RESOURCES AVAILABILITY AND LEARNING TENDENCIES OF PUPILS WITH ORTHOPEDIC AND NEUROLOGICAL IMPAIRMENTS IN SELECTED PRIMARY SCHOOLS, KISUMU WEST DISTRICT, KENYA

A Thesis
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In Partial Fulfillment of the Requirement for The Degree Master of Special Needs Education.

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DECLARATION A

"This thesis is my original work and has not been presented for a degree or any other academic award in any University or Institution of learning".

DDHAMBO OCHIENG JAMES		28/11/13
Name of the Candidate	Signature	Date

DECLARATION B

I confirm that the work reported in this was carried out by the candidate under my supervision.

Dr. Kayimbo		30/11/2013
Name of the Supervisor	Signature	Date

DEDICATION

I dedicated this study to my family members, my father Mzee John Odhiambo, my sister Marian Odinga, my mother Serfine, My wife Caroline and my children; Clare, Julian, Augustine and Serfine for their moral and spiritual support they offered to me through this work.

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May the most precious God bless the work of every hand who participated in his noble course.

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ABSTRACT

This study was carried out to establish the extent of the availability of resources in primary schools in Kisumu West, Kenya; to examine the level of learning tendencies of the orthopedic and neurologic impaired learners in Kisumu West, Kenya, as well as to asses the relationship between resources availability and the learning tendencies of the orthopedic and neurologic impaired learners. A total of 132 respondents participated in the study. These were all teachers of the learners being studied. The data was collected by distributing questionnaires to respondents and the research instruments used were face sheet to gather data on the respondent's demographic characteristics and research devised questionnaires to determine the levels of resource availability and the learning tendencies of pupils with orthopedic and neurological impairments. Using a descriptive correlation survey design to carry out the study, the data were analysed using the mean and the Pearson's product moment correlation. It was found out that the resources existed to a small extent, the learning tendencies of the orthopedic and neurologic impaired learners were satisfactory, and there existed a significant relationship between resources availability and the learning tendencies of the orthopedic and neurological impaired learners. It was concluded that the resources in primary schools in Kisumu West were inadequate, that physical disability does not necessarily mean inability, and that resource availability is a strong predictor of pupil's desire to learn, to perform better and to love schooling. It was thus recommended that the government should provide more resources to the primary schools; that parents and guardians should work hand in hand with teachers to give more guidance to the orthopedic and neurologic impaired learners so that they could develop more positive attitude towards learning.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

In Africa, some countries have not set up meaningful resources to assist physically disabled children in improving their academic progress. Quite a large number of the orthopedic children are found in war-torn countries like Somalia, Sudan, Congo, Namibia and Mozambique where they are neglected (Warunguru, 2002). Yet, if catered for they can have meaningful lives. This study was carried out in Kenya with an assumption that if there are adequate relevant resources for the physically disabled children in a school and the concerned children have access to them, it can make the disabled learners have a positive attitude towards schooling, like or love school and perform well.

1.1.1 Historical perspective

Historically, formal education was introduced in Kenya by the Christian missionaries and the Arabs. Though the Arabs came to Kenya earlier than the Christian missionaries, the Arabs were more interested in trade than in establishing schools. It were the Christian missionaries who first set up schools. Prior to that, there existed informal education whereby the elders taught the young ones all the things they believed were important in the life of an individual such as work, morals and culture (Warunguru, 2002). In African indigenous societies, the physically disabled were considered to be curse to society and such children were either usually kept indoors or behind the houses. In educating the young, much care was not paid to them.

With the advert of formal education however, the Christian missionaries urged parents to take all children to school, irrespective of their physical state or stature. Since by then many people had not yet recognized the importance's of education, few people took children to the school and the one they took were those who were physically fit and healthy. The orthopedic and neurological impaired children were left at home to do domestic chores such as digging, cooking, looking after animals, washing utensils, among others. Many times the parents of such children thought that they had been bewitched by the bad –hearted people to produce such children.

With increased globalization in the 1980s and early 1990s however, matters started taking a different shape. The government of Kenya, non –government organizations and the civil societies started sensitizing the masses on the importance of educating all children irrespective of their gender and physical state. It became a strong issue when fine primary education was introduced and all parents were ordered to take all their school-going children to school, or also face punishment. This generally enabled many orthopedic and neurological impaired children accessed schools; there have been a challenge of the resources such as the special chairs, tables for them to use especially those who are terribly handicapped. This study was thus carried out to assess the extent to which the availability of adequate and relevant resources can explain the orthopedic and neurologic impaired pupils learning tendencies, specifically in the primary schools of Kisumu West district, Kenya.

1.1.2 Theoretical perspective

This study was based on the hierarchy of needs theory propounded by Abraham Manslow. This theory links the two variables of this study. The theory states that human needs are in a certain order with physiological needs and safety as the basic needs before others could be met. The orthopedic and neurologic impaired learners therefore need basic resources such as page turners, wheel chairs, special desks', among others. By these needs are met and their safety guaranteed, they can be motivated to study at school

1.1.3 Conceptual perspective

In this study, resource availability was the independent variable, yet learning tendencies of its orthopedic and neurologic impaired pupils was the dependent variable. Resource availability is the extent to which the relevant manpower and physical items such as wheel chairs, desks, walking sticks, are in place. The orthopedic impaired learners are the pupils who have problems related to their bones or Shelton such that they find it un-easy to walk, run touch or do work. The neurologic are those who have problems related to their nervous system. Learning tendencies in the context means the way or extent to which the pupils have a positive attitude towards schooling, love education, and how they perform at school.

1.1.4 Contextual perspective

With the advert of free primary education in Kenya, coupled with massive sensitization of the citizens, many parents

have taken their children to school, some of their children are physically alright yet others are handicapped whereas they have been admitted in schools and whereas they have been counseled and guided in education –related matters, it is claimed that some schools do not have or do have inadequate equipment such as which would be so relevant and useful to the neurologic and orthopedic impaired learners. As a result, some of these learners continue schooling but with difficulty and others attend about for the sake of it, and others abandon school especially those in rural areas and those with less educated parents and guardians. This investigation was thus made to assess the extent of availability of relevant resources for the orthopedic and neurological impaired learners and their learning tendencies in Kisumu West Kenya.

1.2 Statement of the Problem

Orthopedic and Neurologic impaired learners usually have difficulty in performing basic functions such as grasping objects with their hands, moving arms or legs in a full or even limited range of motion. These issues lead them to difficulties in class work; hence they cannot compete fairly academically with their counterparts who are normal. In line with study performance, these orthopedic and neurologic Impaired Learners still cannot match their counterparts because the regular teachers have no skills and resources to use in helping them. These children need special instructions and should be given extra time to compensate the delayed time they take to reach school because of their sluggish mobility.

The regular teachers do not include them in activities due to fear of the accidents which may cause breakdown of their bodies. So they are left to stay a side when others are busy in activities like running; jumping among others. They fear such children might fall down during such activities and hurt themselves.

The population of such learners are rising. Worse still, most of them join class one when they are over-aged. Even those who are lucky to join at the appropriate age perform with difficulty in exams because human and physical resources suited to improve their study progress are inadequate or completely lacking (Waruguru, 2002).

Therefore the problem is that the relevant resources for the orthopedic and neurological impaired learners seem to be inadequate in the primary schools in Kisumu West district and the learning tendencies of those pupils (the orthopedic and neurological impaired) seem to be unsatisfied. The study was thus carried out to examine the extent to which the relevant resources were available and to determine the level of the learning tendencies of the orthopedic and neurological impaired pupils

1.3 Purpose of the study

The study intended to explore how the availability of appropriate resources affect the learning of orthopedic and neurologic impaired learners in Kisumu district primary schools, Kenya.

1.4 Research objectives

This study was carried out:

1. To establish the extent of resources availability in selected primary schools in Kisumu West district, Kenya.
2. To investigate the level of performance of the orthopedically and neurologically impaired learners in the selected schools in Kisumu West.
3. To establish if there is a relationship between resources availability and the learning of orthopedic and neurologic impaired learners in selected primary schools in Kisumu West, Kenya.

1.5 Research Questions

This study was carried out to answer the following questions:

1. What is the extent of availability of resources in the selected primary schools in Kisumu West, Kenya?
2. What is the level of performance of the orthopedically and neurologically impaired learners in the selected primary schools in Kisumu West Kenya?
3. Is there a relationship between resources availability and the learning of orthopedic and neurologic impaired learners in selected primary schools in Kisumu West, Kenya?

1.6 Hypothesis

Ho: There is no relationship between the extent of resources and the learning of the orthopedic and neurologic impaired learners in Kisumu West District, Kenya.

1.7 Scope

i. Geographical scope

This study was conducted in selected Government aided primary schools in Kisumu West District, Kenya. The District is situated in the Western region of Kenya along the shores of Lake Victoria. It comprises of two administrative Divisions namely Kombewa and Maseno Divisions. Kisumu West District is home to a hundred and fifty duly registered and Government aided primary schools. The selected schools formed the representative sample of the government aided primary schools which formed the sample frame of the study.

iii. Content scope

The variables in the study were the resources (physical and human) as independent variables and the learning of orthopedic and neurologic impaired learners as dependent variable.

Further, the form of the relationship between these variables was to be determined to establish the kind of relationship that existed between the independent and dependent variables as used in the study.

iv. Time scope

The data for the study was collected in the period of April, 2012 to June 2012 after that, the data was analysed and then the report was written.

1.8 Significance of the study

The findings of this study was intended to provide information beneficial to the furtherance of quality education for all without bias or prejudice to people with orthopedic and neurologic impairments by

identifying strengths and weaknesses in resource allocation for the education of pupils with these conditions.

To the government and non government organizations, it would provide information on resource availability or lack of it to help in resource allocation and distribution.

To the policy makers in the education sector, information would be provided to help in strengthening human resource capability to deal with these conditions in the learning institution.

Handlers of pupils with these conditions would find a yard stick for measuring the extent to which their perception affected these pupils and adjust where need arose to promote the goals of quality and equitable education for all.

Finally, the future researchers would use the outcome of the study to embark on a related study as well as eliciting new knowledge and ideas regarding the relationship between physical and human resources and performance of orthopedic and neurological impaired learners.

CHAPTER TWO
REVIEW OF LITERATURE

2.0 Introduction:

This chapter presents the aims on which its study was based, the conceptual framework, as well as the related literature, presented as per the objectives of the study

2.1 Theoretical Review

This study was based on the hierarchy of needs, motivation theory Maslow presented human needs in a hierarchy, with physical needs and safety as essential before others could be met. When children came to school hungry or frightened about a situation on the way to school, they would not be able to learn. If the classroom was an unpredictable, unsafe place where students were being ridiculed, they were more concerned with protecting themselves than with studying or participating in learning activities. Many schools or individual teachers adopted the concept of students' rights. These rights were meant to protect and support the students' right to learn by guaranteeing safety from physical and emotional dangers. Therefore providing resources to orthopedic and neurologic impaired learners was evidence of friendship and safety and could enhance their learning activities. This theory emphasized that an individual could think of higher order needs when lower order needs such as safety have been met. Thus , for the orthopedic and neurologic impaired learners, their lower needs include the essential resources such as wheel chairs, special tables, special desks, ramps, prostheses, page turners, among others the availability of such resources could lead to satisfaction and finally to having a positive attitude towards schooling.

Resource Availability

Orthopedic and neurologic impaired learners require specialized resources such as wheelchairs, prostheses, helmets, book readers, page turners, writing aids, rest equipments, special tables and desks in order to make their learning given their conditions easier if not possible (Kennedy, 1990).

In structured classrooms, teachers arrange not only the physical environment, but also the daily events, materials and strategies to be used in teaching and managing the children. It is different from a chaotic open ended environment. The structured environment implies an environment that is arranged and is conductive to learning and instructional aspects that are well delineated in order to foster learning and behavior that is in accord with the teacher's laid down expectations, Kauffman (1973). The author wrote generally on resources. No mention was made of the orthopedic and neurological impaired learners.

There are materials that seem to suggest that the physically handicapped children do not exist, usually they are deprived of the same opportunity for healthy growth and development as is available to the vast majority of the members of the large society in which he lives,

Research conducted by the National Institute of Child Health and Human Development (2007), shows that students with disabilities who use intellikeys increase performance by 50% to 60% over a six month period allowing them almost equal to their peers in the regular education classes, (Kenya Government Special Education Annual Report, 1996). This study was however not carried out in Kisumu West Kenya.

A virtual keyboard is on the screen that allows the student to enter or navigate the internet. This device is ideal for students with spinal cord injuries and other special needs, (Kenya Government Report, 1988).

Akinwumiju (1987) found that school facilities were provision of capital projects such as staff common room, teachers and pupil's furniture had significant relationship with pupil's academic performance. In the same angle,the finding agreed with Oyedeji (2000), Adegboyejo (1999) and Hallak (1990) whose studies revealed that physical facilities impact significantly on quality of students' instruction and thereby affecting the performance of students in the school.

Adesina (1980) was made research in mexico and investigated that variations in students academic performance can be related to the availability of physical facilities such as furniture and other related materials which are capital projects in nature. An institution that is well equipped with school infrastructure such as buildings (staff offices, library, lecture room and so on) has the capacity of encouraging staff and students to engage in teaching and learning process, class size determines the academic performance of pupils. An overcrowded class is normally determined in terms of more pupils assigned to the building than it is designed to accommodate (Folge & Breda, 1990; Duffy's (1992) research shows that overcrowding causes a variety of problems and the findings indicated that pupils in overcrowded schools and classrooms do not score as high on achievement tests as pupils in non-overcrowded schools and classrooms. Corcoran et al, (1988) reported that overcrowding resulted in a high rate of absenteeism among teachers and pupils. For the teachers, overcrowding results in stressful and unpleasant working conditions. Overcrowded schools and classes are noisier, and create more non-instructional duties and paperwork, and that without question, they inhibit teaching and larning (Rivera- Batiz and Marti
1995).

Text books are scarce and expensive especially at secondary level. It is estimated that only fifteen percent of the total instructional materials required are supplied by the government and or community. Therefore pedagogical styles are basically didactic and students at all levels spend lots of time copying notes from the chalkboard into their books, supplementary readings are rare and to a larger extent unrelated to their environments and life styles. It is estimated that 5Q% of all secondary schools have no permanent classrooms, while 40 and 10 percent have permanent and semi permanent classrooms respectively. Further on average one to two student share a single desk and teachers have no rooms (office) for preparations, so many are forced to work on verandas specially the community schools.

Providing text books to students who lack them seems to be an obvious way to improve educational performance. Textbook provision is almost universally accepted as an effective education policy, even by those who doubt the effectiveness of increased school spending (Glewwe, Kremer, Moulin and Sylvie, 2008). Empirical results show that providing textbooks to rural schools in Tanzania did not increase average test scores, although it did increase the scores of students with high initial achievement. The latter findings suggest that the official textbooks are ill-suited for the typical students and may reflect more fundamental problems with centralized educational systems, heterogeneous students' populations and entrenched elite power.

There is conclusive international evidence that the school library does contribute to academic achievement within schools (Lance, Welborn, Hamilton-Pennell, 1993; Todd, 1995; Lance, Rodney and Hamilton-Pennell, 2000). Perhaps the most powerful recent evidence of the impact of school libraries on the educational programme comes from the large

library. Power project of the late 1990s in the United States library grants were given to 700 schools in 19 school districts for resources, staff and accommodation to set up or improve their school library programmes and then the impact on various aspects of the educational programme was assessed (Haycock, 1999), the various participant schools throws light on the value of the school library in the school) and Tanzania government supported the community secondary schools for construction of library in rural areas(ward school).

Schools with very few facilities, in their discussion of the findings of the library Power project, Hopkins and Zweizig (1999) put well the case for school libraries: The library profession believes that authentic learning, involving the use of information to think critically, solve problems and to create personal meaning, is central to increasing learning for all pupils.

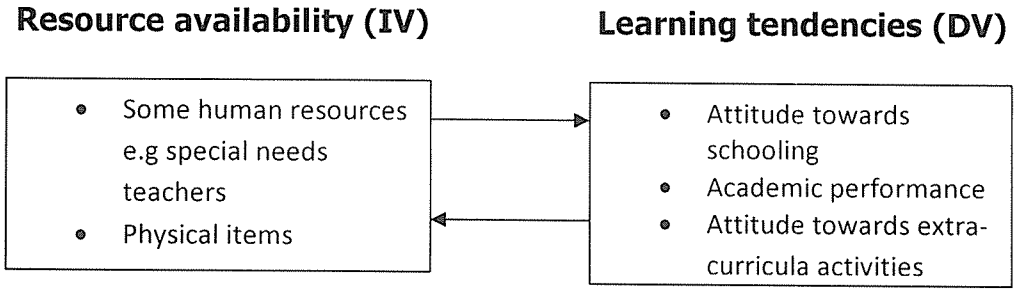
Buni(1993) found out that teachers' experience has no effect on teacher effectiveness, yet textbooks and other facilities, school administration, finances, and teacher training impact much on effectiveness. On the other hand, Jumba (1992), claimed that many schools in his area of study lacked some of the basic facilities. And for those schools that had some school facilities their utilization was not adequate. Odiya (2009) found no significant difference between the use of school facilities among private and public secondary schools in Tanzania.Most of the school has library shown by mean of 2.51 of high interpretation but experience of few school facilities.

Abdulkareem (2003) ,conducted research in Jacata on quantity and quality, as well as materials for teachers and students in adequate number, must be available for use to ensure school success. Okunamiri (2003) found out that whereas facilities were adequately provided in

selected schools in Ilemela Mwanza, facilities were not effectively utilized and this led to poor performance in schools.

2.2 Conceptual framework

Figure 1 Relationship between the independent variable and the dependent variable



The conceptual framework reveals that the adequacy of relevant resources such as the special teachers and physical resources can determine the learning tendencies of the orthopedic and neurologic impaired learners, if for instance physical items are available in schools, it can make the learners develop a positive attitude towards schooling.

2.3 Related literature

Public law 94-142, refers to the physically handicapped children as those with Neurological, Orthopedic and Health problems. This problems would partially or total render it difficult though not impossible for such children to go about their activities with as much ease as physically normal or healthy children. It further refers to orthopedic as impairment caused by congenital anomaly like club foot and absence of some members.

Kennedy (1990) conducted a study to determine the causes of physical disability among 1,2,3,7 children enrolled in eight schools. For

the physically disabled, Polio was the leading cause at 66.9% of the children, followed by Cerebral palsy at 12.5%, congenital deformities at 7%, spinal bifida at 3%, amputation at 2.6% and finally muscular dystrophy stood at 2% of all the children under study. In the study, 922 conditions were listed as mild handicap accounting for 73.9% of all cases. Where as this is relevant to the current study, it did not address the orthopedic and neurological impaired learners in Kisumu West, Kenya, hence present study.

Examples of orthopedic disabilities include poliomyelitis, amputations, arthrogryposis, multiplex congenital, club foot, osteogenesis imperfeta (brittle bones), and congenital dislocation of the hips, scoliosis or curvature of the spine, leg-calves perthes due to neurological spinal cord injury, muscular dystrophy, and childhood muscular atrophy (Karen, 1997).

Neurologic and orthopedic children are the children with physical, neurological and chronic health impairments. They have problems performing one or more motor activities due to muscular-skeletal disorder, neurological and/or chronic health impairments. The motor affected may include; movement, writing and speech. These children to him require aids, wheelchairs, prostheses helmets, and book readers, page turners, writing aids, rest equipment, special tables and desks as physical resources vital in the learning process of the children with such conditions. (Kennedy, 1990)

Academic performance of the physically disabled follows the same pattern as intellectual functioning. Since it cannot be said that such children are mentally retarded as a result of disability (although some score in the mental retardation range), it cannot be said either that their academic achievement are significantly below and acceptable level.

However, it should be noted that 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 classes in order to attend physiotherapy sessions cannot make them to perform well academically, (The Education for All Handicapped Children Act (p. 143 - 146).

According to Kennedy's (1990) academic survey on performance of the orthopedically handicapped children on average, orthopedically Handicapped Children enrolled in special schools were doing very well or better than children in regular schools.

For instance, Joy town primary school ranked fifth in 1986 in a municipality of 16 schools, third in 1987 in a municipality of 16 schools and fifth in 1988 in a municipality of 17 schools. Other primary schools surveyed were doing well in comparison with regular schools. At the secondary school level, results for Joy town secondary school showed that children were doing comparatively better than most regular schools. For instance, from 1983 to 1987 the school prepared 126 children for Kenya Certificate of Education examinations. When the school first prepared its students for the examination in 1983, none of the candidates attained divisions one and two, only four children passed in the third division and eleven in the fourth division, while eight failed. When the school enrolled its children for the examination 5 years later in 1987, all the children passed, three in division one, 13 in division two, 11 in division three, and eight in division four.

Relationship between Resources availability and of Learning of Neurological and Orthopedic children

Many authors such as Ruttle, 1979; Kennedy, 1990; Chayya, 1997, among others note that the availability, quantity and quality of physical and human resources can affect learning of pupils or students. No matter whether the learners are mentally or physically sound or not, they can be affected either in the same or in different ways Chayya (1997) for instance claims that in a school where learners are exposed to different quality learning resources such as visual aids, learners are more likely to learn better than those who are not exposed to such learning resources.

Much as the author's submission might be relevant to this, the submission was not specifically about orthopedic and neurological impaired children in Kenya, hence, the current study.

In a surprising note however, according to Kenya government (1988), many primary schools in Kenya were equipped with enough and relevant items such as text books qualified teachers despite this was not performance of learners in the national examinations was not good in many schools. This suggests that the availability of resources does not necessarily predict improved performance of the learners. Other factors might be determining.

School physical facilities include classrooms, furniture, special rooms such as laboratories, workshops, store rooms, libraries, and staff rooms according to Nwanko. He further asserts that if facilities are not available and or not enough, school effectiveness could never be achieved.

Subbs (1995), on the contrary, in his study found out that the availability and utilization of resources may have no significant effect on

school effectiveness but the environment where the school is located and parental or community involvement in school activities have a greater impact. The provision of capital projects such as staff common room, teachers and pupils furniture had significant relationship with pupils' study performance (Akinwumiji et al, 1987).

Summary of gaps identified

1. Many authors presented their views in a generalized manner. They did not write from the context of the orthopedic and neurogical impaired pupils in Kisumu West Primary Schools.
2. Some studies that were carried out on the orthopedic and neurological impaired learners were carried out long ago. Therefore, what the researchers found out ten or five years ago may not necessarily be the same findings today in 2013.

CHAPTER THREE
METHODOLOGY

3.0 Introduction

3.1 Research Design

This study used a cross sectional survey and descriptive correlation survey design, taking a quantitative approach. It was cross-sectional in the sense that the data were collected once at a time from the respondents. It was survey since it employed a reasonably big number of respondents.

It was descriptive correlation since it established the relationship between the independent and dependent variable.

3.2 Research Population

The target population of the study included teachers in the 25 public primary schools in Kisumu west district, Kenya. Public schools were chosen because of the rampant media reports that the resources in many public primary schools are inadequate despite the increasing numbers of pupils in schools because of universal primary education.

It was perceived that it has a way it affects the learning of pupils, more so those with orthopedic and neurological disorders.

3.3 Sample Size

All the 132 teachers from ten public primary schools was taken participate the study since their number was not very big. Also the desire to collect data from many respondents so that the findings would be confidentiary generalized to the population necessitates using universal sampling.

3.4 Sampling Procedures

There were 25 public schools in Kisumu west district at the time the study was carried out. Since they were apart from one another and their number was big, a sample of ten primary schools was taken using probability sampling. After getting the ten schools, universal sampling was used for the respondents. Since teachers were the respondents and yet their number was not so big, they were all included in the sample.

3.5 Research Instruments

The research tools utilized in this study included the following:

(1) Face sheet to gather data on the respondent's demographic characteristics (gender, marital status, age, educational qualification and years of work experience).

(2) Researcher devised questionnaires to determine the levels of resource availability and the learning of Orthopedic and Neurologic impaired learners.

3.6 Validity and Reliability of Research Instruments

Content validity was taken care by subjecting the researcher devised questionnaires on resources and learning levels and tendencies judgment by the content experts who were three senior research lectures, who estimated the validity on the basis of the their experience. Then the researcher used the finding of Amin (2005), that for the validity of the instrument to be accepted as valid, the average index should be 0.7 or above, the study had content validity index of 0.9 that showed that it was valid.

The test - retest technique was used to determine the reliability (accuracy) of the researcher devised instruments to five qualified

respondents. One from each of the five schools . These respondents were not included in the actual study, In this test - retest technique, the questionnaires was administered twice to the same subject. The test was reliable and the trait being measured was stable since the results were consistence and essentially the same in both times.

3.7 Data gathering procedures

Before the administration of the questionnaires:-

1. An introduction letter was obtained from the college of Higher Degree and Research for the researcher to get approval to conduct the study of primary schools in Kisumu West District. Authority from the Heads of the schools where the study was to be conducted was then secured.
2. The researcher got a list of the qualified respondents from the school authorities in charge and selected them through systematic random sampling from the list to reach the minimum required sample size.
3. An explanation about the study was then given to the respondents after which they were requested to sign the informed consent form (Appendix III).
4. The researcher then made available enough questionnaires for distribution to the respondents to ensure no scarcities arose in the course of data collection.
5. Selection of research assistants, who assisted in the data collection, briefed and oriented them in order to be consistent in administering the questionnaires, was then made.

During the Administration of the Questionnaire

1. The respondents were requested to answer all the items in the questionnaire questions.
2. The researcher and/or his assistants mutually agreed with the respondents on the date of collection of the questionnaire which never exceeded two weeks from the date of receipt of the questionnaire. In some instances, the respondents filled and returned the questionnaires in minutes of waiting by the researcher and/or his assistants.
3. On getting the questionnaires back, thorough checking was done over them to see if all were answered.

After the Administration of the Questionnaires

The data gathered was collated, encoded into the computer and statistically treated using the Statistical Package for Social Sciences (SPSS).

3.8 Data analysis

The frequency and percentage distribution was used to determine the demographic characteristics of respondents.

The mean was applied for the levels of resource availability and level of learning.

The following mean range was used to arrive at the mean of individual indicators and interpretation.

A. For the Extent of Resource Availability

Mean Range	Response Mode	Interpretation
3.26 - 4.00	More Than Enough	Very Satisfactory
2.51 - 3.25	Adequate	Satisfactory
1.76 - 2.50	Few	Fair
1.00 - 1.75	None	Poor

B. For the level of learning

Mean Range	Response Mode	Interpretation
3.26 - 4.00	Strongly Agree	Very Satisfactory
2.51 - 3.25	Agree	Satisfactory
1.76 - 2.50	Disagree	Fair
1.00 - 1.75	Strongly Disagree	Poor

The Pearson's linear correlation coefficient was used to assess the relationship between the availability of resources and the learning of orthopedic and neurological impaired learners in Kisumu West Primary School.

3.9 Ethical considerations

To ensure confidentiality of the information provided by the respondents and to ensure that practice of ethics in this study was complied with, the following activities were put in place by the researcher:

1. Seeking permission to adopt the standardized questionnaire on resources and study performance through a written communication from the author.

2. The respondents' schools were coded instead of reflecting their respective names.
3. Permission through a written request to the concerned officials and to the head teachers of primary schools included in the study was sought.
4. The respondents were requested to sign the informed consent form.

5. Acknowledgement was made of the authors quoted in the study. The same was done to the authors of the standardized instrument through citations and referencing.
6. The findings of the study were presented in a generalized manner.

3.10 Limitations of the Study

In view of the following threats to validity, the researcher claimed an allowable 5% margin of error at 0.05 level of significance. The following were the limitations of the study.

1. Less than 100% response rate was experienced due to reasons on the part of the respondents that ranged from sickness to refusals. This necessitated reservation of more respondents by exceeding the minimum sample size. This situations arose despite the effort made to request by constant reminders to respondents to attempt all questions in the research tools provided.
2. The researcher experienced inconsistencies at the beginning of administration of research tools due to research assistants' explanation that was prone to misunderstanding on the part of the respondents. This was however corrected by clarifications by the researcher.

3. The research instruments were not standardized; hence a validity and reliability test was carried out to reaffirm reasonable measurements of the research variables.
4. There could have been practices of dishonesty, personal biases and uncontrolled setting of the study on the side of the respondents which were never noticed by the researcher.

CHAPTER FOUR
DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction:

The collected data were coded and entered into spreadsheet. The spreadsheet was then imported into statistical package of social scientists (SPSS) for analysis. The results as per the research questions came up as a result of the data that was analyzed. Presentation of the demographic characteristics of the respondents was first made as shown in table I

4.2 Research Question 1:

Table 1 below gives the socio-demographic characteristics of respondents with regards to gender, marital status, age, educational qualifications and years of experience as teachers.

Table 1: Socio-Demographic Characteristics of the Respondents

Category	Frequency	Percentage
Gender		
Male	57	57
Female	43	43
Age		
18 – 19	0	0
20 – 39	50	50
40 - 59	50	50
60 and above	-	-
Marital Status		
Married	70	70
Single	10	10
Divorce	9	9
Widowed	11	11
Educational Qualifications		
Certificate	61	61
Diploma	11	11
Bachelors	8	8
Special Education	14	14
Masters	6	6
PhD	-	-
Others(to be specified)	-	-
Years of Experience as a teacher		
1 year and below	12	12
2 - 4 years	15	15
5 - 7 years	49	49
8 years and above	24	24

Source: primary data, 2013

Based on table I, it is revealed that 57% of the respondents were male and 43% Female. As for marriage, 70% were married, 10% were single, 9% were divorced and 11% were widowed. The respondents' age ranged between 20 years and 59 years. Majority of the teachers in this study had certificate level of education (61%) while only 6% had Masters as their highest level of education with none having attained PhD level.49% of teachers had work experience of between 5-7 years, 24% of respondents had work experience of 8 years and above, 15% of teachers had work experience of between 2-4 years 12% of teachers had work experience of 1 year and below.

The findings about the demographic characteristics of respondents reveal that the primary schools in Kisumu West, Kenya, are dominated by qualified teachers, thus observing one of the policies in the Ministry of Education that a primary school teacher must have a minimum of certificate of education. Teachers were 132 from 10 primary schools

The extent of availability of physical as well as human resources in the selected schools under study are presented in table 2.

Research question 1

What is the extent of availability of resources in primary schools in Kisumu West, Kenya?

Table 2: Mean for the availability of resources in primary schools in West District

Items	Mean	Interpretation of the extent
Text Book	3.00	Big
Books Leaders	2.50	Small
Accessibility Latrines	2.34	Small
Safe playground	2.20	Small
Modern Class Rooms	1.95	Small
Class Ventilation	1.80	Small
Wheel Chairs	1.76	Small
Special teachers	1.51	Very small
Health facility	1.17	Very small
Physiotherapists	1.17	Very small
Special tables	1.33	Very small
Special desks	1.00	Very small
Ramps	1.00	Very small
Space accommodation	1.00	Very small
Prostheses	1.00	Very small
Helmets	1.00	Very small
Page turners	1.00	Very small
Writing aids	1.00	Very small
Rest equipments	1.00	Very small
School transport	1.00	Very small
Total Mean	**1.48**	**Very Poor**

Source: Fieldwork

Table 2 shows that on average, the relevant resources for the orthopedic and neurological impaired learners in Kisumu West district Primary Schools were available to a very small extent. This means the relevant equipment

for the teaching of learners who have limb and mental-related challenges were very few.

The items that were identified to be very few in the primary schools under study were the special teachers, health facilitation, phyrotherapists, special tables and desks, ramps, helmets, among others. This reveals that many schools either find it hard to buy them or do not care to have them since such orthopedic and neurological challenged learners are usually not very many. It might hence be perceived to be non-cost effective for the schools. This also reveals that the government of Kenya has not yet given much attention to such learners.

Research question 2

What is the level of learning tendencies of the orthopedic and neurological impaired learners in primary schools in Kisumu West?
On this objectives, the findings are presented in table 3

Table 3: Learning tendencies of the orthopedic and neurologic impaired learners.

In the school, the orthopedic and neurological challenged learners.	**Mean**	**Interpretation**
1.Do well in class	3.22	Satisfactory
2.Join secondary school after class 8	3.22	Satisfactory
3.perform well in the national exams	3.75	Very satisfactory
4.Are usually promoted from one class to another	2.17	Fair
5.Complete the whole primary school cycle	2.40	Fair
6.Come early at school	3.29	Very satisfactory
7.Follow school routine and do remedial work	2.71	Satisfactory
8.Are usually given career guidance	3.19	Satisfactory
9.Are motivated by teachers	3.34	Very satisfactory
10.Rank high in the district primary school academic assessment	3.04	Satisfactory
11.Usually ask questions in class	3.34	Very satisfactory
12.Participate in some co-circular activities	2.41	Fair
13. Do assignment on time	2.92	Satisfactory
14.Freely mix with other pupils in class	2.54	Satisfactory
Grand mean	**2.92**	**Satisfactory**

Source: Fieldwork

Based on table 3, 14 items were used to determine the learning tendencies of the orthopedic and neurologic impaired learners. In the responses from the respondents, seven were evaluated to be satisfactory, four as fair, and another four as very satisfactory. This resulted in an average mean of 2.92 which implied that the learning tendencies of orthopedic and neurologic learners in these schools were satisfactory.

The researcher established that the performance of the orthopedic and neurologic impaired learners in the National exams to be with the mean of 3.75. This implied that their performance was very satisfactory. This shows that being neurologic does not necessarily mean that one will perform poor in class. The researcher also established how the orthopedic and neurologic impaired learners ask questions in class. The respondents indicated that their general asking of questions in class was very satisfactory with the mean of 2.34. This shows that these learners have high self esteem.

Also, the researcher established the level of the orthopedic and neurological impaired learner's being motivated by teachers. The mean of 3.34 implied that the teachers' motivation to these pupils was very satisfactory. In other wards, despite the few special teachers for the orthopedic and neurologic pupils, the teachers highly motivate the learners to study and to enjoy school. This could be because most of the teachers were qualified. A qualified teacher usually motivates his or her learners.

The respondents also indicated that most of these pupils come to school early (mean of 3.29), which was very satisfactory. By not coming to school late, it shows that the learners either are interested so much in schooling or fear to reach late to be punished by the teachers.

The researcher established class work performance of the orthopedic and neurologic impaired to be with the mean of 3.22. This implied their class work was good. The implication of this satisfactory performance is that being disabled does not necessarily mean being unable to perform well, so disability does not mean inability.

The researcher established the extent to which the orthopedic and neurologic impaired learners transit to the secondary schools, after the

completion of their primary schools to be with the mean of 3.22. This implied that many of them form secondary schools.

Regarding the item of completing the whole primary cycle, it was found out that they fairly did. In other wards, the number of those who complete the entire primary cycle without dropping out of school was not so big and not so small. This means that whereas some pupils complete the entire primary school cycle, others do not complete.

The orthopedic and neurologic impaired learners were not largely victims of class repetition. This could be because of the government education policy in Kenya which forbids class repetition. In Kenya the head teachers of public primary schools who force their learners to repeat classes due to poor academic performance are interdicted if they are discovered.

Research question 3:

Is there a relationship between the availability of resources and the learning tendencies of the orthopedic and neurologic impaired learners in primary schools in Kisumu West, Kenya?

The findings on this research question are presented in table 4

Table 4 Relationship between resources availability and the Learning of the orthopedic and neurologic impaired pupils.

Variables Correlated	r-value	P-value	Interpretation of Correlation	Decision on Ho
Resource availability vs. Learning of orthopedic and neurologic learners	0.928	0.000	Significant	Rejected

Source: primary source.

Table 4 reveals that the relationship exists between the availability of resource and the learning tendencies of the neurologic and orthopedic impaired learners, and that relationship is significant. In other words, the adequacy of the resources so much affects the way the orthopedic and neurologic impaired pupils learn.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS.

5.1 Introduction

This chapter presents the discussions, conclusions as well as the recommendations. Recommendations were made based on the findings of the study.

5.2 Discussion

Research question 1: What is the extent of the availability of resources in primary schools in Kisumu West, Kenya?

The findings of the study on this research question revealed that the resources were available to a very small extent. In other words, the resources were, on average not many. This could be attributed to the fact that the schools under study were public. Public schools usually get inadequate funding from both the government and sometimes from the donors. This finding is similar to the observation of Karen (1997) who lamented the inadequacy of both physical and human resources in the education system in many African countries. The similarity between the findings of the present study and Karen (1997) is observation could be due to the country's limited economic resources.

Secondly, as Glow (2008) observes, many African countries have not yet given much attention to some minority groups. The orthopedic and neurologic impaired are among the minority groups that are not cared for a lot. In some instances, some parents perceive them as curses from their God or from the witch, hence ignoring them. This may probably be

one of the reasons why the relevant resources for such children are very few in the primary schools.

Research question 2: what is the level of the learning tendencies of the orthopedic and neurologic impaired learners in primary schools in Kisumu West?

On this research question, the findings indicated a satisfactory level of learning tendencies. In other words, the orthopedic and neurologic impaired learners learn well, are committed and have interest in studying. The possible cause of this could be due to sensitization of the masses by the government through the mass media such as radio and television, as well as the news papers. Through the mass media, parents are usually urged to take their children to school and counsel them to love schooling, no matter their physical state or stature.

It was found out that the orthopedic and neurologic impaired pupils perform well in class as well as in the national examinations. This could be because of the guidance and counseling they get from parents, guardians and the schools authorities it could as well be due to the desire for them to prove their worth, to show that they can perform equally or more than the physically fit and mentally. fit children. This finding does not differ much from waniguru (2002) who claimed that it is foolish for parents not

to take their physically handicapped children to school, that research has shown that in some instances, physically handicapped children perform better than the physically fit children.

The finding that the pupils are highly motivated by the teachers reveals that the teachers in the primary schools in Kisumu West District are qualified, usually a qualified teacher has the techniques of handling well

the learners to motivate them to love school. It could also be due to the fact that the majority of teachers as per table 1 are adults and are

It is also important to note that many countries including Kenya are striving to attain the eight millennium goal by the year 2015. One of the goals is about achieving universal primary education. Since the government of Kenya is striving to achieve 100% universal primary education by 2015, it has infected in many resources to ensure that all children of school going age, whether they are physically deformed or not, access primary education cycle and complete it. Because of this, many measures have been put in place including legislation whereby primary education is compulsory for the school going children. A parent who fails or refuses to take his or her child to school is punished. This could have made parents argue, guide and counsel their children, including the orthopedic and neurologic impaired, to develop a positive attitude towards schooling. This view does not differ much from the submissions of KISE (2010).

Research question 3: is there a relationship between the availability of resources and the learning tendencies of the orthopedic and neurologic impaired learners in Kisumu west primary schools?

The results on this research question are that the relationship exists between the availability of resources and he learning tendencies of the orthopedic and neurologic impaired learners in Kisumu West primary schools and that relationship is significant. The meaning in this is that the availability of resources highly affects the way the learners develop their attitudes towards schooling.

5.3 Conclusions

The following conclusions were made based on the findings of the study on each research question.

1. To a small extent resources were available in primary schools in

Kisumu West Kenya. This shows that despite the efforts of the government of Kenya in promoting education for all, resources in schools are a challenge.

2. The level of learning tendencies of the orthopedic and neurologic impaired learners was satisfactory. This shows that physical disability does not necessarily mean inability.

3. There was a significant relationship between resource availability and the learning tendencies of the orthopedic and neurologic impaired learners in primary schools in Kisumu West district, Kenya. This shows that the adequacy of relevant resources is one of the strong predictors of pupils desire to learn or study, good performance, as well as having a positive attitude towards education in general.

5.4 Recommendations

The following recommendations are made.

1. The government needs to provide more physical and human resources in the primary schools. This was based on the findings that the resources were inadequate.
2. Parents, guardians and teachers need to work hand in hand to guide and counsel the orthopedic and neurologic impaired learners more for them

to have a very satisfactory level of learning tendencies though the findings was that their learning tendencies wee satisfactory there is need for the learning tendencies to become very satisfactory.

3. Since it was established that resources available significantly affect learners, learning tendencies, there is need for both resources and learning to be improved in Kisumu West district. This can be done by the government of Kenya

Areas for further study

Since the study established that performance is not affected significantly by availability of resources, I wish to recommended further study on the following;

1. The influence of learning environment to learning patterns of orthopedic and neurologic impaired learners.
2. The influence of each human and physical resources to the learning of the orthopedic and neurologic impaired learners.

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APPENDIX IA

TRANSMITTAL LETTER

KAMPALA INTERNATIONAL UNIVERSITY

Ggaba Road, Kansanga
P. O. Box 20000 Kampala, Uganda
Tel: +256-414-266813 / +256-772 322560
Fax: +256-414-501974
E-mail: admin@kiu.ac.ug
Website: www.kiu.ac.ug

OFFICE OF THE HEAD OF DEPARTMENT, EDUCATION, OPEN AND DISTANCE LEARNING
COLLEGE OF HIGHER DEGREES AND RESEARCH (CHDR)

Date: 3rd May, 2012

RE: REQUEST OF ODHIAMBO OCHIENG JAMES MSEN/15624/ 112/DF TO CONDUCT RESEARCH IN YOUR ORGANIZATION.

The above mentioned is a bonafide student of Kampala International University pursuing Masters in Special Needs Education.

He is currently conducting a research entitled **"Resource and Learning of Pupils with Orthopedic and Neurological Impairments in Selected Primary Schools In Kisumu West District Kenya. "**

Your organization has been identified as a valuable source of information pertaining to his research project. The purpose of this letter is to request you to avail him with the pertinent information he may need.

Any information shared with him from your organization shall be treated with utmost confidentiality.

Any assistance rendered to him will be highly appreciated.

Yours truly,

Dr. Ssemugenyi Fred
Head of Department,
Education, Open and Distance Learning (CHDR)

NOTED BY:
Dr. Sofia Sol T. Gaite
Principal-CHDR

APPENDIX IB

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-[illegible]
254-020-310571, [illegible]
Fax: 254-020-318245, [illegible]
When replying please quote
secretary@ncst.go.ke

[illegible]
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: NCST/RCD/14/012/806

Date: 29th June 2012

James Odhiambo Ochieng
Kampala International University
Kampala, Uganda

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Resources and learning of pupils with orthopaedic and neurological impairments in selected primary schools in Kisumu West District, Kenya,*" I am pleased to inform you that you have been authorized to undertake research in **Kisumu West District** for a period ending 31st **December, *2012*.**

You are advised to report to **the District Commissioner and the District Education Officer, Kisumu West District** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

DR. M. K. RUGUTT, PhD, HSC
DEPUTY COUNCIL SECRETARY

Copy to:

The District Commissioner
The District Education Officer
Kisumu West District

APPENDIX IC

MINISTRY OF EDUCATION

Telegrams
Telephone Kisumu (057) 2022620
When replying please quote

DISTRICT EDUCATION OFFICE
KISUMU WEST DISTRICT
P.O. BOX [illegible]
PAW- AKUCHE.

12th 2012

REF: KWD/TSC/361532/54

Ochieng' James Odhiambo
TSC/361532

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION
JAMES CHIENG' ODHIAMBO – TSC/361532.

The above [illegible] undertake a research [illegible] Masters Degree at Kampala International [illegible]

You are hereby [illegible] programme.

DANIEL K. MOSBEI
DISTRICT EDUCATION OFFICER
KISUMU WEST.

Cc: The District Commissioner
Kisumu West.

APPENDIX ID

OFFICE OF THE PRESIDENT

Telegrams: DISTRICTER, HOLO
Telephone: 0202674771
When replying please quote
Email: dckisumuwest@yahoo.com

OFFICE OF THE DISTRICT COMMISSIONER
KISUMU WEST DISTRICT
P. O. BOX 4
PAW- AKUCHE

REF: KSW/ ADM/3 VOL. I/113

11th September, 2012

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION:

This is to confirm that Mr. James Odhiambo Ochieng of Kampala International University, Uganda, has been authorized to carry out a research on "*Resources and learning of pupils with orthopaedic and neurological impairments in selected primary schools in Kisumu West District*" up to 31st December, 2012.

Kindly accord him the necessary assistance.

G. B. KITIYO
DISTRICT COMMISSIONER
KISUMU WEST

cc

The District Education Officer
KISUMU WEST.

APPENDIX IE

Transmittal Letter for the respondents

Dear Sir/Madam,

Greetings!

I am a candidate for Masters in Special Needs Education (MSNE) at Kampala International University with a thesis on **RESOURCES AVAILABILITY AND LEARNING TENDENCIES OF PUPILS WITH ORTHOPEDIC AND NEUROLOGICAL IMPAIRMENTS IN SELECTED PRIMARY SCHOOLS IN KISUMU WEST DISTRICT, KENYA**. Within the context of this academic requirement, may I request your assistance by being part of this study?

Please respond to the questionnaires and kindly do not leave any item unanswered. Any data from you shall be for academic purposes only and will be kept with utmost confidentiality.

Thank you very much in advance.

Yours faithfully,

Odhiambo Ochieng' James.

APPENDIX I

CLEARANCE FROM ETHICS COMMITTEE

Date.....

Candidate's Name.....

Reg.# .....

Course.....

Title of study.....

.....

.....

Ethnical Review Checklist

The study reviewed considered the following

_____ Physical safety of human subjects.

_____ Psychological safety.

_____ Emotional Security

_____ Privacy

Written request for author of standardized instrument.

_____ Coding of questionnaires/anonymity/confidentiality

_____ Informed Consent

_____ Citations/authors recognized

Results of ethical review

_____ Approved.

_____ Conditional (to provide the ethics committee with corrections)

_____ Disapproved/submit proposal

Ethics committee (Name and signature)

Chairperson .....

Members .....

APPENDIX II

INFORMED CONSENT

I am giving consent to be part of the research study of Mr. Odhiambo Ochieng' James that will focus on; Resources and Learning of Orthopedic and Neurological impaired pupils in Kisumu West District Primary schools.

I shall be assured of privacy, anonymity and confidentiality and that will be given the option to refuse participation anytime.

I have been informed that the research is voluntary and that the results will be given to me if I ask for it.

Initials: .....

Date: .....

APPENDIX III

FACE SHEET: SOCIO - DEMOGRAPHIC CHARACTERISTIC OF THE RESPONDENTS.

Direction: Please provide information about yourself. Kindly tick or fill out the blank space of each option.

Gender: Male _____ Female _____

Age:

20 – 39 Years _____

40 – 59 Years _____

60 Years and above _____

Marital Status: Married _____ Single _____Divorced _____

Widowed _____

Education Qualification:

Certificate: _____

Diploma: _____

Bachelors: _____

Masters: _____

Special Education: _____

PhD: _____

Others (Please specify)

_____

Years of Experience as a Teacher:

6 Months – 1 Year: _____

2 Years – 4 Years: _____

5 Years – 7 Years: _____

8 Years and above: _____

QUESTIONNAIRE TO DETERMINE THE EXTENT OF RESOURCES AVAILABILITY

(For both administrators and Teachers)

Direction 1: Please use the rating guide provided below with reference to the availability of resources in your school for the orthopedic and neurologically impaired learners.

Response Mode	**Score**	**Description**
More than enough	(4)	Very Satisfactory
Adequate	(3)	Satisfactory
Few	(2)	Fair
None	(1)	Poor

AVAILABILITY OF PHYSICAL RESOURCE

1. **Books**

_____ 1. Text Books to students

2. **Classroom**

_____ 2.1. Ramps at the door entrances.

_____ 2.2. Space accommodation.

_____ 2.3 Classes Ventilations.

_____ 2.4 Modern class room.

3. **Furniture**

_____ 3.1 Special desks.

_____ 3.2. Special tables in classrooms.

_____ 4. Wheelchair.

_____ 5. Prostheses.

_____ 6. Helmets.

_____ 7. Book leaders.

_____ 8. Page Turners.

_____ 9. Writing Aids.

_____ 10. Rest Equipment.

_____ 11. Accessible latrines.

_____ 12. School transport (buses, truck and van) adapted for Physical Handicapped.

_____ 13. Safe play ground for the students.

_____ 14. Health Facility in the school to assist the physically Handicapped.

HUMAN RESOURCES

_____ 15. Teachers with special needs education training.

_____ 16. Physiotherapist near or in the school.

QUESTIONNAIRE ON THE LEVEL OF LEARNING OF TENDENCIES OF ORTHOPEDIC AND NEUROLOGIC IMPAIRED PUPILS

Direction 2: Please use the rating guide provided below with reference to the level learning of the orthopedic and Neurologically impaired learners in your school. Kindly use the scoring system below.

Response Mode	**Score**	**Description**
Strongly agree	(4)	Very satisfactory
Agree	(3)	Satisfactory
Disagree	(2)	Fair
Strongly disagree	(1)	Poor

_____ 1. In this school, the orthopedic and neurological impaired learners: do well in class work.

_____ 2. Join secondary school, after class 8

_____ 3.Orthopedic and neurologic impaired perform well in the national Exams.

_____4.. Follow school routine: come early at school and do remedial work.

_____5. Rank high in district primary schools academic assessment.

_____6. Are usually given career guidance

_____7. Are motivated by teachers

_____8. freely mix with other pupils in class

_____9. freely mix with teachers

_____10. Usually ask questions in class

_____11.are usually promoted from one class to another

_____12. Complete the whole primary cycle.

APPENDIX IV

Validity of the questionnaire

Content validity Index; thus

$$CVI = \frac{RQ}{TQ}$$

CVI = Content Validity Index

RQ = relevant Questions = 140

TQ = Total Number of Questions =153

$$CVI = \frac{CVI_1\,(51) + CVI_2\,(49) + CVI_3\,(50)}{IQ\ 153}$$

1st Lecturer $= \frac{RQ}{TQ} = \frac{51}{51} = 1$

2nd Lecturer $= \frac{RQ}{TQ} = \frac{49}{51} = 0.9607$

3rd Lecturer $= \frac{RQ}{TQ} = \frac{50}{51} = 0.9803$

$$= \frac{2.941}{3}$$

$$CVI = \underline{0.980}$$

APPENDIX V

Researcher Curriculum Vitae

To document the details of the researcher, his competency in writing a research and to, recognize his efforts and qualifications, this part of the research report is thus meant. The researcher's bio – data is categorized as follows:

Personal Profile

Name	:	Odhiambo Ochieng' James
Gender	:	Male
Nationality	:	Kenyan

Educational Background

Bachelors of Special Needs Education (K.I.U) - 2009

Diploma in Special Needs Education (K.I.S.E) - 2003

Primary Teachers certificate (Murang'a T.T.C) – 1993

Kenya Certificate of Secondary Education (Ambira Boys) – 1991

Work Experience

Assistant Head teacher - **6 years** - Dago Kanyagaya Primary School

Senior teacher - **14 years** - Pith Kabonyo and Omuya Primary School.