that their interaction with peers is very poor and they are isolated apart from being emotional. This is an indication that they have negative self-concept.

Majority of the teachers confirmed that it was most certain children with physical handicap are in the villages. However, some of the teachers maintained that such children are not in the village. However, those who confirmed their presence in the village said that their parents were hiding them from the public as they were of no use to the community. This shows negativity and ignorance of some parents as far as the disabilities are concerned. It appears that there is need for more sensitization so that all the parents can take up the advantage of education for all in Kenya.

In the review of related literature it showed that the academic achievement of physical handicapped children follows the same pattern as the intellectual functioning. The data collected and analyzed also concur with the above statement; the research analysis revealed that 26% of the children with physical handicap who are already in school perform below average in academic work. 50% of the children with physical handicap are analyzed to perform average and 24% perform above average in academic work.

This poor performance is attributed to inadequate teaching and learning facilities,
lack of in-service courses for teachers on the appropriate teaching methods, lack of encouragement from teachers, parents and peers and possibly very severe cases of physical handicap that need special schools. The current curriculum does not favor children with physical handicap and needs to be addressed adequately. For the purpose of placement most teachers felt that these children should be segregated and placed to learn in special schools. This is a notion that is strongly opposed to the policy of inclusion.

The majority of resources to be used by learners with physical handicap, according to Nderumo Michael (1993) are not put into practice in most schools due to lack of funds. It's clearly evident from the tabulated data that most of the resources are mainly human and teaching and learning resources which is 44.4% and 33.3% respectively. However, some resources that are used by minimal are compensating resources 16.6%. The general education resources such as models and specimen are not used at all to support learners with physical handicap. Most of the resources used in teaching learners with physical handicap are made locally 66.7%, although few are commercially bought as it is indicated in chapter four.

The researcher also came up with the following about the involvement of parents in supporting learners with physical handicap. It shows that most of the parents are involved in creating awareness to the learners by giving guidance and counseling to them on how they can cope with their condition. However, some respondents affirmed that the parents are involved in the provision of educational resources such as adaptive devices. Few parents participate in school projects such as construction of buildings and leveling of the grounds for ease of mobility for learners using wheel chairs and crutches.

Most of the supports given to the learners are educational support 59% given by teachers and 41% medical support from medical personnel when they are taken to the hospitals.
The information gathered indicated that most teachers had not got any training in handling children with physical handicap in class hence they do not relate with them well. Very few teachers are trained to handle such children. This is an indication that the personnel to handle learners with special needs in education especially those with physical handicap are inadequate. Furthermore, it was realized that the number of teachers who had got adequate training are negligible. Hence these children are not handled by qualified personnel.

However, some teachers felt that children with physical handicap should learn in regular schools as most of the regular schools would offer them natural environment and in most cases make them stay close to the families hence not deprived of their parental love. It was realized that most teachers encourage interaction among children with physical handicap and their peers. Despite these, teachers' effort to encourage interaction some acted otherwise. This was an indication that small number of teachers held negative attitude towards the disabled and reasoned that the "normal ones" would not accept children with physical handicap easily. Those who encourage interaction generally argued that interaction would promote sharing of ideas among the disabled and the non-disabled children hence improve their academic performance.

Most teachers asserted that there were no environmental adaptations such as ramps for children using wheel chairs and crutches in their respective schools. This is an indication that most of our regular schools have learning environments not conducive for the children with physical handicap.

To improve the above, funds should be allocated for environmental adaptation such as construction of ramps at the entrances for easy mobility particularly for those with wheel chairs, modified latrines or toilets amongst others.
5.2 CONCLUSION

It is a pity to note that children with physical handicap have suffered negligence for years and this explains why they have not been even fully enrolled in schools. Most of their parents do not want them to be exposed and even if they happen to be enrolled in schools, teachers do not show concern to them as they hold negative attitude towards them. They are neglected and mistreated by members of the community.

The learning environment does not cater for their needs and teachers use poor teaching methods to handle them. It is time to note that these children are discriminated against and they have negative self-concept in themselves. In view of the above, the researcher would like technology to look into their plight and ensure the availability of differentiated curriculum among other things. The researcher hopes that the recommendations given in this research will be of great assistance.

5.3 RECOMMENDATION

From the data collected and analyzed, the researcher strongly feels that he has made some recommendations which if taken into consideration, inclusive education in Kenya will be a success and that parents and children with physical handicap will be part and parcel of the society in which they live in. They will therefore be able to contribute to the nation building like all others.

The recommendations are as follows:

- The parents, teachers and the community at large should further be sensitized to enroll children with physical handicap into regular schools.
• That the provincial administration should take a leading role through the sub-location and location leaders to ensure that homes, which have children with physical handicap, are identified and such children made to go to schools close to them.

• That all stakeholders in the educational fields should encourage interaction among children with physical handicap and non-impaired one.

• That parents of children with physical handicap should accept the condition of their children and give them equal love and opportunities as their non-impaired peers.

• Those children with physical handicap should be made to develop wholesomely so that their potentialities are used to the community as the non-impaired ones.

• That the government of Kenya should adopt the curriculum for pre-service teachers so that it caters for both “normal” and the disabled children.

• Those regular schools should have adapted learning environments to cater for learners of various disabilities inclusive of those with physical handicap.

• That public Baraza should be held countrywide and specialists in the field of special needs education be invited to facilitate.

• That more funds should be allocated by the government to cater for children with physical handicap when allocating funds to boost free primary education.

• That seminar and in-service courses should be organized to induct the regular teachers on how to handle children with physical handicap.

• Those small homes should be established near regular schools to ease the burden of going far distance which is a major contributing factor to lack of schooling.

• That every regular school should have one personnel trained in special needs education.
• That there should be provision of free medical service to those children as most parents cease to take their children to hospital due to lack of money.

• That there should be home visits by EACRS-coordinators and social workers to give guidance and counseling to parents and children with physical handicap.

• Those teachers should accept these children, show them love, care and assist them in all areas.
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APPENDICES
APPENDICES A. INSTRUMENTS
RESEARCHER MADE QUESTIONAIRE

INTRODUCTION

This questionnaire is intended to gather information on how environment affect the academic Performance of learners with physical handicap in regular primary schools. The information obtained from the respondent shall be treated with high level of confidentiality. In giving of the responses use ticks or statements where appropriate.

PRELIMINARIES

Information on the respondents.

(1) Gender: Male ☐ Female ☐

(2) Level of Education

Certificate ☐ Diploma ☐ Degree ☐
(3) Do you have any training in SNE  YES  No  

(4). Give any other information you see appropriate which is not covered in the questions above.

________________________
________________________

QUESTOINAIURRE
1. Do you have learners with physical handicap in your school?
   A. Yes  B. No.

2. If yes in question one above, how many do you have?

3. Which type of learners with physical handicaps are found in your school?
   A. Leg affected  B. Hand affected  C. Both leg and hand

4. List five education resources you use when teaching physical handicap learners in your class
   A. __________________________________________
   B. __________________________________________
   C. __________________________________________
   D. __________________________________________
   E. __________________________________________

5. How do you acquire the education resources cited in question 4 above?
   A. __________________________________________
   B. __________________________________________
   C. __________________________________________
   D. __________________________________________
6. What support do you give learners who are physically handicapped in your school?
   A. 
   B. 
   C. 
   D. 
   E. 

7. Generally, teachers love and are friendly to physically handicapped.
   A). strongly agree
   B). Not sure
   C). Disagree
   D). Strongly disagree

8. How can you strengthen the relationship between teachers and learners with physical impairment?
   A. 
   B. 
   C. 
   D. 
   E. 

9. What are the environmental factors affecting the physically handicapped learners in your school?
   A. 
   B. 
   C. 
   D. 
   E. 

10. How can the environmental factors above be modified to suit learners with physical handicap?
11. How do learners with physical handicap perform in academic work?
   A. Above average □  Average □  Below average □

12. As a teacher, what are some of the recommendations you would make to improve the academic performance of physically handicapped learners in your school
   A. ____________________________________________
   B. ____________________________________________
   C. ____________________________________________
   D. ____________________________________________
   E. ____________________________________________