

**AN INVESTIGATION INTO THE PROVISION OF SUPPORT SERVICES FOR LEARNERS WITH PHYSICAL
DISABILITIES IN THE TWO SELECTED SCHOOLS IN KISUMU EAST DISTRICT, KENYA**

BY

WACHIANGA J. O. WASHINGTON

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Declaration

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

Sign _____

Date _____

Wachianga J.O. Washington

E55/12995/05

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

Sign _____

Date _____

Dr. Nelly W. Otube

Department of Special Education

Sign _____

Date _____

Dr. Isabella Musyoka - Kamere
Educational Foundations Department

DEDICATION

To my late mother, Mary Consletah Obonyo.

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TABLE OF CONTENTS

	Page
Declaration	ii

Dedication.....	iii
Acknowledgement.....	iv
Table of Content.....	v
List of Tables.....	ix
List of Figures.....	x
Abbreviations and Acronyms.....	xi
Abstract	xii

CHAPTER ONE: INTRODUCTION .

1.1. Background to the Study.....	1
1.2. Statement of the Problem.....	4
1.3. Purpose of the Study.....	5
1.4. Objectives of the Study.....	5
1.5. Research Questions.....	6
1.6. Significance of the Study.....	6
1.7. Delimitations and Limitations of the Study.....	7
1.8 Assumptions of the Study.....	7
1.9 Theoretical Framework.....	8
1.10 Conceptual Framework.....	10

1.11 Operation Definitions of Terms.....	14
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CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.0. Introduction.....	17
2.1. Development of Support Services.....	17
2.2. Mobility Services.....	19
2.3. Self-help Skills of Learners with Physical Disabilities	23
2.3.1 Dressing.....	24
2.3.2 Hygiene Skills.....	25
2.3.3 Toileting.....	26
2.3.4 Eating and Feeding Techniques.....	27
2.4. Medical Services.....	29
2.5. Counseling services for Learners with Physical Disabilities.....	32
2.6. Teachers Role in Provision of Support Services.....	34
2.7. Professional Challenges.....	37
Summary of Literature Review.....	39

CHAPTER THREE: RESEARCH METHODOLOGY

3.0. Introduction.....	41
3.1. Research Design.....	41

3.2. Variables.....	42
3.3. Location of the Study.....	42
3.4. Target Population	43
3.5. Sampling Techniques and Sample Size.....	44
3.6. Research Instruments.....	46
3.7. Pilot Study.....	49
3.7.1 Validity.....	49
3.7.2 Reliability.....	50
3.8. Data Collection Techniques	50
3.9. Data Analysis	52
3.10 Logistical and Ethical Considerations.....	53
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND DISCUSSION	
4.0. Introduction	54
4.1 Demographic Data of Students.....	55
4.1.1 Demographic Data of Teachers.....	57
4.2.1 Mobility Services Provided to Students.....	59
4.2.2 Mobility and Academic Participation.....	62
4.2.3 Mobility Services and Socialization of Students.....	65

4.3.1 Teaching Self-Help Skills.....	66
4.3.2 Self-Help Skills and Academic Participation.....	69
4.4.1 Learners Perception on Provision of Medical Services.....	71
4.4.2 Types of Medical Services Provided to Students.....	72
4.4.3 Medical Services and Academic Participation.....	74
4.4.4 Medical Services and Socialization.....	75
4.5.1 Provision of Counseling Services.....	76
4.5.2 Types of Counseling Services Provided to Learners.....	78
4.5.3 Counseling and Socialization of Students.....	79
4.5.4 Counseling and Academic Participation.....	81
4.6.1 Teachers Views on Collaboration.....	82
4.6.2 Types of Professionals Invited to Schools.....	83
4.7 Challenges Faced by Professionals.....	87
4.7.2 Review of Services.....	89

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction.....	91
5.1 Summary of Research Findings.....	91
5.2 Conclusion.....	95

5.3 Recommendations.....	96
5.4 Suggestions for Further Research.....	97
References	99
APPENDICES	
Questionnaire for Students.....	103
Questionnaire for Teachers.....	107
Focus Group Discussion for Students.....	115
Interview Guide for Professionals.....	117
Observation Checklist.....	118
Research Authorization and Permit.....	120

LIST OF TABLES

Table 4.1 School Level of Students.....	56
Table 4.2 Professional Qualifications.....	57
Table 4.3 Level of Training in Special Needs Education.....	58
Table 4.4 Common Mobility Devices Used by Students.....	61

Table 4.5 Use of Mobility Skills Learnt by Students.....	64
Table 4.6 Teaching Self-Help Skills.....	67
Table 4.7 Self-Help Skills and Academic Participation.....	70
Table 4.8 Types of Medical Services Provided to Students.....	73
Table 4.9 Types of Counseling Services Provided to Learners.....	78
Table 4.10 Counseling Services and Socialization of Students.....	79
Table 4.11 Types of Professional Invited to Schools.....	83
Table 4.12 Collaboration with Other SNE Professionals.....	84

LIST OF FIGURES

Figure 1.1 Support services and their impact on learners with physical disabilities.....12

Figure 4.1 Gender of Students.....55

Figure 4.2 Teaching Experience.....59

Figure 4.3 Provision of Self- Help Skills.....68

Figure 4.4 Learners’ Perception of on Provision of Medical Services.....71

Figure 4.5 Medical Services and Academic Participation.....74

Figure 4.6 Medical Services and Socialization.....75

Figure 4.7 Provision of Counseling Services.....77

Figure 4.8 Types of Adaptations86

Figure 4.9 Review of Support Services.....89

ABBREVIATIONS AND ACRONYMS

ASCA	–	American School Counselor Association.
CWD(s)	-	Children with Disabilities
EAHCA	–	Education for All Handicapped Children Act.
EARCs	–	Educational Assessment and Resource Centers.
FAPE	–	Free Appropriate Public Education.
FGD	–	Focus Group Discussion.
GoK	-	Government of Kenya
IDEA	–	Individuals with Disabilities Education Act.
IEP	–	Individualized Education Plan.
KIE	–	Kenya Institute of Education.
MoE	–	Ministry of Education.
MOEST	_	Ministry of Education Science and Technology.
PWD (s)	-	People with Disabilities
SNE	–	Special Needs Education.

- SPSS – Statistical Package for Social Sciences.
- UNESCO – United Nations Educational Scientific and Cultural
Organization

ABSTRACT

This study investigated the provision of support services to learners with physical disabilities in Kisumu East District, Kenya. The study focused on provision of support services and their impact on socialization and academic participation of learners with physical disabilities. It was guided by social cognitive theory. Case study was used to achieve the objectives. The target population was made up of 34 teachers, 177 students and four professionals, making a total of 215 persons. In the study, purposive, simple and stratified random sampling techniques were used in selecting schools and respondents. The sample was drawn from two selected special schools for learners with physical disabilities and support services professionals attached to the two schools. Four instruments were used to collect data on provision of support services. These were questionnaires, interview guide, focus group discussion and observation checklist. A pilot study was done in Masaku Primary School for the Physically Handicapped in Machakos District. This was done to check the validity and reliability of research instruments before commencement of the actual study. Data was sieved, prepared and analyzed using Statistical Package for Social Sciences (SPSS). Descriptive statistics were used in presenting and analyzing the results of the study. The findings of the study indicated that there were problems associated with the provision of mobility services to students. However, it facilitated socialization and academic participation of learners. The teaching of self-help skills was necessary as it promoted academic participation and reduce chances of contracting infection. There were no medical personnel employed in the selected schools. Provision of medical services was found to be inadequate. In some cases, teachers were involved in the provision of minor medical services. Medical services promoted socialization and academic participation of students. Counseling services promoted socialization and academic participation, although schools did not have professional counselors. There was little collaboration among teachers and professionals yet collaboration between teachers and professionals is mandatory. Professionals faced various challenges that affected the quality of their services, such heavy workload, transport, uncooperative parents and financial implications in the provision of support services and materials. The study recommends that schools should be keen on adequate provision and quality of self- help skills. School administrations should employ school nurses incase the government is unable. Schools should organize transport arrangements for the professionals. The ministry of education to deploy more professionals in schools of

learners with physical disabilities. Schools should encourage parents of students to be cooperative when it comes to enquiries about their children at school. The government should consider increasing funding to schools of children with physical disabilities for support services and materials used.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Physical disabilities are impairments that interfere with an individual's mobility, coordination, communication, learning and personal adjustment. It covers a wide range of conditions from a mild degree of clumsiness, to the child using a wheelchair who may need support in many areas of his/her daily living. This is due to the fact that, physical impairment can affect one's ability to move about, to use arms and legs effectively, to swallow food and or breathe independently. It can also affect other primary functions such as vision, speech, language, learning and bowel control (Neckel, & Desch, as cited in Hardman, Drew & Egan, 2005). Provision of a wide range of support services can enhance their positive psychosocial, physical and cognitive development of learners with physical disabilities.

According to Hallahan and Kauffman (1997), children with physical disabilities are defined as those whose physical limitations or health problems interfere with school attendance or learning to an extent that special services, training, equipment, materials, or facilities are required. This calls for the provision of support services by professionals from other fields to promote their academic participation and socialization. The primary distinguishing characteristics of children with physical disabilities are medical

conditions, health problems, or physical limitations, which necessitates multidisciplinary cooperation in the provision of support services. The decreased motor fitness will reduce the child's social integration with classmates especially during instructions that involve physical activities which are movement based. Training the child in mobility is a prerequisite for academic participation.

The support services which are also referred to as related services are those services, offered to children with disabilities to enable them to achieve their academic and social potentials. According to Schwartz (2005) the Individuals with Disabilities Education Act (IDEA) 1997, related services, are services that support the individual and aid him to overcome or reduce his handicap. They include services such as physical and occupational therapy, counseling, and medical services as well as the provision of mobility devices that may be required to assist a person with a disability to benefit from special education.

In America, IDEA ensures that children with handicaps receive necessary education and services without the cost to the child and family. Free Appropriate Public Education (FAPE) is one of the provisions in the IDEA. It stipulates that special education and support services are provided at public expense, meet the education standards and is provided in conformity with the individual educational program (IEP) required for the child. For children with physical disabilities, special education alone will not be enough. Individuals with disabilities and other health impairments often require special interventions to realize their potential. Moreover, the range of medical services, educational placements and therapies are extremely diverse and highly specific to the person and his/her needs. Depending on placement alternatives, therapies and other support personnel will come into the classroom to assist the teacher, the child and classmates (Szaba, cited in Heward, 2006). Depending on the disability, some children need physical while others need medical interventions.

In Kenya, according to GoK the Children's Act (2001) embraces the principle of 'best interest', which states that all decisions affecting the child will be made in the interest of the child. To promote quality education to learners with physical disabilities, a multidisciplinary team composed of different professionals providing support services and other stakeholders must attend to the problems and interests of all learners. According to GoK the Disability Act (2003) indicates that learning institutes should take into account the special needs of persons with disabilities to perform to their maximum. This implies that the physical, medical and psychosocial needs of all learners must be adequately addressed. A Task Force on Special Needs Education (SNE) (2003) notes that, the success of SNE services requires specialists from different fields. This indicates that teachers alone cannot lead to the success of SNE unless the other services are provided to students by other experts from various fields with the skills in the areas needed.

The introduction of Free Primary Education (FPE) in 2003 opened doors for millions of Kenyan children including those with special needs. (MoEST,2003) The FPE policy aimed at provision of education and training for all Kenyans as a fundamental to the success of the government over all development strategy. In the past, students with special needs such as physical disabilities used to be segregated and educated only in residential special schools. The recent development has witnessed integration where children with special needs are educated in the mainstream settings. FPE is bent towards inclusion where all children including those with special needs are educated in nearby regular classes nearly all the day instead of special classes. The government provides funds and equipment to ensure that all children are in school. Although the government is committed to providing special education, the effective delivery of support services to learners with physical disabilities has not received adequate attention, hence the focus of the present study.

1.2 Statement of the Problem

This study focused on the provision of support services to learners with physical disabilities in order to establish how they enhance their socialization and academic performance. It is based on the premise that provision of support services to learners with physical disabilities can improve their academic and social wellbeing. The MoE Task Force (2003) recommended the assessment of learners with physical disabilities by a multidisciplinary team of experts at all Educational Assessment and Resource Centres (EARCs), so that early identification and intervention measures are done in good time. However, it is worth noting that these services are also required at the school level to enable learners to perform to their maximum in all aspects of their lives. Learners with physical disabilities have diverse needs that must be met for their all round development. Klein, Cook, and Richardson - Gibbs, (2001) observed that, shared expertise of several special educators, therapists and proponents that working as a team can enhance classroom experience for children with special needs. This definitely requires adequate and effective provision of support services to children with physical disabilities.

Although much had been done by the government on provision of special education, no study has been conducted on provision of support services to learners with physical disabilities and their effect on enhancement of education participation and socialization which prompted the study

1.3 Purpose of the Study

The purpose of this study was to establish the provision of support services for learners with physical disabilities in Kisumu East District in Nyanza Province. It was further to determine the role of teachers and challenges faced by professionals when providing support services and how these impact on

socialization and academic participation of those learners. By exploring the provision of these services, the stakeholders such as the government, teachers and parents could see the need for provision of support services to learners with physical disabilities.

1.4 Objectives of the Study

The main objectives of the study were:

- i. To determine the type of support services offered to promote academic participation and socialization of learners with physical disabilities.
- ii. To establish the extent to which teachers collaborate with professionals offering support services to learners with physical disabilities.
- iii. To determine challenges faced by professionals in providing support service to learners with physical disabilities.

1.5 Research Questions

The study sought to answer the following questions:

- i. What type of support services are offered to promote academic participation and socialization of learners with physical disabilities?
- ii. To what extent do teachers collaborate with professionals offering support services to learners with physical disabilities?
- iii. What challenges do professionals face in providing support services to learners with physical disabilities?

1.6 Significance of the Study

It was hoped that the findings of this study would provide comprehensive information to the government and other stakeholders on the need to avail relevant support services and personnel in these schools. The implementation of Free Primary Education since 2003 has led to increased enrolment of learners in schools with varying learning needs which need provision of support services. Further, it was hoped that the findings would be utilized by Kenya Institute of Education (KIE) to modify regular curriculum to incorporate the support services to make it appropriate and meaningful to learners with physical disabilities. The findings of this study would be useful to Kenya National Examinations Council (KNEC) to modify their assessment and grading procedures of learners with physical disabilities by taking into consideration their special needs, in terms of exam duration, need for assistance during exams, and use of recording devices for those with writing problems. The findings of this study would add to literature on the provision of support services to learners with physical disabilities in Kenya. Finally, the findings of this study would also be useful in providing a base for future research in the field of learners with physical disabilities in Kenya.

1.7 Delimitations and Limitations of the Study

1.7.1 Delimitations of the Study

The study was confined to Kisumu East District in Nyanza Province. It was limited to only two special schools for learners with physical disabilities in the district.

1.7.2. Limitations of the Study

The study was limited to a small sample because it only considered two special schools of students with physical disabilities in the district thus its findings could not be generalized to all schools of learners with physical disabilities in the entire country.

1.8 Assumptions of the Study

The researcher made the following assumptions: First, that all the respondents were cooperative, truthful and were objectively able to give reliable information. Second, that the sample size and instruments used for the study generated sufficient and authentic data which allowed the researcher to attempt answering the stated research objectives which the study sought to investigate. Third, every respondent would provide the information required without fear or favour.

1.9 Theoretical Framework

The study was guided by Social Cognitive theory. According to Pajares (2007), the social cognitive theory was advanced by Bandura in 1986. This theory states that, human functioning controls a central role of cognitive, vicarious, self-regulatory and self-reflective processes in human adaptation and change. From this perspective, human functioning is viewed as a product of dynamic interplay of personal, behavioural and environmental influences. These create interactions that result in triadic reciprocity. The reciprocity makes it possible for the therapeutic and counseling efforts to be created. This results in rehabilitation of the individual in aspects of his/her life. These are directed at personal, behavioural and environmental factors. The theory accounts for the influence of social and technological innovation that create new environmental selection pressures (Bussey & Bandura, cited in Pajares 2007). This implies that the technological advancement in the medical field can lead to improved and maintained health

condition for those with physical and other health impairments. Bandura includes collective agency, people work together on shared beliefs about their capabilities and common aspirations. This means that multidisciplinary teamwork would provide very effective results.

According to this theory, one expects the provision of support services to children with physical disabilities to revolve around personal factors such as self-esteem, behavioural such as withdrawal and environmental factors e.g. mobility, physical structures and manipulation of learning materials. This means that the academic and social wellbeing of these students cannot adequately be provided by teachers alone without involving other experts. In school, teachers and other professionals have the challenge of improving confidence and academic performance of the students under their charge. Using social cognitive theory as a framework, teachers and professionals can improve their student emotional slots and correct their faintly self-habits and thinking (personal factors) to improve their academic and self-regulatory practices (behaviour) by working as a team for ultimate goal. They can alter the school and classroom structures that may work to undermine the students success (environmental factors).

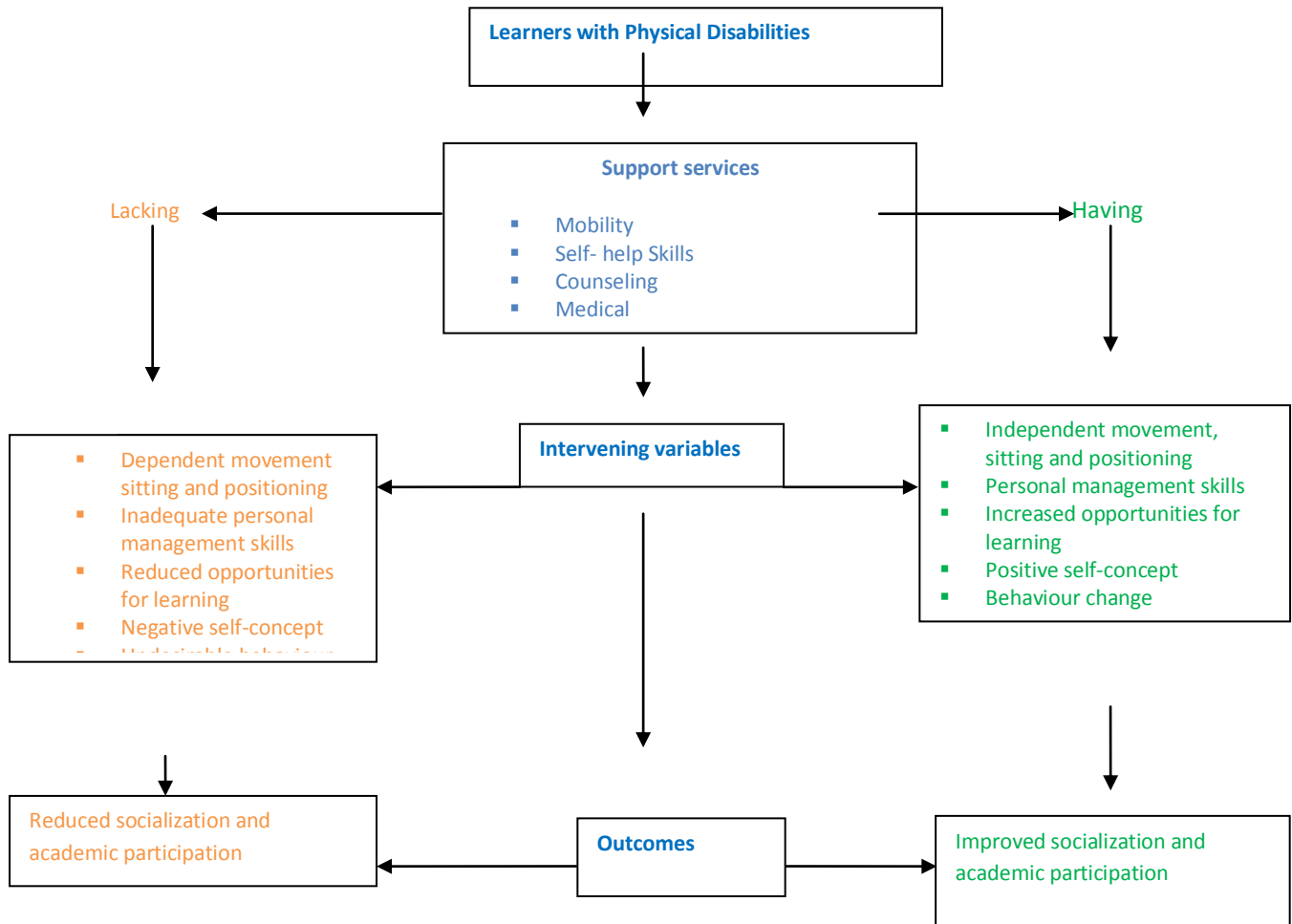
To achieve this, the teacher will apply the Bandura's collective agency, by working with the counselor, therapists and medics to enhance academic performance and socialization of learners with physical disabilities. The counseling services will assist the child to understand self and environmental factors that will alter his behavior to improve his/her positive self-concept and self-esteem. These impact on active social life and increased academic performance at school. The physiotherapist services assist in enhancing mobility skills within the school environment and use of mobility devices. The ease of movement enables the child to perform both academic tasks and interact with peers. The occupational services involve self-help skills such as bathing, washing, toileting and feeding. It also includes the manipulation and use of assistive devices. These equip the child with the ability to perform academic

and daily tasks that improve the social life of the child at school. The medical services depending on the technological innovations will improve health status of the students and change their behaviour positively towards academic tasks. A healthy child is motivated to join peers in social activities within the school environment. According to the theory, students are expected to be agents proactively engaged in their own development, and can make things happen by their actions with multidisciplinary team assistance. This is due to the fact that what people think, believe and feel, affect how they behave.

1.10 Conceptual Framework

Support services for the child with physical disability are a necessity if he/she is to participate fully into the learning process. The framework attempts to explain the provision of support services to a child and the benefits the child gains which impact on his socialization and academic participation. The support services have got the intervening variables and the outcomes. Intervening variables are the benefits the child gets when having support services within a short period. These are independent movement, sitting and positioning, personal management skills, increased opportunities for learning, positive self- concept and behaviour change. The child loses when lacking these services, it result in dependent movement, sitting and positioning, inadequate personal skills, reduced learning opportunities, negative self-concept and undesirable behaviour change. While outcomes are the major benefits the child experiences in the long run.

Figure 1.1 Support Services and their impact on learners with Physical Disabilities



As shown in the diagram, the child benefits by receiving the support services to cater for his physical, medical and psychosocial needs from different professional experts. These include mobility services that are provided by the physiotherapists and the skills gained are applied by teachers on the school's daily routine. In the process, the child who is provided with adequate and appropriate mobility services develops independent movement with or without the devices, proper sitting and positioning which sustain the child's endurance in class and general physical independence. These increase the child's physical and social environment. The state further creates opportunity for exploration, discovery of new

skills for mastery and socialization of the child. Lack of mobility services makes the child to be dependent in movement, sitting and positioning.

The self-help skills as one of the support services emphasize on the acquisition of activities of daily living such as bathing, washing and toileting among others. The acquisition of these skills leads to child's confidence in personal management which reinforces peer groupings. This facilitates learning involving peer groupings. The occupational therapists and the teachers further assist the child in manipulating learning materials including the use of assistive technology in class which increases the child's academic participation. A child lacking assistance in self-help skills develops inadequate personal management skills which interfere with his/her potential socialization and academic performance.

The medical services as shown are provided to the child by the school nurse and other medical personnel increase learning opportunities and social interaction of the child, since the child is able to reach the stimulating environment, which is both physical and social. With the evolution of technology, some of the learners may require specialized treatment which includes the use of specialized machines that are made available through referrals. Inadequate provision of medical services results in the child's reduced opportunities for learning which is both formal and informal. As shown in the diagram, the other support service is counseling. Its provision promotes the child's self-concept to perform demanding tasks in the school environment. The child who is self-worthy will try to change the behaviours that improve his social integration and compete favourably in academic task, while with lack of counseling services, the child develops negative self- concept and undesirable behaviour. These lead to socialization and academic participation problems. The interventions put in place through the provision of support services as in the diagram result in what this study refers to as intervening variables. The effective provision of support services leads to appropriate and holistic development in

the child developing competence in academics, social and physical skills. The outcome benefits by the child are improved socialization and academic participation. While the child lacking these services ends up with reduced socialization and academic participation.

1.11. Definition of Operational Terms

Adaptation – Change or changes made to fit a specific child in an environment.

Discrepancy Analysis – A method used to determine the child's current abilities on a task and how the task can be performed.

Individualized Education Program – A written plan which describe a student's special individual learning needs and the exceptional student programs and services which will be given to the student.

Free Primary Education - Education that ensures enrolment of all school going children in public schools through government finding.

Integration - Education of children with special needs in mainstream settings without changes in curriculum provision.

Occupational Therapist – A professional who has specialized training in helping an individual developmental or physical skills that aid in daily living activities

Physical Disability - An impairment that refers to motor difficulties and medical Conditions, which interfere with mobility, coordination, communication, learning and personal adjustment.

- Physiotherapist -** A specialist that provides physical exercises that strengthen muscles that promote the child's ability to move and manipulate learning resources.
- Self-help Skills -** The skills acquired by the child to perform independent tasks of daily living such as dressing, feeding, hygiene skills and toileting.
- Special Education -** Specially designed programme of instruction to meet the unique needs of learners with special needs including those with disabilities.
- Support Services -** Related services offered to a child under special education and includes mobility, self-help skills, medical and counseling services. They help to reduce the effect of their disability.
- Support Professionals –** The individuals who have knowledge and skills in different areas that assist the students to perform to their maximum, in physical, academic and social wellbeing.
- Task Analysis –** The process of breaking down the complex activity into easier steps, which are organized as a sequence and the student, can be taught each step to achieve the goal.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

The purpose of this study was to investigate into the provision of support services for learners with physical disabilities. The services such as self-help skills are taken for granted to normal children but are important to these children with physical disabilities because they reduce the impact of their disability and make them independent at school. The services make them active, adjust to school life and promote their social wellbeing. The adequate provision of these services can enhance their academic performance. In this chapter, related literature to the study has been reviewed under the following sub-sections: development of support services, mobility services, self-help skills, medical services, counseling services, teachers' roles and professional challenges.

2.1 Development of Support Services

Prior to the implementation of public Law 94-142 (the Education for All Handicapped Children Act (EAHCA) of 1975, many students with disabilities received either no services or inappropriate services in public schools (Smith and Colon; Zaccaria, cited by Amy, 2002). The law mandated that special education and support services be made available to all eligible school-aged children and youth with disabilities. Special education means specially designed programmes of instruction to meet the unique needs of learners with special needs including those with disabilities. Since that time, the US government federal funds have been provided to help state and local educational agencies provide special education and support services to

children with disabilities. The move was generated by two critical factors that is, how the student is expected to do in school and how a student is doing in school. This called for multidisciplinary interventions to improve the students' work at school.

In 1990, as part of its authorization by US congress, the EAHCA was renamed the Individuals with Disabilities Education Act (IDEA), which replaced the term handicapped with a "person first" phrase; individuals with disabilities. IDEA 1997 defines the term support services as transportation and such developmental, corrective and other support services as required in assisting a child with a disability to benefit from special education. The following are included within the definition of support services: physical and occupational therapy, counseling services, medical services, for diagnostic or evaluation purpose and school health services. Under IDEA '97, a student must need special education to be considered eligible for support services. Support services reinforce school performance for the child. According to Patanjali (2005) in UK, the Disability Discrimination Act (2002) makes it unlawful for education, training and related (support) service providers to discriminate against students who are disabled or potential students without justification. In India, curriculum must interrelate special support services, and personnel to create a programme which facilitate curricular integration on its most specific situations (Patanjali, 2005).

Kenya's policy framework has been influenced by USA and other international laws in regard to the provision of special education and support services to school children. The Salamanca Statement and Framework for Action on Special Needs Education (1994) cited in MoE (2006) both of which are ascribed to by the government of Kenya continue to influence education of learners with special needs. Its main

objective was to present new thinking on learning difficulties and disabilities. It reviewed recent development in provision of education to children and youth with special education needs. Kenyan commitment to provision of support services is evidenced by the Persons with Disabilities Act (2003) which stresses that learning institutions shall take into account the special needs of persons with disabilities with respect to auxiliary services. The government has been providing funds to sustain FPE as well as for environmental adaptation in schools to make them learner friendly. According to MoE (2005), the government's main task is to provide access and quality education. To achieve this, it has to collaborate with support service providers for children with special needs. This study looked at the different collaborators in the provision of support services and players in the education of children with disabilities. The study wished to establish how this team work would influence the academic participation and socialization of students with physical disabilities.

2.2. Mobility Services

According to Stone (1995), mobility is the ability to move oneself without coming to any harm. The ability to explore and interact with the environment is critical and any inability to do so affects the individual psychologically, socially, emotionally and physically. The loss of ability to move about freely and safely may be the greatest deprivation felt by learners with physical disabilities. Providing a means of mobility to those learners can improve their independence, exploration, interaction with the world and may result in enhancing learning opportunities (Heller, Forney, Alberto, Schawatzman & Goeckel, 2000). In view of the foregoing, this study examined the extent to which mobility services influence socialization and academic participation of those learners. This would be established by looking at the type of mobility services offered to learners with physical disabilities. Kamere (2004) looking at the development

of special education in Kenya explores how special schools offer a variety of rehabilitation services, mobility aids and other specialized aids for children with disabilities (CWD) to boost the personal and social wellbeing of those learners and enhance their school performance. This study went further to determine support services offered to promote academic participation and socialization of students with physical disabilities.

Mobility services are those services provided by physical therapists who are trained professionals. They play essential role in the management of motor difficulties through the use of exercises. According to Kieran, Corner, Hippel and Jones (1999), these services promote self-sufficiency primarily by training in gross motor skills such as walking, sitting, shifting position and balance, design equipment and muscle test. These services can be effectively provided by the school if students have regular physiotherapy with adequate apparatus. Their quality and effectiveness can influence academic participation and socialization of students with physical disabilities. News Digest (2007) states that the services include helping the students improve posture, gait and body awareness, monitor functions and proper use of mobility aids and devices, treatment to increase joint functions, muscle strength and mobility endurance. This implies that for the students to have adequate school performance, a wide range of mobility services should be provided to them. This study intended to establish the range of mobility services provided at schools and how these services impact on socialization and academic participation of students with disabilities which had not been given emphasis they should deserve.

When considering mobility options for children with physical disabilities, it is important to evaluate the individual student's capability to move himself/herself in the environment. Such strategy was subject to investigating whether the kind of mobility services given to the child depended on the evaluation

results. It must be considered in the context of the effort required for mobility training skills (Smith, 1998). The effort required depends on the magnitude of the student's motor problem(s). A programme is then developed by the multidisciplinary team, citing settings and situations to the specific individual. According to Hanson and Harris cited in Tassoni (2003), when developing strategies for independent mobility, the goals should include: helping the student to initiate interaction with and control various aspects of his environment. They should also provide movement opportunities that are functionally based for the child to acquire mobility skills. The child should learn and gain independence from mobility exercises. In line with the above study, the physiotherapist has a pertinent professional role to conduct mobility training, that is, appropriate and meaningful to the child.

Training children in mobility, which is specific to the individual, must be developed throughout the week. The training sessions or physiotherapy lessons must be used for teaching new skills. Swallow and Huebner as cited in Stone (1995) suggest that the sequence of learning independent movement skills follow three steps. These include: learning a specific skill, the incorporation of the skill into daily routine and application of the skill as needed. However, this should target the social and academic participation. It was significant for this study to establish the frequency of training students in mobility and application of those skills learnt. Frequent training provides the students with ample time for practising the skills which are then internalized for better results.

Students with physical disabilities may require mobility devices to move about. Therapists who assess the child, help to evaluate and design appropriate devices such as wheel chairs, walkers, canes, leg braces, and adapted seating to improve independent movement for these children. A child with physical disability may need more than one device at the same time (e.g., wheelchair

and crutches) depending on where, how far, and why he is moving. Furthermore, most of the children out grow the devices; therefore, regular attention and assessment by the therapists are necessary for effective use. During the selection of the device, the student's feelings and comfort must be incorporated to make it appropriate to the child. Therapists must orientate and train the student on how to use the device in various settings and safely. The devices must be functional to allow the student to perform various academic and social tasks within the school environment.

The children with physical disabilities have motor difficulties which make it difficult for them to move or manipulate the physical environment, interact freely and communicate easily. Most of the literature available looks at mobility exercises, aids and programmes to enhance mobility. The current study focused on the availability and adequacy of mobility services which are expected to result in independent movement, proper and comfortable sitting, and positioning. The study ascertained how these results lead to improved socialization and academic participation as major outcomes which are critical to the life of the child at school and for future life.

2.3 Self-Help Skills for Learners with Physical Disabilities

Students with physical disabilities may need to be trained and/or assisted in several self-help skills (Smith, 1998). These are skills that allow the student to do things for himself/herself. On the same view, Raymond (1984) stresses the importance of including self-help skills while planning curriculum for children with special needs. These skills cover dressing, personal hygiene, toileting and feeding. According to Dare and O'Donovan (2002) gross and fine motor skills and hand-eye coordination are

particularly important for such tasks as eating, drinking, and toileting. This is because as the child matures, he begins to integrate the finger muscles to perform activities of daily living. .

A study by Okech (2003) revealed that self-help skills enable a person with special needs to be accepted and to participate in all activities of the society. This study sheds light on the importance of acquiring daily living skills in a school. Children with motor difficulties and health problems have social needs which are accomplished through interaction with peers. There is a great danger of forming negative self-concept as a result of the reactions from peers (Mwaura and Wanyera, 2002). The negative self-concept is critical to academic performance of these children at school. These studies have shown the importance of self-help skills to children who are physically disabled. However, they did not focus on academic performance of learners with physical disabilities. This is what the current study hoped to establish if self-help skills services offered have influence on academic participation of these children.

2.3.1. Dressing

Dressing is one of the self-help skills that are needed by the child for personal management. Dressing skills by learners with physical disabilities mostly involve the assistance given by the teacher and the occupational therapist that is specialized in training individual developmental and physical skills that aid in daily activities. Occupational therapist improves, develops functions or restores functions impaired or lost through illness, injury or deprivation, reinforces and enhances performance in activities of daily living while the physiotherapist deals with the management of motor difficulties. He does this through evaluating and examining which pertains to determine impairments. The design for clothing must take into account the needs of the children by allowing them as much independence as possible in putting on and taking them off. Clothes must fit under, over and/or around braces, calipers, harnesses and tubes. Writers such as Bare, Boettke, Waggoner, Loman, Klinger, May, and Hott cited in Bigge, (1982) observe

that most learners with physical disabilities may require adapted dressing devices, due to their unique problems. The parent should also be educated on dressing needs for their children. They should be informed of adaptations on clothing such as use of zips, velcro or big buttons as opposed to small ones. This is necessary because some of these children experience fine motor problems such as grasping and manipulation of materials that may affect their ability to dress with ease. This study tried to establish if teachers were involved in teaching these children dressing as a self-help skill, which is an integral skill towards self-independence.

2.3.2. Hygiene Skills

Cleanliness and good hygiene practices help prevent infections, keep the child comfortable and promotes confidence and self-esteem. According to Westling and Fox cited in Bigge, Heller and Best, (2005), learning these skills can maintain health, promote socialization and acceptability to others. Students with physical disabilities may not fully achieve the required hygiene skills due to cognitive or physical limitations that require practical teaching and assistance. Basic instruction such as hand washing should be taught. It should follow daily routines, after toileting and before taking medications because it is a major source of infection. Nails should be washed and kept short since they can easily carry germs. Instructions of face and body washing should be done in the morning and at night as well as when they are dirty. The child should be given tips to recognize when the face is dirty with the aid of a mirror.

Teachers or occupational therapists can apply target techniques and task analysis while teaching face and body washing for the students to master the skills easily, due to their cognitive and physical

limitations (Bigge et, al.2005). Target technique means that the child only washes the part of the body which is dirty. The child who has problems with hygiene skills is not easily accepted by the peers because he will make them feel uncomfortable and this may interfere with his/her academic participation because the child is likely to develop low self-esteem and negative self-concept. A study by Bigge et,al. (2005) on hygiene skills considered socialization of the child. This study intended to go further to find out the extent to which the teaching of hygiene skills promoted academic participation of students with physical disabilities.

2.3.3. Toileting

Toileting is one of the most important self-help skills that can be taught to a student, it is an intensively private action. For students with physical disabilities learning to use toilet may be a challenge due to positioning, because of balancing problem as a result of motor abnormalities affecting toileting process. Toilet training to the students with physical disabilities often requires patience, consistency, adaptive equipment and systematic instruction. Bowel training should be done on regular basis. This involves training the student to empty the bowel completely. Bowel and bladder care will lead to maximum cleanliness, comfort and prevent skin breakdown, among others. Training should include transfer to and from the toilet, positioning and familiarizing the child with the toilet and associating it with the bathroom (Heller *et al.*, 2000). This gives the child opportunity to practise the toileting skills and use of the bathroom for required hygiene. Toileting is critical because as the child matures, the more absence of this basic skill becomes an increasing liability. Acquisition of toileting skills makes the child to develop personal management and boosts positive self-concept in performing tasks together with the peers. The training should aim at making the child independent to freely interact and participate in the learning

process. This study intended to find out if toilet training of students was included in the teaching of self-help skills.

2.3.4. Eating and Feeding Techniques

According to Heller *et al.*, (2000), eating is one the most basic and crucial skills needed to sustain life but consists of a complex series of processes. These include: moving the food to the mouth, accepting the food, manipulating the food with the structures of the mouth, and swallowing the food in a timely manner between the breaths. Children with physical disabilities often encounter complicated eating problems. Feeding is when a person gives the student food or liquids to suck, claw or swallow. Eating is when the student takes food or liquids independently (Heller *et al.*, 2000). However, children with neurological and physical problems which affect the muscles of the face lips, jaw, tongue or throat, may need to be assisted to feed.

To teach a child to feed involves, lip movement, those who have tight faces will have their faces massaged or relaxed towards the mouth position prior to feeding to loosen the tight muscle (Klein & Delaney cited by Heller *et al.*; 2000). For those students to whom massaging is inappropriate, a controlled motor input program aimed at desensitizing the facial area and around the mouth may be implemented. According to Heller *et al.* (2000) students with low tone and problems with lip closure require games such as tapping around the jaws and cheeks. The other strategy will target the jaw closure where the feeder uses the middle finger placed under the jaw behind the chin to assist in upward movement and reduce the tongue provision. There is need to activate cheek muscles for chewing. Tongue laterality for chewing should be developed by providing sensory input to the tongue

alternately in the mouth. The food should be warm and tasty since some of these children may lack appetite (Heller et,al. 2000).

Finally, the child should be given strategies for swallowing. There is need for proper positioning and putting food with a spoon towards the back of the tongue. It should then be given time to mix with saliva for easy swallowing. According to Dare and O'Donovan (2002), eating or assisting in eating may take a long time and patience is needed. Meal times can provide the best opportunity for learning because eating is highly motivating and engaging as the child freely interacts. This study wished to ascertain whether the schools involved teaching feeding to students who might require it and how it reflects on their academic participation.

2.4 Medical Services

Medical services refers to services provided by a licensed physician to determine the child's medically related disability that results in the child's need for special education and support services. For example surgery to correct joint or muscle deformity and recommendations of special diet due to health needs of the student. Medical services are provided for diagnostic and evaluation purposes only. School health services may include interpretation, interventions, administration of health procedures, and the use of assistive health device to compensate for the reduction or loss of body function (Rapport, as cited in News Digest, 2007). According to this literature, school health services do not involve direct treatment of students yet some of these children have other health complications such as asthma, epilepsy and sickle cell anemia, among others. This study hoped to establish the type of medical services provided at school to students to enhance their academic participation.

In some cases, students with cerebral palsy require surgery when bracing and physical therapy have not been effective in preventing and correcting potential deformities. The school nurse would normally refer the child for medical checkups. The surgery would improve functional abilities in walking and limit damage of progressively worsening contractures of muscles (Rapport, as cited in News Digest 2007). Children with hydrocephaly need medical procedures that include insertion of a shunt tube, to drain excess fluids from the child's brain, which may cause brain malformation, poor motor activities, communication difficulties and limit the child's academic performance (News Digest 2007). Hydrocephaly is a condition caused by abnormal accumulation of fluids, which expands the bones of the skull. School nurses discuss health issues with children and parents, offering them health promotion advice. This suggests that medical services at schools are more of guidance and nursing, this may increase the number of referrals to hospitals. It is important to identify major school health services that improves the child's health condition and mobility which facilitates socialization and academic participation.

It is common for school-age children with physical disabilities to require medication while in school. Medication may range from those taken daily for chronic and acute disorders such as seizure disorders or respiratory infection to medication taken at the onset of certain symptoms such as asthma attack. Teachers and other school personnel need to have knowledge about the effects of their students' medication regardless of who is administering it for two reasons. First, it may interfere with the students' optimal performance on school tasks; second, physicians and parents rely on school personnel on the effects and report their observations to effect any need for change. Prescription requires permission from the parent and/or physician to be given at school (Urbano, cited in Heller *et al.*, 2000).

This is because the drug may react to medication received at home or it may be contradicted given the child's condition. The students should be taught what their medication is, when it should be taken and what medication is for. Little is known on how medical services contribute to socialization and academic participation of students at school. It was critical to investigate whether medical services enhance socialization and academic participation of students with physical disabilities.

Some educators and school administrators believe that services such as catheterization and tube feeding are more medical than educational and should not be the school's responsibility (Heward, 2006). According to this study the educators and school administrators consider these services to be offered to patients rather than students because they require medical background. Catheterization involves surgical operation which allows urine to come out on the belly into a bag for complete emptying. Tube feeding involves the use of a bottle and a tube or straws that the child can suck to feed depending on impairment that interferes with the normal feeding. They also note that the expense of such services and supervision of support service providers pose potential problems to schools. This reflects the fact that coordination for adequate delivery of these support services to the children continues to be inefficient.

Health complications of some students necessitate special diet, which may require special feedings. Meal times for students with physical and other health impairments must be considered during the Individualized Education Programme (IEP) by the multidisciplinary team since some may need feeding apart from food substitution whose progress is evaluated and reviewed regularly to benefit the child. The school nurse and nutritionist can help the teacher to attend to these cases (Crump, cited in Smith & Luckasson, 1992). However, the services stress on medical model. This study went further to establish whether medical services promote socialization and educational needs of the child at school.

2.5 Counseling Services for Learners with Physical Disabilities.

According to Nasibi (2003), counseling is an interaction process between a counselor and the counselee in a professional setting which is initiated and maintained as a means of facilitating meaningful understanding of oneself and environment and results in changes in the behaviour of the person who has problems. To provide counseling effectively to learners with physical disabilities, one needs to focus on their problems. According to Nwoye (1988), there are two broad types of counseling services, which are recommended for persons with disability. These are adjustment and informational counseling. Adjustment counseling is where the student understands him/her self to adapt the desirable behaviour. Information counseling is the process of informing the student of the possible discoveries in science and technology that relate to improving a specific problem the learner is having. They can be provided directly to the learner or indirectly through peer, parents and his/her teachers.

The American School Counselor Association (ASCA) cited in Amy (2002) recommended the roles of a counselor that fitted the students with physical disabilities. These services included being an advocate for these students in school and or community, assist in planning for transitions to post-secondary institutions. The study by Amy (2002) is relevant to this study especially on the counseling services to learners who are physically disabled. It does not however discuss how counseling enhances socialization and academic participation of students which was the main focus of this study. Counseling services should include the establishment and implementation of behaviour modification since most of these students are affected by social interaction and socialization problems. The counselor should provide feedback on social and academic performance of the students to the multidisciplinary team. This study

intended to find out if and to what extent counseling services impacted on socialization and academic participation of students.

The primary concern of the counselor working with the exceptional children should include self-concept (MoEST, 2003). Most students with physical disabilities need to build a better self-concept as people who can perform and accomplish goals. The above study does not however, specify how self-concept can lead to improved academic performance. It was necessary for the current study to go beyond this to identify types of counseling services provided in schools which promote academic participation. Counseling services should target the needs and interests related to stages of growth. The severely handicapped students in adolescent generally require self-care routine appropriate for their school environment. This does not explain in any way how counseling a student during adolescence can promote socialization of students. However, dealing with components of one's sexuality are sometimes more difficult (Farley & Goddard, cited in Neely, 1982). The counselor can help correct distortions on information by using terms the children themselves use to describe sexuality. This study does not explain in any way how counseling students during adolescence can promote socialization of students.

According to Neely (1982), the counseling role is included in the delivery of support services, although counselors typically have no direct experience or training to work with specific handicapped populations. However, legislation encourages greater school counselor involvement with students who are physically disabled. Little research had been conducted to examine the actual roles they perform for the students at school. This was critical and necessary for the current study to find out how counseling facilitates socialization and academic participation of students at school.

2.6 Teachers Roles in Provision of Support Services

Teachers dealing with children with physical disabilities are likely to work with a range of therapists (Klemz & Bell, 1981; Smith & Luckasson, 1992). This current study focused on the role of teachers while collaborating with professionals providing support services. It is important, that the classroom teacher has a chance to talk to them, so that they can exchange information about the children concerned (Dean, 1996). The study by Dean (1996) does not specify the actual roles played by teachers on provision of support services to disabled students. This study intended to consider the specific teacher roles that promote socialization and academic participation of students at school. Teachers should regard specialist services as contributing to their work in the classroom. According to Bigge *et al.*, (2005), therapists cannot take place of professional educators, even though they assist in equipment modification and training that increase the functional settings. Similarly, educators cannot provide direct therapy services although they frequently follow through therapeutic regiments established by occupational and physiotherapists. This study was motivated to establish the extent to which professionals join teachers to work with students in the classroom.

Not only do teachers provide direct instruction, they frequently collaborate with support service providers in the implementation of goals and objectives drawn from assessments. Guilford cited in Kamere (2004) states that special schools provide opportunity for close cooperation between the teachers and specialists, with each appreciating the disability and its challenges to the child physically, academically and psychologically. Although the study by Guilford as cited in Kamere (2004) is relevant to the current study, it does not explore how the cooperation between teachers and specialists enhance socialization and academic participation of students who are physically disabled. A teacher who is

involved in health maintenance and administration, in so many occasions reminds the child to take medication in the absence of the nurse. By knowing side effects of medication, teachers can target certain times of the day as more ideal for instruction and identify variance in performance. He can take measures to minimize the side effects. The teacher needs to be aware that some children with physical disabilities need special diets due to their conditions. This implies that the teacher can improve academic performance of the students in relation to health services. It does not reveal how the teacher's involvement in medical services improves socialization of students hence focus of the current study.

The teacher should be sensitive to the physical environment of the child. The student may require specially fitted chairs, desks, and worktables and perhaps extra space for maneuvering bulky leg braces, crutches or wheel chairs to facilitate mobility and positioning. The inability to compete physically, the isolation and frequent hospitalization may restrict the child's social world. The teacher depends on the therapists in developing these accommodations (Smith & Luckasson, 1992). In relation to the foregoing citation, this study focused on teacher's roles in collaborating with professionals providing support services to students who are physically disabled which enhance their social wellbeing and academic participation.

Given the nature of his/her work, the teacher should be trained in special needs education (SNE) and be experienced. He/she should work with the recommended ratio of students, that is, 1:15. However, it was found that the ratio of a teacher to students was 1:55. (MoE Task force, 2003). Following this ratio, together with support services of which some must be provided on individual basis then, the effective

roles of the teacher on provision of support services should be determined. This study wished to establish the teachers' roles in relation to socialization and academic participation.

Adaptations are made on furniture, teaching and learning materials, inclusion of IEP, classroom arrangement and suitable teaching methods (Smith and Luckasson, 1992). This means that the level of teachers' professional and academic qualification together with the teaching experience would influence the quality and the type of adaptation. The current study investigated to what extent teachers made adaptations in the classroom to improve students' academic participation.

2.7 Professional Challenges

When diverse populations of students are educated within one classroom, no one individual will have the expertise to meet all the needs. It is, therefore, necessary to utilize the expertise of professionals trained in specific areas. Some of the professionals who are able to offer support to classroom teachers are physiotherapists, occupational therapists, psychologists, behavioural therapists, nurses, computer specialists, counselors, physical education consultants and speech and language pathologists (Fahey, Coats, Bishop & Cremot-Scheyer; Harris; Saskatchewan Education cited in Stanviloff, 1994). This does not explore in any way how these professionals co-ordinate their work. The current study would provide insight on the specific challenges encountered by professionals while providing support services aimed at promoting socialization and academic performance of students who are physically disabled.

Effective multi-professional work is not easy to achieve. It requires cooperation, collaboration and mutual support. The success requires careful planning, using regular contacts as a means of achieving a

climate of trust and shared expertise (Lecy as cited in Dean, 1996). However, none of the people concerned has time to spare and each one has a different perspective because most of these are from different fields. Klein *et al.*, (2001) reinforces this, arguing that, to function as a successful team, the educators and specialists must foster an atmosphere of respect built on trust and good communication. Specialists from different disciplines evaluate a particular child and make recommendations often without the knowledge of or consultation with other specialists providers. This study aimed at establishing whether professionals constantly evaluate services provided to students. Klein *et al.*, (2001) says that, in working with children, the roles of occupational therapists and physical therapists may sometimes overlap. Each of the two may design the devices and exercises for the child independently, leading to duplication of roles and implementation problems. The overlapping roles can affect the quality of the support services given to students. It was, therefore, significant to establish the challenges the professionals encounter in provision of quality and maintenance of support services to students with physical disabilities in schools, which are meant to promote their socialization and academic participation.

According to California School Nurses Organization (2005) healthcare issue is one of the greatest challenges facing our society today. An increased number of students are entering schools with complex medical conditions that require daily monitoring and specialized medical procedures. Increasingly, students are seen entering the school system with physical disabilities and chronic health conditions that have the potential to disrupt the learning process. The primary role of the school nurse is to answer the health care needs of school children. This implies that the school nurse must be well-trained to handle varied health problems of the students. This study by California School Nurses Organization

(2005) overlooked other various challenges in the work environment such as workload and availability of the personnel to provide the adequate services, hence the focus of the current study.

A study by Amy (2002) sought to obtain feedback from practising school counselors in order to explore their activities. Results indicated that, school counselors provide many services to students with disabilities and that additional measures could be taken to help them feel more prepared to work with those students. This reflects the fact that school counselors require a solid foundation of knowledge in the counseling profession and SNE dealing with physical disabilities. In general, most of the professionals in Kenyan special schools are not fully employed by the government to provide specialized services in schools. Some of them have their individual work schedules and transport arrangements. The support of professionals is necessary for successful teaching of students with physical disabilities. This study intended to establish how professionals felt competent in working with those students following their training background.

Summary of Literature Review

The necessity of support services has evolved through the federal laws and international policies. The mobility services can enhance school academic participation when incorporated in the daily routine and classroom activities. Self-help skills allow a student to do activities of daily living for himself/herself. Medical services are mandatory and require daily routine management. The most common counseling issues involve self-concept, social skills and behaviour modification. The teacher's roles are based on collaboration and implementation of pieces of advice given by the professionals. However, challenges facing professionals such as coordination of their services,

school time schedules, overlapping duties and knowledge in supporting children with physical disabilities may negatively interfere with socialization and academic participation of the child.

From the review of related literature, there are five important gaps in knowledge that the present study intended to fill. First, most related studies on support services had been conducted outside Kenya, where social realities, technology and economic circumstances are totally different from the local ones. Second, medical services focused on medical model in supporting learners in schools overlooking the educational and socialization model which this study focused on. Third, the literature on professional services did not reveal team planning and constant review of the child's socialization and academic participation. Fourth, the literature on mobility services focused only on academic participation leaving out socialization of children which lays greater foundation for their academic participation. Lastly, no study of this kind had been conducted in Kenya at the time. Therefore, the current study focused on provision of support services and how they impact on socialization and academic participation of learners with physical disabilities.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction

The chapter presents a discussion on research methodology that was employed in the study. The following are discussed: research design, variables, target population, location of the study, sampling technique and sample size, research instruments, pilot study, validity and reliability, data collection techniques, data analysis, and logistical and ethical considerations.

3.1. Research Design

This study used a case study with both qualitative and quantitative orientation. Mugenda and Mugenda (2003) suggest that a case study is an in-depth investigation of an individual, group, institution or phenomenal. It is also based on the premise that a case can be located that is typical of many others. In this case the two selected schools located in the same place, that is, Joyland Primary and Joyland secondary for the physically handicapped are having similar special needs as those in other parts of Kenya. The design was suitable for this study because the qualitative approach allowed for the use of observation checklist, Focus group discussion (FGD) and interview schedule. Where the last two gave room for open-ended items that allowed the research to go beyond the statistical data. It also allowed room for probing. Quantitative approach in this study was relevant because it produced data that are quantifiable through questionnaires. It allowed the use of random sampling which was done to ensure representation of the sample to be included in the study.

3.2. Variables

A variable is a measurable characteristic that assumes different values among the subjects. An independent variable is the one that the researcher manipulates in order to determine its effect on another variable. This study had both independent and dependent variables. The dependent variables comprised socialization and academic participation while independent variables constituted support services, that is, mobility services, self-help skills, medical services, counseling services, teachers' roles and professional challenges. The level of socialization and academic participation of students will depend on the effective provision of support services.

3.3. Location of the Study

The study was conducted in Kisumu East District in Nyanza Province. It is about 400 km from Nairobi the capital city of Kenya. It is bordered in the south by Nyando district, in the west by Lake Victoria, in the north by Kisumu West District, in the northeast by Vihiga District and in the east by Nandi District. According to MoE Task Force (2003), Nyanza Province had 942 children with physical disabilities in special schools and units. Kisumu East is the only district in the province with two special schools with a total of 279 students in both primary and secondary. The two schools selected were Joyland Primary and Joyland secondary schools for the physically handicapped. They are the only special schools in the province of students with physical disabilities. They are located in one compound of about 12 acres, in Kaloleni village, Winam Division. Joyland primary school for the physically handicapped was established in 1974 under the sponsorship of Salvation Army. The growth of the primary created the need for a secondary school for the physically handicapped. This led to the establishment of Joyland secondary school for the physically handicapped under the same sponsor in 1994 in the same compound and it did its first KCSE in 1997. The two schools were selected because the students had similar special needs in

education. The primary school feeds the secondary school with students so it has a long history of providing support services. The schools also have the largest number of teachers with experience in teaching students with physical disabilities. Therefore, it provided the highest concentration of learners with physical disabilities in the province. It was possible to collect data from the professionals providing services to the students in the two schools.

3.4. Target Population

The target population was made up of 215 persons. It was made up of 34 teachers from the two selected schools, 63 pupils from standard five to seven from Joyland Primary for the Physically Handicapped. It also consisted of 114 students from Joyland secondary school for the physically Handicapped from form one to three. The justification for selecting these students was that they could interpret the items in the questionnaire and respond adequately. They could also participate actively in the group discussion. Class eight was left out because students were busy preparing for their final exams. In Joyland Secondary, form fours were left out because the data were collected during their intensive preparation for exams in the third term. Four professionals from the Kisumu East District were targeted for they were the ones providing support services.

3.5. Sampling Techniques and Sample Size

The study used purposive sampling to select schools and professionals, and stratified random sampling technique to select students. Simple random sampling was used to select teachers. Purposive sampling technique, involves including individuals in the sample because they are judged to possess important/special/unique information that is relevant to the study (Patton cited in Githinji 2007). The

schools were purposively selected for the study being the only two special schools for students with physical disabilities in the district. The professionals were also purposively selected because those working with the two schools were expected to have relevant information on the services they provide to students.

Stratified random sampling technique was used in grouping students according to gender and classes. In stratified sampling technique, the population is divided along some characteristics before a simple random technique is done. The students were grouped according to gender and class, that is, classes five to seven, form one to three, boys and girls separately. Simple random sampling was then used to select students in the different strata. A list of students in each stratum was made and a number assigned to every student in the list. These were then written on a piece of paper, folded and put in a container and then picked five papers at random. The students whose names corresponded to the numbers picked were included in the study. This gave every student an equal and independent chance of being selected. Ten students, that is, five boys and five girls from each class were selected making a total of 60 students to form a study sample. Simple random sampling was used to select ten students from those who had responded to questionnaires from each school to participate in focus group discussions (FGD). In total, 20 students participated in the FGD.

Simple random sampling was used to select ten (10) teachers from each school making a total of 20. The teachers were selected because they are the main link between the professionals and students. They at times do the work of the professionals through guidance.

The Sample Size

Through simple random sampling, a sample of 20 teachers was selected from the two schools representing 9.30 percent of the target population. Ten students were selected through stratified random sampling from each of the selected classes with a total of 60 representing 27.90 percent of the target population. Four professionals comprising physiotherapist, occupational therapist, school nurse and a counselor were purposively selected because of their limited number, representing 1.86 percent of the target population.

3.6 Research Instruments

Questionnaire

According to Orodho (2003), a questionnaire has the ability to collect a large amount of information in a reasonably quick space of time. It also ensures confidentiality. Closed-ended items in the questionnaire were used to elicit salient and specific data to enable the study to be more focused and realistic in its findings. The open-ended items allowed the respondents to give their views and opinions on the support services provided to students. The questionnaire for teachers was used to seek background information which sought teachers' personal data. It also sought information on the available mobility services, self-help skills, medical services, counseling services, teachers' roles and how these services impact on socialization and academic participation of learners.

The questionnaire for teachers consisted of six sections. Section A contained background information on teachers' demographic characteristics. Section B comprised of items about the mobility services, their availability and impact on socialization and academic participation and how they enhance

academic participation. Section C comprised of items on self-help skills. Section D consisted of items on medical services and how they impact on socialization and academic participation of students. Section E carried items on counseling services and their impact on socialization and academic participation. Section F comprised of items on teachers' roles when collaborating with professionals. Responses required putting a tick, Yes/No and by giving reasons and explanations. (Appendix B).

The questionnaire for students consisted of three sections. Section A comprised of items on the background information which sought personal data. Section B carried items on availability of the support services provided while section C carried items on the effectiveness of support services provided to students. They were required to respond by putting a tick, Yes/No and giving simple explanations. (Appendix A).

Focus Group Discussion (FGD) Schedule

Focus group discussion was based on the principle of small group dynamics. In FGD, items relevant to the study were to generate information from a small group of students with physical disabilities. This was because they were the recipients of the services and were in a better position to judge whether they were available and effective. According to Kombo and Tromp (2006), this method can produce a lot of information and is good for identifying and exploring beliefs, ideas or opinions in a community. This method was suitable because it allowed the students to assess the state of support services offered to them and make suggestions for improvement to facilitate their socialization and academic participation. It also allowed for probing to get in-depth information. The items in the discussion consisted of open-ended questions to allow for probing. The discussion sought information about the availability and effectiveness of support services offered to the students and suggestions for improvement to reinforce their socialization. The respondents were students. (Appendix C).

Interview Guide

This instrument consisted of a set of questions that the interviewer asks when interviewing a respondent that helps cover a broad area of the study and allows for in- depth information through constant probing. The informant becomes an active participant. This would imply that the researcher and the respondent talk at the same level. The researcher guides and listens. The interview with the physiotherapist sought to gather data on the services they provide, challenges they face and recommendations for improving the quality of their services. (Appendix D).

Observation Checklist

Observation checklist is used to collect data on non-verbal behaviours within a research setting (Oanda cited in Thendu 2006). These constituted some of the major items for the study which relate to socialization and academic participation. Simple direct observations were recorded during the classroom teaching and outside the classroom within the school environment. Facilities included their availability and use of mobility devices while others related to counseling and medical services were also scored. Observation schedule was considered appropriate because it would yield data, which would be used to supplement the questionnaires and interviews for relevant information. (Appendix E).

3.7 Pilot Study

The pilot study was conducted in Masaku Primary School for the physically handicapped in Machakos District. Piloting involved 6 teachers and 12 students selected from class five to seven. The procedure that was employed was similar to that of the actual study. Piloting was done to check the validity and reliability of the research instruments. Through observation and oral questioning the researcher realized

that some question items in the teachers' questionnaire could not be interpreted easily. The questionnaire items for students had complex grammar which also needed editing, which was subsequently done. Piloting further enabled for modification and removal of ambiguous items on the instruments. The selected school for piloting did not take part in the main study.

3.7.1 Validity

According to Orodho (2003), validity is the degree to which a test measures what it purports to be measuring. That is whether the instrument measures the characteristics or trait for which it was designed or intended. Validity of instruments was ascertained through several measures for example several instruments were used to check biases connected with using data derived from one instrument. During piloting, the teachers helped in removing ambiguities such as question items which were difficult to interpret and those with complex grammar for students and hence validity of the items were assured. The clarifications were incorporated into the final documents.

3.7.2 Reliability

According to Kombo and Tromp (2006), reliability is a measure of how consistent the results from a test are. It is the degree to which an instrument will give similar results from the same individuals at different times. To test reliability, test-retest technique was used. The instruments were administered in September 2008 in Masaku Primary School to the subjects involved in the pilot study twice in two weeks. After piloting, the results were analyzed and the reliability co-efficient was calculated using the Spearman's rank order correlation coefficient (ρ) to establish the extent to which the contents of the questionnaires were consistent in eliciting the same response. The teachers' questionnaires after test-retest yielded a positive correlation of $r = 0.850$. The students' questionnaire after the test-retest

yielded a positive correlation of $r = 0.788$. According to Orodho (2003), a correlation coefficient (r) of about 0.75 should be considered high enough to judge the reliability of the instrument.

3.8 Data Collection Techniques

Before data collection, the District Commissioner and District Education Officer, Kisumu East were visited to brief them about the study. Logistic procedures were followed downwards to the schools. Prior appointments were made to visit the respective schools at a time convenient for them. To minimize misinterpretations, clear instructions were given on how to fill the questionnaires. A total of 20 questionnaires were distributed to teachers in the two schools. A maximum of one and a half weeks were given to the respondents to fill the questionnaires. Completed instruments from the respondents, were immediately collected after filling in. However, those teachers who could not manage to complete filling in the instruments the same day, had arrangements made so that they were collected on the agreed date. Out of the 20 respondents (teachers), 17 returned their questionnaires.

A total of 60 questionnaires were distributed to students in the two schools. Out of these, 30 questionnaires were distributed to students in primary classes five to seven. In the secondary school, 30 questionnaires were distributed to students from form one to three. Instructions were given and the questionnaires were administered to the students at the same time making clarifications to those with language problems especially from the primary school. Out of 30 respondents from primary, 29 returned their questionnaires. While in the secondary school, all the respondents returned their questionnaires.

Focused group discussions were administered to 10 students from those who had filled the questionnaires from each school. Observation checklist was used to observe a lesson in each of the classes/ forms where samples were drawn in the same school. This was done within a period of two weeks on agreed dates convenient to each of the two schools by the administration. Interview guide was administered to one physiotherapist on the agreed date convenient for him after the prior visit.

3.9 Data Analysis

According to Kerlinger cited in Nyakado (2007), data analysis means categorizing, ordering, manipulating and summarizing data to obtain answers to research questions. The data collected for this study were both quantitative and qualitative in nature following research questions. The data collected from the study were analyzed quantitatively. However, some qualitative analysis was done on the open-ended questions, focus group discussions and interview guide.

First, questionnaires were sorted out to remove those with incomplete information; those questionnaires that were duly filled by the respondents were included in the analysis. Second, a data code book was prepared; this reference book facilitated the entry of data into computer data entry sheet.

Third, the coded data in the computer sheet were directly keyed into statistical package for social sciences (SPSS) computer software. This package is known for being quite efficient and for its ability to handle large amounts of data given its broad spectrum of statistical procedures purposely designed for social sciences. The data were analysed and presented using descriptive statistics on the basis of frequencies and percentages. Graphs, pie charts, and tables of frequencies and percentages were used to present and analyse the data.

Data from open-ended questions such as focus group discussions and interview guide were first thoroughly read by the researcher to gain familiarity of the responses. These were then sorted out, classified and categorized under major themes or categories of support services as mobility services, self-help skills, medical services, counseling services, teachers' roles and professional challenges. This made it easier to determine frequencies and then give adequate descriptions.

3.10 Logistical and Ethical Considerations

A research permit was obtained from the Ministry of Education. Further permission was sought from the District Education Officer and District Commissioner from Kisumu East. Permission was requested from the headteachers to conduct research in their schools. Kombo and Tromp (2006), maintain that researchers must justify beyond any reasonable doubt the need for data collection. The participants were informed of the purpose of the study. Direct consent was sought from teachers, physiotherapist providing support services and consent of students' participation was requested from the headteachers. Participants were assured that the information they provide would be kept in confidence and would only be used for the purpose of the study as was indicated in each instrument.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

This study was carried out to establish the support services provided to learners with physical disabilities in the two selected schools in Kisumu East District. The data obtained concerned provision of support services. These involved mobility services, self-help skills, medical services, counseling services, teachers' roles and professional challenges, their impact on socialization and academic participation of students.

Information in this study was collected from teachers and students using questionnaires, focus group discussions with students, observation checklist and an interview schedule with one physiotherapist. The data were analyzed using descriptive statistics and discussed. The analysis is presented in form of tables and figures showing frequencies and percentages. Data gathered through interview guide and open-ended questions in the questionnaires were thematically described, followed by interpretation and discussion of research findings. The study sample consisted of 20 teachers, 60 students and four professionals. Response rate was however obtained from 17 teachers, 59 students and one physiotherapist giving a response rate of over 90%. This response rate was considered adequate enough to have the data analyzed and recommendations made. The findings have been organized and presented based on research questions of the study.

The research questions that guided the study were:

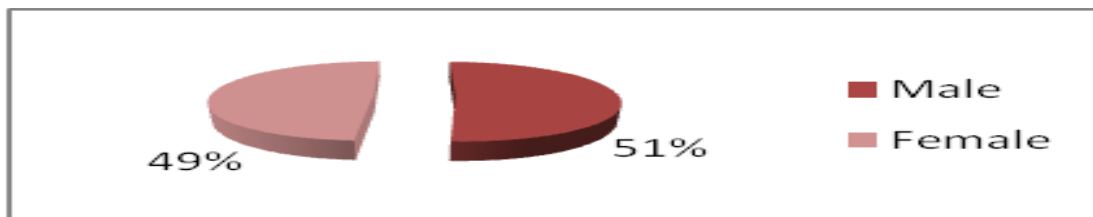
- i. What type of support services are offered to promote academic participation and socialization of learners with physical disabilities?
- ii. To what extent do teachers collaborate with professionals offering support services to learners with physical disabilities?
- iii. What challenges do professionals face in providing support services to learners with physical disabilities?

4.1 Demographic Data of Students

The demographic data for this category of respondents included gender and school level. The data were collected from both Joy Primary and Joy Secondary Schools for Physically Handicapped students. These data were collected to get equal representation between boys and girls in the study. School level was considered to seek varied information from the sample of 60 students.

Gender

Figure 4.1: Gender of Students.



The data from figure 4.1 show representation of the respondents (students) by gender of which 30 (51%) of the students were male and 29 (49%) were female. The total number of students was 59. One of the respondents had problems with writing so did not respond. According to the figure, there were more male than female students.

Table 4.1. School Level of Students, $N=59$

School level	No. of students: (Frequency)				Percentage (%)
	Class	Boys	Girls	TOTAL	
Primary	Five	5	4	9	15
	Six	5	5	10	17
	Seven	5	5	10	17
Secondary	Form 1	5	5	10	17
	Form 2	5	5	10	17
	Form 3	5	5	10	17
TOTAL		30	29	59	100

The data from table 4.1 reveal that 30 (51%) were from the secondary school, while 29 (49%) of the students were from the primary school. This provided the best representation of the respondents. They are likely to give reliable information based on their academic background especially those in the secondary school. Those from primary school were upper classes and had added advantage of having stayed longer in their school, hence were able to provide reliable information about the support services offered to them.

4.1.1 Demographic Data of Teachers

The bio-data of teachers on this category included professional qualification, training in special needs and teaching experience. The respondent characteristics were considered important for the study to generate required data.

Table 4.2 Professional Qualification, N=17

Qualification	No. of Teachers (Frequency)	Percentage (%)
Diploma	9	52.94
Bachelors in Education	7	41.18
Masters (MED)	1	5.88
Total	17	100.0

The data on table 4.2 show the level of professional qualification of the 17 teachers sampled. 9 (52.94%) were diploma holders, 7 (41.18%) had bachelors degree in education while only 1 (5.88%) had masters degree in education. This professional background was good enough for the teachers to provide informed data.

Training in Special Needs Education

The study set to establish the level of teachers trained in special needs education. The information got from teachers is tabulated as follows:

Table 4.3: Level of Training in Special Needs Education, N=17

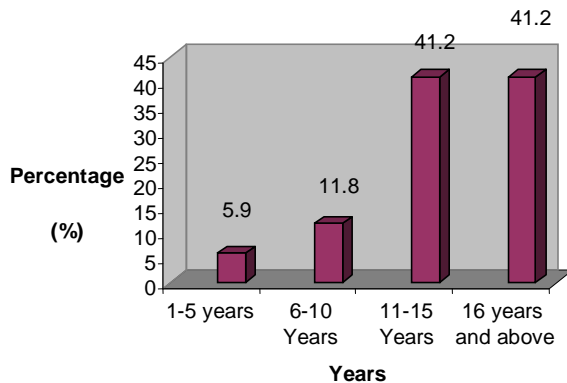
Level in Special Needs	No. of Teachers: (Frequency)	Percentage (%)
Diploma (SNE)	9	53
Bachelors (SNE)	6	35.0
None of the above	2	12
Total	17	100.0

According to table 4.3, the highest 9 (53%) of the sampled teachers were holders of diploma in special needs education, 6 (35%) were degree holders in special needs education while 2 (12%) had no training in special needs education. This indicates that most of the teachers from the two schools had good training background in special needs education. They had acquired the necessary knowledge and skills to teach students with special needs, therefore they did provide informed data.

Teaching Experience

In an attempt to establish teaching experience from teachers, they were asked to indicate the period they had taught since college training. The responses are shown in figure 4.2 below.

Figure 4.2: Teaching Experience



Based on data shown on figure 4.2, the majority of the teachers 14 (82.4%) had taught for more than (11) years, only 1 (5.9%) had taught for 1-5 years while 2 (11.8%) had teaching experience between 6-10 years. Data in the figure indicate that greater number of the teachers sampled had taught for over 10 years. If this long period could be translated to good teaching and accumulation of knowledge, then these teachers should be considered to be competent and able to provide adequate knowledge about the support services provided to students. The study was guided by three research questions of which one is indicated below.

Question 1: What type of support services are offered to promote academic participation and socialization of learners with physical disabilities?

4.2.1 Mobility Services Provided to Students

The study sought to establish the types of mobility services as one of the support service offered to students with physical disabilities. The information was sought from an interview with the physiotherapist, who provides services to the students in the two schools selected, the students and the observation checklist.

Nabango (8/10/08) posits that assessment of the individual students is an essential service provision. This was conducted to determine the impairment or functional limitations of the affected parts in the student's body. The discussions with students reinforced this. Smith (1998) points out that when considering mobility options, it is important to evaluate the individual student. This is because mobility problems are specific to the individual. Designing exercises such as walking, crawling, weight lifting, hopping, skipping, sitting, shifting position and balancing were also mentioned. These are therapeutic interventions that were meant to alleviate the impairment or functional loss. This could be interpreted to mean that exercises are pertinent to mobility services for children with physical disabilities. This finding is consistent with Kieran et al. (1999) who noted that the type of mobility services should include promoting self-sufficiency related to gross motor skills.

The physiotherapist also mentioned checking on equipment and walking aids. However, mobility equipment for the two schools in the gymnasium were inadequate compared to the large number of students. This could lower the quality of exercises provided to the students because not all of them would be able to practice the exercises using the equipment at any one time. Students' mobility for those who use the devices depend on their conditions. This warrants repair and maintenance. This could influence the ease and speed of movement by students for those who use mobility devices. The study also revealed that mobility services included managing plaster applications. This is very necessary especially for children with weak bones such as those with brittle bone conditions.

The teachers were asked to mention the most common types of devices used for mobility by students.

Information was sought from 17 teachers whose responses are summarized in Table 4.4.

Table 4.4 Common Mobility Devices Used by Students

Mobility Device	No. of times mentioned	Percentage (%)
Wheelchairs	16	91.1
Crutches	17	100
Boots and calipers	12	70.6
Mobility chairs	4	23.5
Walking frames	8	47.1

The results from table 4.4 above show that crutches were the most common devices used by students above all the devices as indicated. The findings does not concur with Gargiulo (2006) who found that, students with physical disabilities may use a wide range of mobility devices to move from one location to another and the most common ones are wheelchairs, either manual or electrical. This variation of the findings can be due to the fact that crutches are cheaper compared to wheel chairs but not so appropriate. However, when considering mobility devices to use by students, one should check on their appropriateness to the individual rather than their popular use. From the observation checklist, the environment favoured the use of crutches than wheelchairs or any other mobility devices. It was observed that the secondary school compound lacked adequate ramps, pavements and supportive bars. The primary school had fairly adapted environment, but it also lacked other facilities such as walking bars for those with posture and balance problems.

4.2.3 Mobility and Academic Participation

The study was also intended to establish whether mobility services provided improved academic participation. The information was sought from teachers. All the 17 (100%) teachers responded that mobility services improved academic participation. Teachers observed that, learners attend classes in time and also participate actively in class especially groupwork due to improved mobility. Mobility is critical to time management of learners who are physically disabled between the lessons, especially before classes begin in the morning, after lunch or between breaks. Late arrival in class or change over in activities that demand mobility reduces time for effective learning engagement. Nevertheless, the curriculum for each class is stipulated according to the number of periods per subject per week. Therefore, punctuality in class is very rewarding. This finding is consistent with Waruguru and Kabuchuru (2008) who observed that to teach a learner with physical disabilities, it is important to train the learner to use mobility devices. According to this, the device would accelerate the speed of student's movement. The teachers' responses further indicated that learners actively participate in class especially during groupwork. This involved altering their seating positions in the process of class activity. Groupwork encourages the learners to interact and assist one another as they learn for better results.

These findings were further reinforced during the FGD with the students in Joyland Primary which revealed that mobility services improved the handwriting of learners with physical disabilities. This was possible because improved mobility results in good sitting, positioning and balancing, which are some of the skills that could influence hand writing either positively or negatively. This improved hand writing involves the use of fine motor skills which enhance grasping and manipulation of writing materials. Good

handwriting has an aesthetic value which leads to self-confidence in the students. This is improved by the work of occupational therapist, but was done by the physiotherapist because there was no occupational therapist in either of the schools selected. This was revealed during an interview with the physiotherapist. Waruguru and Kabuchoro (2008) posit that the learner who is physically disabled should be trained to make use of the functional parts of the body for writing.

The FGD with students from Joyland Special Secondary School also revealed that the mobility services made learning more effective. The students were able to reach their classes easily and began lessons in time. This could be interpreted to mean that mobility services improved speed of movement, sitting, positioning and shifting positions in class. This reduced stress in the learners and enhanced their concentration in the class delivery. According to Nabango (8/10/08), students become more active after the exercises which improve their class performance. Mobility services are therapeutic and recreative as such the students become more refreshed to learn. The findings indicate that mobility services enhance students' involvement in academic learning. This is in line with Heller *et al.*, (2000) who observes that mobility services can enhance learning opportunities for learners with physical disabilities. This could be due to the fact that provision of mobility services alleviates most of the students' problems that may affect their academic participation. For example, difficulty in sitting and controlling body muscles can greatly interfere with manipulation of writing materials. It is important that services should be provided for the students' to enhance their performance.

To gather further information on use of mobility skills learnt to improve school performance, the teachers were asked whether the mobility skills learned by students were applied on daily routine. The results are shown in Table 4.5 below.

Table 4.5 Use of Mobility Skills Learnt by Students, N=17

Responses	No. of teachers (Frequency)	Percentage (%)
Yes	14	82.4
No	3	17.6
Total	17	100.0

According to table 4.5, out of 17 teachers, 14 (82.4%) indicated that the new skills were used on daily routine while only 3 (17.6%) felt they were not. The use of new skills such as walking, shifting position, balancing, and standing promotes independent movement of the students in the school. The daily practice of these skills enables the students to master them easily. This is consistent with a study by Swallow and Heubner cited in Stone (1995) who emphasize that, the sequence of learning independent movement skill follows three steps; learning a specific skill, incorporation of the skill into daily routine and application of the skill as needed. Since teachers spend most time of the day with the students, they are instrumental for the effective functioning of the mobility regimes given to students to increase their school performances. This should be done by encouraging and ensuring that students are adequately involved in following the school daily programmes.

4.2.4 Mobility Services and Socialization of Students

The study intended to establish whether mobility services improve socialization of students. This information was derived from teachers, students and physiotherapist. All the teachers 17 (100%) and students comprising 59 (100%) were of the opinion that mobility services provided enhanced interaction among students and teachers. It was further established from teachers that mobility services enhanced socialization through students playing together with peers, moving in groups and also working together in class. In view of this, socialization took place through the peer interaction in various activities both in and out of class within the school compound.

Mobility services lead to increased socialization of students during gymnasium exercises. When students improve their mobility, their physical environment is extended both to the peers and teachers (Nabango, 8/10/08). The findings indicated that mobility services impact positively in facilitating socialization of students. This could be due to the fact that most of activities that facilitate socialization are movement-based. Therefore, when students' mobility is enhanced, they are encouraged to interact among themselves and teachers. This study conforms to the previous study by Heller *et al.*, (2000) who found that providing a means of mobility to learners with physical disabilities can improve their independent exploration and interaction with the world. According to this citation, interaction with the world around the student results in discovery, exploration, free movement, as well as the ability to socialize with others. This implies that in a learning environment, students learn and master new experiences, informally as they interact with peers and teachers. One can, therefore, conclude that the student's ability to move about is very rewarding.

4.3.1 Teaching Self-Help Skills

The study also sought to establish whether teaching of self-help skills as another support service, was necessary for students with physical disabilities. Teachers were asked to respond with either Yes or No. The following responses were collected as shown in Table 4.6 below.

Table 4.6 Teaching Self-help Skills, N=17

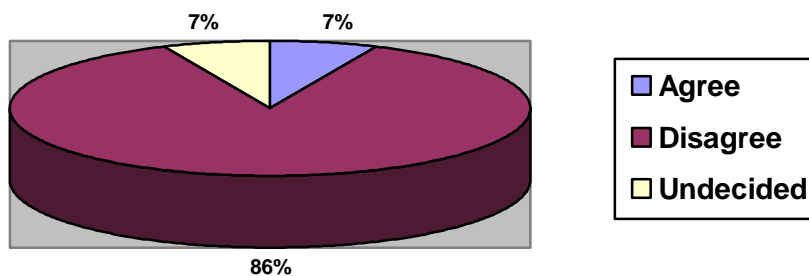
Response	No. of teachers (Frequency)	Percentage (%)
Yes	14	82.4
No	3	17.6
Total	17	100.0

According to table 4.6, 14 (82.4%) of the teachers indicated Yes while 3 (17.6%) responded with No. The finding showed that majority of the teachers indicated teaching self-help skills to students with physical disabilities was necessary. Normal children are not generally taught how to perform such activities as bathing, dressing and toileting. They acquire them through observation and imitation, and they become part and parcel of their lives. They, therefore, learn them naturally, incidentally or effortlessly. However, children with physical disabilities have difficulties acquiring these skills. In view of this, they should be taught these skills to carry out activities of daily living without or with minimal assistance. The study further sought to establish who should be involved in teaching self-help skills. Majority of the teachers indicated that teachers should be involved in teaching learners self-help skills especially hygiene skills. Teachers spend most of their time with students and have the advantage over identifying individual weaknesses in specific areas of self-help skills which should be emphasized. Most of the

students in Joyland Primary School had not mastered these skills and therefore needed effective instructions from teachers. A study by Raymond (1984) stressed the importance of including self-help skills when planning curriculum for children with special needs. This means that the life of students with physical disabilities requires adapted curriculum which incorporates the activities of daily living. On the other hand, some students with mild impairments may not require the teaching of these skills or adapted curriculum on the same.

The students were further asked to respond to the statement regarding whether self-help skills were included in the daily programme. This was scored using the likert scale ranging from one to five. The results are illustrated in figure 4.3 below.

Figure 4.3 Provision of Self-help Skills



As presented on figure 4.3 above, majority of the students 51 (86%) indicated that the services were not included; only 4 (7%) were in agreement that self-help skills were provided on daily basis. This was very interesting as most of the students with physical disabilities depended on the need for personal

management of which some of them had cognitive and physical limitations. Some of these skills such as dressing can be best learnt by continuously practising the skill.

The kind of self-help skills given in the selected schools included bathing, dressing, toileting, washing clothes and utensils especially with the primary students. The secondary students might have acquired these skills during their primary level although some of them might still require them at this level. The need for self-help skills is more crucial in primary than in secondary schools for learners with physical disabilities. The selected schools need expert personnel like occupational therapists to train students on fine motor and how to perform activities of daily living but who were not available in the two selected schools. This could mean that the teaching of these skills was inadequate as they lacked expert personnel to assist the students even if teachers were involved.

4.3.2 Self-help Skills and Academic Participation

The study sought to establish whether the self-help skills promote academic performance of learners. All the 17 (100%) of the teachers observed that self-help skills promote academic participation. The acquisition of the skills make the child fit for schooling because he/she freely interacts with the teachers and peers in and out of classroom activities. This means that a withdrawn child due to poor self-care skills may not perform to his/her potential. The study further sought teachers' opinions on how self-help skills promote academic participation. The results are shown on the Table 4.7 below.

Table 4.7 Self-Help Skills and Academic Participation

Responses	No. of times mentioned	Percentage (%)
Reduces infections	17	100
Builds self-esteem	15	88.2
Improves their health	16	94.1
Feels comfortable	15	88.2
Promotes confidence	17	100
Promote groupwork	14	82.4
Increases class attendance	11	64.7
Creates conducive learning environment	7	41.2

The data on Table 4.7 show that the highest mentioned responses were reduced infections and promotion of confidence. This was indicated by all teachers 17 (100%). Sixteen (94.1%) of the teachers felt it improved health while 15 (88.2%) of the respondents indicated that it builds self-esteem and feel comfortable respectively, about 14 (82.4%) teachers indicated it promoted group work while 11 (64.7%) teachers mentioned increased class attendance. The least mentioned was created conducive learning environment by 7 (41.2%). Reduced infections lead to better health maintenance of the child at school. For the child to gain and discover new learning experiences, the child must actively be involved in the learning process. This depends on the health status of the child.

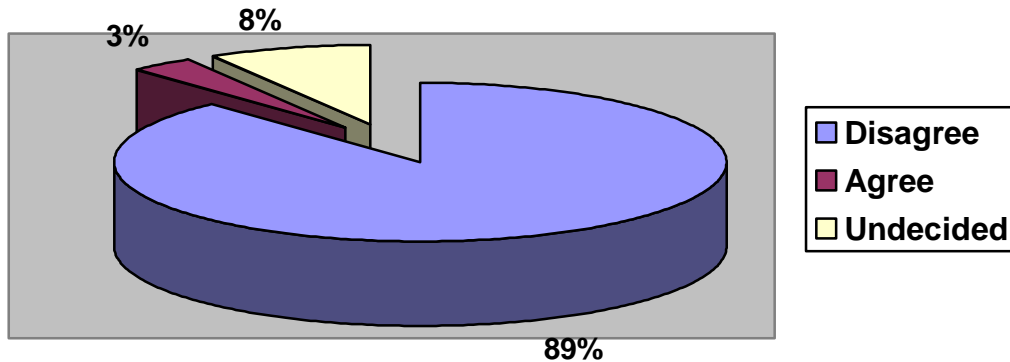
The results in the Table above also show that self-help skills had influence in academic participation because it builds self-esteem, as such the child feels confident and comfortable. This view is shared by

Westling and Fox cited in Bigge *et al.*, (2005) who observe that hygiene skills maintain health, promote socialization and acceptability to others. These could in turn improve group work involvement of the child for better academic performance. The findings of this study differ with Bigge *et al.*, (2005) who emphasize importance of teaching personal management skills to promote independence in school. This did not reflect on academic performance of students as a result of personal management skills.

4.4.1 Learners' Perception on Provision of Medical Services

The study wished to establish the perception of learners on the state of medical services given to them as another support service. The results are shown in figure 4.4 below.

Figure 4.4. Perception of Learners on Provision of Medical Services



Data on figure 4.4 reveals that majority of the students 52 (89%) disagreed that school health services were provided regularly. Only a few of the students 2 (3%) responded that medical services were provided regularly.

During the focus group discussions with students from the selected schools, it was learnt that the two schools used to be served by one nurse who left to another station. The students noted that the services were not timely given and in most cases they were referred to or taken to the hospital depending on the nature of sickness. This was a very risky situation for these students, some of whom were dependent on medicine. The absence of school nurse was the cause of inadequate and untimely provision of medical services. This finding is in line with California School Nurses Organization (2005) stating that, the need for the school nurse is greater than it has ever been and yet this is the time of crisis. This implies that schools face great danger without nursing services.

4.4.2. Types of Medical Services Provided to Students

The study also sought to establish from teachers the type of medical services offered by medical personnel and teachers to students. The results are presented in Table 4.8.

Table 4.8 Types of Medical Services Provided to Students

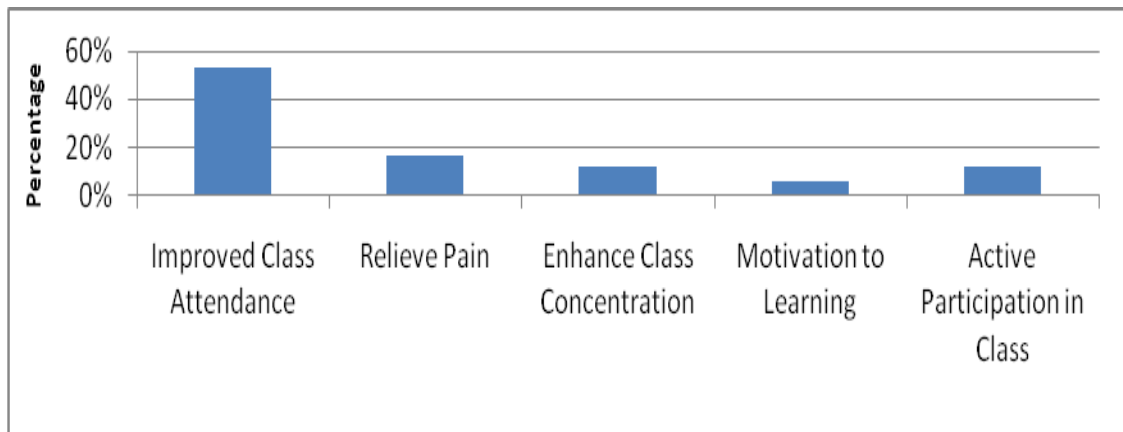
Medical services	No. of times mentioned	Percentage (%)
Surgery	7	41.2
Bracing	9	52.9
Discussing health issues	15	82.2
First Aid during emergencies	17	100.0
Ensuring proper dose	16	82.4

Data on table 4.8 reveal that the highest mentioned medical related services received by students were first aid during emergencies. This was mentioned by all the 17 teachers (100%), discussing health issues was mentioned by 15 (82.2%) and ensuring proper dose by 16 (82.4%) of the teachers, only 9 (52.9) teachers indicated bracing while surgery was mentioned by 7 (41.2%) of the teachers. The provision of first aid was very crucial because teachers need to assist students during the times of danger. This could easily be done by teachers as they didn't require expert experience. This evidenced why it was highly mentioned. Discussing health issues with the students on personal healthcare and sanitation could prevent outbreak of diseases that may interfere with the student learning. These were some of the best services teachers could give to students. This finding is in line with Smith (1998) who observes that in some occasion's teachers may be asked to dispense medication or attend to minor medical needs of the students. This implies that teachers could be involved in health maintenance and administration.

4.4.3. Medical Services and Academic Participation

The study also intended to establish how medical services provided to students enhance their academic participation in the school. The information was gathered from teachers and students. The findings from both schools revealed that medication led to regular class attendance, being active in class and made them work better in class. From the foregoing discussion, one could observe that medical services enhance classroom attendance and active involvement in the demanding learning tasks in class. Teachers were further asked to state how medication improved academic participation of students. Their responses are summarized in figure 4.5 below.

Figure 4.5 Medical Services and Academic Participation



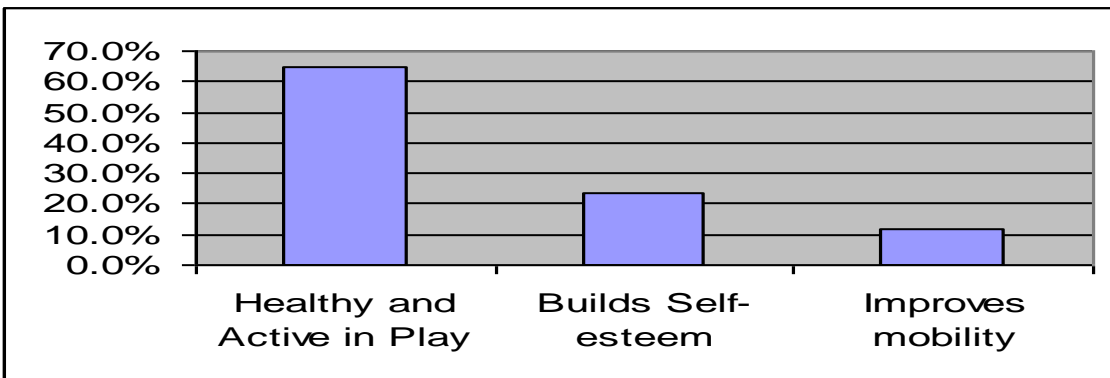
Data from figure 4.5 show that majority of teachers 9 (53%) observed that medical services led to improved class attendance while few teachers 3 (17%) responded that medication relieved pain, other teachers 2 (12%) each mentioned that medical services enhanced classroom concentration and active participation in class respectively. The least mentioned was motivation to learn by 1 (6%). The finding therefore, reveals that medical services lead to improved academic participation among learners. This is possible because most of the students with physical disabilities have problems that require medical attention as some of them depend on medicine in their lives both in and outside the school. They can only attend classes regularly, when medical facilities are provided to maintain their health. This reduced the absence of the students to seek medication on their own hence loss of class instructions. The

medical conditions include those with muscle and joint problems. For example, some students such as those suffering from arthritis or sickle cell anaemia are always under pain. This is enough to affect their academic participation. This finding is consistent with a study conducted by Reinforth by cited in Schwartz (2005) that a student could visit the nursing officer for treatment enable her/him to benefit from educational programme.

4.4.4. Medical services and Socialization

Teachers were asked to respond to a statement regarding whether medical services influenced students socialization in the school. The results from 17 teachers are illustrated in figure 4.6 below.

Figure 4.6 Medical Services and Socialization



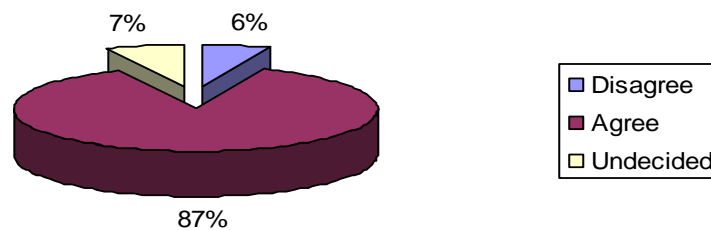
As shown on figure 4.6, majority of the teachers 11 (64.7%) responded that medication made students healthy and active in play, 4 (23.5%) indicated self-esteem while only 2 (11.8%) indicated improved mobility. The findings show that medical services enhance students' socialization in school. Medical services involve diagnostic, interpretation and interventions to reduce the child's health problems. A

healthy child is physically or psychologically able to adjust to the social environment. This is evidenced as the child joins peers and actively involved in their outdoor activities. One could suggest that a healthy child is motivated to reach out the stimulating social environment. He or she would be inspired to join others in play and actively participate.

4.5.1 Provision of Counseling Services

Counselling services as one of the support services are crucial to students with physical disabilities because their disability interferes with their optimal life adjustment. Consequently, counselling helps, them make life more satisfying and achieve their potential. The study also sought to establish from students whether counseling services were provided at school. The results are illustrated in figure 4.7 below.

Figure 4.7 Provision of Counseling Services



In figure 4.7 above, the findings reveal that majority 51 (87%) of the students responded that counselling services were provided while 4 (6%) disagreed. Counselling is recommended to learners with physical disabilities to make them adjust positively to the school life. Due to this, the counseling needs of these students should be addressed to help them further correct maladaptive behaviour. This study

conforms with Nasibi (2003) who emphasizes that the schools are charged with the responsibility of helping individual students and develop them to their fullest extent. This implies that the life of students who are physically disabled would be incomplete without the provision of counseling services.

The study went further to find out the types of counseling services provided to learners with physical disabilities. It sought opinions from teachers. The results are summarized on Table 4.9 below.

Table 4.9 Types of Counseling Services Provided to Learners

Types of counseling services	No. of times mentioned	Percentage (%)
Behaviour modification	15	88.2
Transition plans	9	52.9
Self concept	14	82.4
Needs and interest	7	41.2
Being advocate for the student at school	14	82.4

The data from table 4.9 indicate that majority of the teachers 15 (88.2%) mentioned behavior modification, 14(82.4%) mentioned self-concept and being advocates for the students at school while 9 (52.9%) mentioned transitional plans. The least mentioned was needs and interest with only 7 (41.2%) teachers. Children with permanent disorders tend to have psychological maladjustment which can lead to school related social problems. Behaviour management strategies to enhance their socialization and academic performance were necessary. Self- concept was also rated highly with the teachers. This could be because some children have problems in adjusting to their disability so it was important that they were adequately counseled to look at life positively especially at school.

4.5.3 Counseling and Socialization of Students

The teachers were asked to respond whether counseling influenced socialization of students in the school. All the 17 (100%) of the teachers indicated that counseling had positive influence on socialization of the students. Counseling equips students with skills, awareness and knowledge to confront social inadequacies that would hinder their social integration in school. The study went further to seek teachers' opinions on how counseling impacted on socialization of the students. The results are shown in table 4.10 below.

Table 4.10 Counseling Services and Socialization of Students. N=17

Responses	Frequency	Percentage (%)
Builds self-esteem and self concept	9	53

Students are guided to socialize	5	29
Builds self confidence therefore socialize with others	3	18
Total	17	100

As can be seen in Table 4.10, majority of teachers 9 (53%) indicated that counselling builds self-esteem and self-concept while 5 (29%) indicated that students were guided to socialize. The least mentioned was that counselling builds self-confidence by 3 (18%) of the teachers. In a school environment, it is important for a student to establish and maintain friendship in order to diminish feelings of isolation and loneliness as well as join a crowd where the student feels comfort and acceptance. This depends on self-esteem that was highly mentioned by teachers because it resulted on individual image in comparison with others. When one feels dignified among others, he/she would interact freely with others. The feeling of self-worth due to positive self-concept reinforces socialization. Based on the data on Table 4.10, self -concept was found to be one of the major impacts leading to socialization. The finding disagrees with MoEST (2003) which looked at self-concept broadly on academic rather than on socialization model. According to it, the primary concern of a counselor dealing with exceptional children should include building a better self-concept as people who can perform and accomplish goals. The finding implies that positive self- concept reinforces self-confidence and therefore the student could easily socialize with his/her peers.

During the focus group discussion with the students at Joyland Secondary School, it was revealed that they receive counseling on social relationships. This was very essential because most of the students

were in adolescent stage. Therefore, their nature of socialization was very important. This study is in line with Bowman and Jaeger (2004) who argue that issues of disability sometimes create distinct problems that may require the development of special skills in order to navigate relationships with peers. One could conclude that students required individual and group counseling to adjust well to the school setting.

4.5.4 Counseling and Academic Participation

Teachers were given a statement regarding whether counseling could improve academic performance of learners. The responses indicated that all teachers 17 (100%) were in agreement that counseling improved academic performance of learners. This indicates that counseling is very important concerning academic performance of students with physical disabilities. Due to poor physical and medical conditions, some may see no need of working hard in academics as they consider themselves disabled and therefore not motivated to work hard. The same information was sought from students; all the students 59 (100%) were in agreement that counseling services improved classroom participation. This is consistent with Mwangi (2003) who argues that intervention of the teacher counselor should include giving a person academic counseling as one tries to rehabilitate him/her. This implies that teachers who are counselors working with the students who are physically disabled should encourage them to set positive academic goals.

During the focus group discussions between the researcher and students from Joyland Secondary, the students revealed the areas where counseling assisted them. These included academic performance, stress management, study groups, individual and group counseling. Focus group discussions between the researcher and students from Joyland Primary revealed that counseling motivated them to work harder in class. The findings therefore, indicate that counseling improved academic participation of students. This could be because counseling services built students' confidence which reinforced their self- concept as people who could perform just like other non-disabled students. This was possible because majority of students with physical disability have intellectual capacity like their non-disabled counterparts and could averagely compete despite their disability when assisted in the areas which interfere with their academic achievement. This supports MoEST (2003) that exceptional children should be assisted to build a better self-concept as people who can perform and accomplish goals. It suggests that, learners with physical disabilities should be encouraged and motivated to achieve their full academic potential. The study also intended to answer the research question below.

Question 2: To what extent do teachers collaborate with professionals offering support services to learners with physical disabilities?

4.6.1 Teachers' Views on Collaboration

The study sought views of teachers on collaboration with professionals providing support services. The responses were scored using the likert scale ranging from 1 to 5 such as strongly agree (5) agree (4) undecided (3) disagree (2) strongly disagree (1). All teachers 17 (100%) indicated that collaboration was necessary. The varying needs of learners who are physically disabled require that teachers must work with professionals who are providing support services. The professionals are competent in different

areas, at the same time the needs of the individual students are specific yet, in most cases, teachers can mostly implement the pieces of advice given to them by the professionals.

4.6.2 Types of Professionals Invited to Schools

The study sought to establish from teachers the type of professionals invited to schools to provide support services. Their responses are shown in Table 4. 11.

Table 4.11 Types of Professionals Invited to Schools

Professionals	No. of times mentioned	Percentage (%)
Physiotherapist	15	82.2
Occupational therapist	4	23.5
Nurses	12	70.6
Counselors	5	29.4
Orthopedic surgeons	2	11.8
Speech therapist	4	23.5
Social workers	3	17.6

From the data shown in Table 4.11, 15 (82.2%) of teachers mentioned physiotherapists as one of the most invited professionals. The nurses were mentioned by 12 (70.6%) while occupational therapist and speech therapist each was mentioned by 4 (23.5%) respectively. This could be because most of the students with physical disabilities had other health impairments such as diabetes, heart diseases and tuberculosis, which required regular medical attention by the nurses. The presence of school nurses in schools of children with physical disabilities therefore becomes a priority based on the health conditions of the students. The least mentioned were social workers by 3 (17.6%) and orthopedic surgeons by 2 (11.8%) of the teachers. This could be because most of the students with physical disabilities had motor problems that pertain to the movements of arms and limbs which required frequent physiotherapy. This means that the schools of students with physical disabilities cannot do without the services of a physiotherapist. The invitation of the physiotherapist can also reveal that the two schools had no permanently employed physiotherapists.

This study is consistent with the previous studies by Klemz and Bell (1981), and Smith and Luckasson, (1992) who found in their studies that teachers teaching students with physical disabilities are likely to work with therapists. The purpose of this collaboration is significant according to these findings in the sense that the government is unable to employ various experts in the special schools of students who are physically disabled to provide support services. Due to this fact, the teachers must collaborate with various experts in workwise fields for the child to benefit fully in school.

The study further sought to establish how often professionals worked with teachers in class. The results are shown in Table 4.12 below.

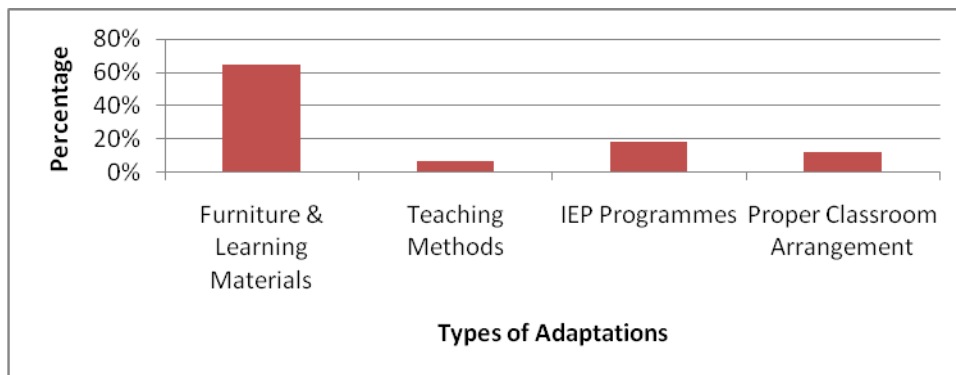
Table 4.12 Collaboration with Other SNE Professionals, N=17

Times	No. of teachers (Frequency)	Percentage (%)
Occasionally	9	52.9
Not at all	8	47.1
TOTAL	17	100

Based on the data on Table 4.12, slightly above half the number of the teachers 9 (52.9%) indicated that professionals occasionally join teachers to work with students in class while 8 (47.1%) of the teachers were of the view that this did not happen. The students with physical disabilities have motor problems that are enough to affect their learning due to difficulties in sitting and standing, holding pens, books, writing or drawing. The teachers may not be able to handle these conditions adequately in class to enhance maximum academic participation of students. This requires that at times, professionals should join the teachers in class to assist students with problems. This finding is in line with the study of Reinforth cited in Schartz (2005) who points out that some support service providers have the talent and flexibility to move in class during any lesson and find ways to provide specialized services needed by individual students. A good number of students with physical disabilities have motor problems which require that specialists such as occupational therapists should enter the class and assist the student with fine motor problems on how to manipulate learning materials. However, this could be very rewarding to the students, but on the other hand, the teacher can see this as a potential loss of his/her class autonomy when a professional is in class assisting students with needs at the same time .

The study sought teachers' opinions on adaptations made in class following their collaboration with professionals. Their responses are illustrated in figure 4.8 below.

Figure 4.8 Types of Adaptations



From the data illustrated in figure 4.8, majority of the teachers 11 (64.7%) indicated that adaptations on furniture, teaching and learning materials had been made, while 3 (17.6%) indicated inclusion of IEP, 2 (11.8%) indicated proper classroom arrangement, only a smaller number 1 (5.9%) stated adaptations of proper teaching methods. Adaptations on furniture were very pertinent since most of the students with physical disabilities had problems with balance, posture, sitting and shifting positions. This requires that, the desks, chairs or wheelchairs must be adapted to the individual needs of the students especially their heights and working area. This could maintain their comfort and increase their endurance and active participation in classroom activities.

From the observation checklist, some of the students had problems with the upper limbs. This led to difficulty in manipulating the teaching and learning materials as others even used the page turners and

adapted pens while performing the class tasks. This conforms to Ndurumo (1993) who observes that in order for severely handicapped children to cope with expectations of classroom work, it is essential that their need for adaptive and assistive devices be taken into account. This could be interpreted to mean that the adaptations are crucial without which the student could remain passive or wait until the teacher comes round to perform a task for him. It could be observed from the checklist that classrooms were arranged to create space for mobility to allow the use of wheel chairs. The devices which were not being used were kept in a safe place in the class during the lesson to reduce the chances of injuries in the class. The last research question to be answered by the study is stated below.

Question 3: What challenges do professionals face in providing support services to learners with physical disabilities?

4.7 Challenges Faced by Professionals

The opinions were sought from an interview conducted to one physiotherapist. According to Nabango (8/10/08), the physiotherapist experienced transport problems to and from the schools which meant that he made his own arrangement, drove to school or is dropped by the hospital vehicle. This was a setback and resulted in delays to deliver support services to students. This implies that the schools did not consider punctuality or the arrival time by the professionals, which could at the same time interfere with the schools' daily programmes.

The findings also revealed that professionals have heavy workload. For example, one physiotherapist should only handle 20-24 students in the gymnasium with each requiring 10-15 minutes at any given time while others required more time (Nabango, 08/10/008). He attended to the two schools only ones

a week. Despite that, he combined with his regular hospital work, since he was under the Ministry of Medical Services and not Education. This implies that the students were rushed during the services due to their large number which had to be attended to on a single day. This reduced the quality and effectiveness of the mobility services the students received.

Despite the above challenge, the study findings further indicates that parents were uncooperative when called to schools to discuss the conditions of their children with the professionals when it was felt that a student's problem had links from home. This implies that the parents should know their child better than teachers or professionals. This is in line with a study by Gargiulo (2006) when he argued that parents are seen as collaborators and equal partners with professionals, a view he shared with Saskatchewan cited by Stanviloff (1994) who observe that parents have up-to-date information, are knowledgeable on their child's disabling condition(s) and can give insight on their child's strengths, likes and dislikes. One can, therefore, conclude that the quality of support services given to students with physical disabilities depend on the cooperative teamwork between teachers, professionals and parents.

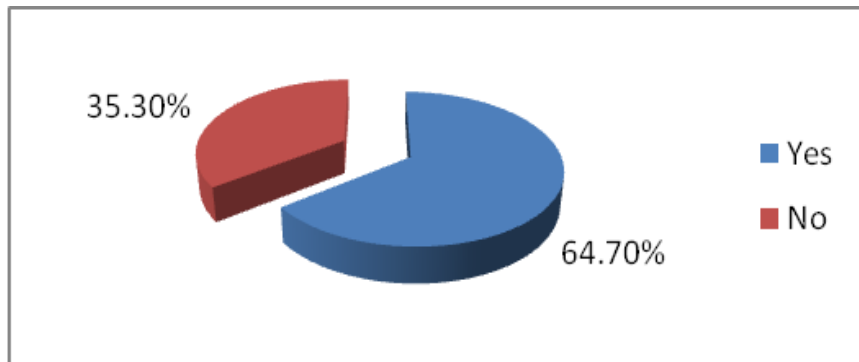
Further interview with the physiotherapist also revealed that, there was financial implication in terms of services and materials such as assistive devices in the provision of support services. The parent is the one who is more involved in the provision of funds for the services such as medical, physiotherapy and materials. Most of the parents sometimes undergo heavy financial expenditure due to medical services and purchase of devices. This is a big challenge as it depends on socio-economic background of the parents. This study is consistent with Barakat and Karak, Sokol *et al.*, cited Gargiulo (2006) arguing that the families of children with physical disabilities and other health impairments are under tremendous

stress characterized by financial strains. This could be so because the funds enhance the quality and adequate provision of support services required by the child.

4.7.2 Review of services.

The information was sought from teachers who were asked to respond to a statement whether professionals constantly reviewed their services provided to students. The results are illustrated in figure 4.9 below.

Figure 4.9 Review of Support Services



The data in figure 4.9 indicate that majority of the teachers 11 (64.7%) responded that professionals constantly assessed the services they provide while only 6 (35.3%) observed that the assessment was not done. The services provided to students' are done by various professionals with each having his/her own programme. It is important to assess whether the progress is being made or not in relation to the students' needs, so that adjustments are made to the success of the programme. This was more evident from the mobility services offered by the physiotherapist that involved assessment before the exercises in training on mobility skills were designed any time he attended to the students. This indicated that

assessment of the progress of any programme for students with physical disabilities is pertinent to the successful results received by the student.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The chapter presents summary of the study findings following research objectives. The conclusions are made followed by recommendations. The final section outlines recommended areas that the researcher feels need further research. The summary is based on the responses of 17 teachers, 59 students from the two special schools for learners with physical disabilities and one physiotherapist attached to the two schools in Kisumu East District.

5.1 Summary of Research Findings

The purpose of this study was to investigate the provision of support services for learners with physical disabilities in Kisumu East District and how they promote academic participation and socialization of those learners. The findings showed that the mobility services were offered. These included assessing the students before designing exercises for the individual affected. Checking equipment and walking aids was also noted. These services were done in the gymnasium which also lacked adequate apparatus. This lowered the quality of services. The most common devices used by students were crutches and wheelchairs. Mobility skills were applied on daily basis to allow for mastery. Mobility services ensured increased learning opportunities of students by enhancing punctuality in class attendance and being active in performing learning tasks both in and outside the class. It improved hand writing and made learning effective. Mobility exercises make learners more active and this improved their class participation. Mobility is critical to time management. Mobility services promoted socialization of the student through peers and teacher interaction in various activities within the school compound. There

was increased socialization during mobility exercises done in the gymnasium. From the above findings one can conclude that mobility as a support service offered to learners with physical disabilities promote their academic participation and socialization.

The findings also revealed that teaching self-help skills was necessary as one of the support services. However, the self- help skills were not provided on a daily basis. The teaching of self-help skills were inadequate and lacked expertise input from the professionals. However, the findings noted that teachers should be involved in teaching self-help skills. The self-help skills provided to students included bathing, dressing, and toileting, washing clothes and utensils especially with primary school students. The secondary students were not trained in self-help skills because teachers believed that they had already mastered those skills during their primary level. The acquisition of self-help skills promoted academic participation because these skills make the child fit for schooling. They reduce the chances of contracting infection and maintain the child's health for regular school attendance. The skills lead to self-esteem enabling the child to feel confident and comfortable and therefore, he/she freely interacts with teachers and peers in learning activities hence increased academic participation.

The findings showed that health services were not provided regularly as one of the support services and most of the time students were referred to hospitals as any of the selected schools had no nurses. These resulted in inadequate and untimely provision of medical services, this was very risky. There was need for provision of medical services to students with physical disabilities. The most common related medical services provided to students included first aid, discussing health issues and proper dose. These seemed to be the most basic services that teachers could easily provide in the absence of qualified medical personnel. The need for provision of medical services was a necessity. Medical services

improved academic participation due to increased class attendance, being active in class, reduction of pain and enhanced concentration in class because they improve and maintain the health status of the child. Although medical services were not regular, it was revealed that medical services impacted positively on socialization of students in the school. Medication made students healthy and active in play. A healthy student was motivated to reach stimulating social environment.

The findings revealed that counseling services were provided. The most common types of counseling services to learners included behaviour modification, indicating that the student had behaviour problems which could be due to effect of their disabilities. Self- concept was also rated highly because it determines the child's academic performance. Although, being advocates to the student was mentioned by (82.4%) of the teachers, it is more of advocacy than a counseling service. It was found that counseling had positive influence on socialization of students through building students' self-esteem, self- concept, confidence and guidance to socialize. From teachers and students responses, it was revealed that counseling improved academic participation by addressing pertinent issues which could hinder students' academic participation. These included general guidance on academic performance, stress management, study groups, individual and group counseling and self-concept. In particular, based on the findings counseling promotes academic participation and socialization of learners with physical disabilities.

The findings showed that collaboration with professionals was mandatory. There was a wide range of professionals invited to the schools to give support services. The most common one was the physiotherapist followed by the nurses. The professionals occasionally joined teachers to work with students in class. It was revealed that teachers made adaptations in line with expert advice given by

professionals, when working with students in class to improve their academic participation. These were mostly on furniture and learning materials.

The findings revealed that the professionals faced various challenges which included: transport problems to and from school of learners with physical disabilities. There were heavy workload compared to the time available and the number of students to be served at a given time and ones in a week. Parents were found to be uncooperative when called upon by professionals. There was lack of professionals in various areas where students needed support services. The study revealed that there were financial implications in terms of services and materials needed to provide support services. The findings revealed that professionals continuously reviewed the services they provided to students. The challenges faced by the professionals can negatively affect the quality of delivery of support services.

5.2 Conclusion

From the foregoing findings of the study, the following conclusions were identified. The provision of mobility services were inadequate in schools due to lack of personnel, and inadequate apparatus. Assessment of the students needing assistance was done first. Crutches were the most common devices. However, mobility services enhanced socialization and academic participation of students. Self-help skills were necessary but not provided adequately in schools and the most affected was the secondary school where it was believed that the students here had already mastered the skills in their primary schooling. Self-help skills had positive influence on academic participation of students. The provision of medical services was inadequate due to lack of nurses in schools with physical disabilities, leading to large number of referrals of students to hospitals. Although medical services improved academic

participation and socialization, it was not provided regularly. The counseling services provided in schools improved socialization and academic participation because it addressed sensitive issues that could hinder students' school performance. The support services provided promote the academic and the socialization of the learners with physical disabilities. However collaboration was necessary, it was limited between teachers and professionals since they were only occasionally invited to schools. Physiotherapists were the most invited among the professionals. Teachers make adaptations in class to promote academic participation of learners. There was lack of personnel in various areas of the support services that were provided to students. There was transport problems and heavy workload. It was revealed that parents were uncooperative. The schools lacked funds for adequate provision of support services and purchase of materials to use for effective delivery of support services. The support services provided by professionals promote academic participation and socialization of learners with physical disabilities.

5.3 Recommendations

Based on the findings above, it is recommended that,

- i. Schools of learners with physical disabilities should be keen on provision of adequate and quality self-help skills to students. This should be done by employing occupational therapists to attend to the needs of students on self-help skills.
- ii. The school administrations should employ school nurses incase the government is unable, to intensify provision of medical services and reduce large number of students referral to hospitals.
- iii. The schools should organize transport arrangement for professionals on known schedules to avoid delays and irregular attendance by professionals to deliver service to students.

- iv. The Ministry of Education should deploy more professionals to schools of learners with physical disabilities in every area of support service to relieve them of workload and also to increase the frequency and quality of support services to students.
- v. Schools should encourage parents of students to be cooperative when it comes to enquiries about their children with special needs at school.

5.4. Suggestions for Further Research

Due to limited scope of this study, the researcher would like to make suggestions on areas in which further research can be carried out. These include:

- i. This study only covered Kisumu East District which is only a small part of Kenya. Therefore, the study would not be generalized for the entire republic: a study of this kind be carried out in other regions of Kenya.
- ii. This study only collected opinions from teachers, students and one professional. The study did not collect opinions from other stakeholders such as parents, EARC co-ordinators and ancillary personnel whose suggestions could be more valuable. Further research is needed to consider all stakeholders.
- iii. The study only surveyed the provision of a few support services. A study could be carried out with a view to including more support services since the students with physical disabilities need services from a wide range of experts.
- iv. Similar study to be carried out in integrated programs for students with physical disabilities.

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APPENDIX A**QUESTIONNAIRE FOR STUDENTS**

This questionnaire is designed to gather information about the provision of support services, their availability and effectiveness to students with physical disabilities. You are assured that your responses will be treated with strict confidence and the information you give will be used for this research purpose only. There is no right or wrong answers. Do not write your name.

A. Background information

Tick (✓) your appropriate response.

1. State the level of your school.

Secondary () Primary (✓)

2. State the level of your class.

Class 5() Class 6() Class 7() Form 1() Form 2() Form 3()

3. State your gender. Boy() Girl()

SECTION B: Availability of Support Services

The following statements indicate the nature of support services provided to students with physical disabilities at school. Please tick the column which most represents your views on the following statements.

Statements.	S A	A	U	D	S D
1. Mobility services are provided daily during school terms.					
2. Only physiotherapists or those trained in mobility teach mobility skills.					
3. Self-help skills such as dressing, toileting and body washing are put in the school's daily programme.					
4. School health services such as prescription of drugs, surgery and general administration of health procedures are provided regularly.					

5. Counseling services are offered to an individual or group at specific times					
6. Teachers regularly invite specialists to provide support services.					
7. Personnel providing support services work as a team when giving support services.					

Legend: SA-Strongly Agree; A – Agree, U-Uncecided, D- Disagree, SD – Strongly Disagree

SECTION C: Effectiveness of Support Services

Please the correct option by putting a tick [V] or giving simple explanations as required.

1. Do the mobility services provided improve your classroom participation?

Yes No

If the answer above is yes, state how the services help in classroom participation

2. Do the mobility services promote your interaction with peers?

Yes No

3. Can independence in self-help skills can promote your interaction with peers and teachers.

Yes No

4. Do you think medical services provided are adequate in assisting your learning at school.

Yes No

Please explain your answer above.

5. Do you think counseling services promote your interaction with peers?

Yes No

6. Are counseling services are useful in improving classroom participation?

Yes No

7. Do people providing support services constantly check how the services assist you in class performance? Put a tick against your choice.

- i. Every time they come.
- ii. Not done every time.
- iii. Not done at all

8. In your own opinion, do you think these services are necessary for your life at school? Please kindly explain your answer.

9. How would you like these services to be provided? Kindly state.

Thank you for responding to these statements,

Wachianga J.O. Washington.

APPENDIX B**QUESTIONNAIRE FOR TEACHERS****Instructions**

I am conducting a study on “Investigation into Provision of Support Services to Learners with Physical Disabilities in Kisumu East District, Kenya”. You are assured that your responses will be treated with strict confidence and the information you give will be used for this research purpose only. There is no right or wrong answers. Do not write your name. You are requested to respond to all statements in each section.

Thank you.

A Background Information

1 Name of your school _____

2 Highest level of professional qualification.

P1 _____

Diploma _____

Bachelors Degree _____

PGDE _____

Masters _____

Other _____

3 i) Have you undertaken training in Special Needs Education?

Yes No

ii) If the answer above is yes, what level did you train for?

P1-----

Diploma-----

Bachelors-----

Masters-----

Other -----

4 How many years have you been teaching?

Less than one year-----

1-5 years-----

6-10 years-----

11-15 years-----

16 and above-----

B) Mobility Services

5 a) Kindly mention the MOST common types of devices for mobility used by your

Learners.

i). Wheel chairs----- ii). Crutches-----

iii). Boots and calipers----- iv). Mobility chairs-----

v). Walkers----- vi) Others (please specify)-----

b) If your answer above include others needed please briefly state why.....

.....

c) Do the mobility services encourage interaction among students and teachers?

Yes

No

d) Please give reasons for your answer above

6a) Does the school train students in mobility skills?

Yes

No

b) Is the training in mobility skills based on;

Individual

Group

(Please tick whichever is applicable)

c) How frequent do you train individual students or a group in mobility skills? (Please tick one).

i) One to one session a week-----

ii) Three sessions a week-----

iii) Developed throughout the week (daily)-----

7 a) Do you apply the new skills such as walking, positioning and balancing in daily routine?

Yes

No

b) Please kindly explain your answer?

8 i) Do the mobility services improve class participation of these learners?

Yes

No

ii) Please give reasons for your answer above.

C Self-Help Skills

9 (i) Do you find teaching Self-help skills e.g. dressing necessary?

Yes

No

ii) If the answer above is yes who are involved in the teaching?

(10) [a] Do you teach hygiene skills e.g. body washing in your school?

Yes

No

[b] If the answer above is yes, which other areas of hygiene skills do you concentrate on?

(i) _____ (ii) _____

(iii) _____ (iv) _____

(11) Do you think learning self-help skills can promote academic performance among learners?

Yes

No

(12) Please kindly tick whichever is applicable in influencing academic performance of students.

- i. Reduces infection
- ii. Builds high self-esteem
- iii. Improves the health of pupils
- iv. Feels comfortable
- v. Promotes confidence
- vi. Increases class attendance

- vii Creates conducive learning environment

D Medical Services

13 a) Do most learners with physical disabilities often require medication?

Yes

No

14 a) Under what circumstances does the school nurse make referral arrangements to hospitals or a visiting doctor for students?

i) -----

ii) -----

iii) -----

iv) -----

v) -----

b) Please list some of the medical related services provided to your learners in the school.

(i)

(ii)

(iii)

(iv)

(c) Do you think health services have an impact on the students' socialization?

Yes

No

Please give reasons for your answer above

(d) How does medication facilitate academic participation of learners with physical disabilities?

16 i) Do some of your learners require special diet?

Yes No

ii) If the answer is yes, how do you do this?

iii) How do you decide on food substitution that is offered to those learners?

E. Counseling Services

17) Which among the following counseling services below are provided to your learners in the school?

i). Behavior modification ii) Transition plans

iii Building positive self-concept

iv) Needs and interest for those in adolescence

v) Being advocate for the student at school. V) Self-esteem

Any other, please specify. _____

18 a) Can counseling services can influence socialization of students in the school?

Yes No

b) Please give reasons for your answer

c) Can counseling service can improve academic performance of learners?

Yes No

Please explain your answer _____

F. Teacher Roles

19 i) Do you consider it necessary to collaborate with other professionals providing support services to students?

Strongly Agree [] Agree [] Undecided []

Disagree [] Strongly disagree. []

ii) Which professionals offer support services to students in your school?

(i) _____ (ii) _____ (iii) _____
(iv) _____

20 i) Do the professionals join the teacher to work with the students in class?

i) Occasionally (ii) Always (iii) No at all

(Please tick against your choice).

ii) If they do, do their role enhance teaching?

Yes No

Please give reasons for your answer above

21) What adaptations do you have in the classroom to improve student academic

Participation? (Kindly explain).

22) What recommendations would you make on the provision of support services to learners with physical disabilities?

Thank you for responding to these statements. I wish you well in your endeavours.

Wachianga J. O. Washington.

APPENDIX C

FOCUS GROUP DISCUSSION FOR STUDENTS

1. School-----

2. Boys -----Girls ----- Total -----.

3. Are you provided with mobility services? (probe)

4 Is there any activity that is done by the physiotherapist before he/she assists you in mobility training?

5 How regular are the mobility services offered in a week?

6 Which mobility devices do you use to move from place to place in the school?

7 How adequate are the devices that you use for mobility? (Probe)

8 How do mobility services promote your interaction and academic participation with peers?(Probe)

9 Are you given instructions in self-help skills?(Probe)

10 (i) What kind of self-help skills are offered to you?

(ii) Do you consider them adequate to promote your independence and academic

performance? (Probe)

11. Are you provided with medical services?

12. Do you consider medication and treatment to be timely and effectively provided? (Probe)

13. How does medication assist in your academic participation? (Probe)

14. How does the school cater for those who require special diet?

15 Are you provided with counseling services?

16 (i) Which areas do you get assistance from the school counselor?(Probe)

(ii) Which other areas would you prefer to be assisted in counseling?(Probe)

17. How does counseling assist you in socialization and academic participation? (Probe)

18 How do you rate teachers' involvement in provision of support services and what

improvements would you require? (Probe)

19. What suggestions would you make for improvement of the support services to enhance your socialization and academic participation?

Thank you.

Wachianga J.O. Washington .

APPENDIX D

INTERVIEW GUIDE FOR PROFESSIONALS

- 1 School attached -----
- 2 Sex Male [] Female []
- 3 What is your profession? _____
- 4 Which support service do you provide to learners with physical disabilities?
- 5 What kind of services does this support service involve that promotes students' academic performance?
- 6 How do these services promote socialization of students? (probe).
- 7 Do you collaborate with teachers while providing support services to support services to students? (Probe).
- 8 Do you plan as a team and constantly review the students' progress? (Probe)
- 9 Have you taken any course or training in working with students with physical disabilities?
- 10 Which other challenges do you face while providing your services to students? (probe)
- 11 Which complications do you think may arise when specialists from different disciplines work with the same child independently? (probe)
- 12 What recommendations would you suggest for improvement in provision of support services? (probe)

Thank you.

Wachianga J.O. Washington.

APPENDIX E

OBSERVATION CHECK LIST

Name of school-----

Class -----

ACTIVITY AREA	COMMENT
In class-(pupils)	
Working in groups.	
Assisting one another in ADL.	
Pupil/ teacher interactions.	
Poor fine motor skills.	
Assistive devices used.	
Physical classroom Classroom arrangement.	
Safety/ arrangement of assistive devices.	
Outside the classroom. Group play among pupils.	

Assisting one another in mobility.	
Kind of devices used.	
Peer interactions.	
Pupil/ teacher interactions.	
School environment	
Guidance and counseling office.	
Nursing room.	
Physio/ occupational room.	
Adapted school environment.	
Daily school programme/schedules for learning new skills.	
Professionals present	

RESEARCH AUTHORIZATION AND PERMIT

REPUBLIC OF KENYA

**MINISTRY OF HIGHER EDUCATION SCIENCE
& TECHNOLOGY**

Telegrams: "SCIENCE TEC", Nairobi
Telephone: 02-318581
E-Mail: ps@scienceandtechnology.go.ke

JOGOO HOUSE "B"
HARAMBEE AVENUE,
P.O. Box 9583-00200
NAIROBI

When Replying please quote
Ref. MOHEST 13/001/ 38 C/551/2

12th September 2008

Wachianga J. O. Washington
Kenyatta University
P.O. Box 43844
NAIROBI

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on, *'An Investigation into Provision of Support Services to Learners with Physical Disabilities in Kisumu District,*

I am pleased to inform you that you have been authorized to undertake research in Kisumu East District for a period ending 30th November 2008.

You are advised to report to the District Commissioner and the District Education Officer Kisumu East District before embarking on your research.

On completion, you are expected to submit two copies of your research report to this office.

M. GATOBU
FOR: PERMANENT SECRETARY

Copy to:

The District Commissioner
KISUMU EAST DISTRICT

The District Education Officer
KISUMU EAST DISTRICT

PAGE 2

THIS IS TO CERTIFY THAT:
 Prof./Dr./Mr./Mrs./Miss. WACHANGA
J. O. WASHINGTON
 of (Address) KENYATTA UNIVERSITY
P. O. BOX 43844 NAIROBI
 has been permitted to conduct research in.....
Location,
KISUMU EAST District,
Province,
NYANZA
 on the topic AN INVESTIGATION INTO
PROVISION OF SUPPORT SERVICES
TO LEARNERS WITH PHYSICAL
DISABILITIES IN KISUMU EAST
 DISTRICT
 for a period ending 30TH NOVEMBER, 2008...

PAGE 3

Research Permit No. MOHEST 13/001/38C 551
 Date of issue 12.9.2008
 Fee received SHS. 500



M. Gatobu
 M. GATOBU

Applicant's Signature FOR: permanent Secretary
 FOR PERMANENT SECRETARY Ministry of
 MINISTRY OF SCIENCE and Technology
 TECHNOLOGY

PERMANENT SECRETARY
 MINISTRY OF SCIENCE AND
 TECHNOLOGY

MINISTRY OF EDUCATION

Telegrams:

Telephone: Kisumu (057-2022626)
When replying please quote

DISTRICT EDUCATION OFFICE
KISUMU EAST

P.O. Box 1914



REPUBLIC OF KENYA

KISUMU.

Ref: KSM/MISC/29/VOL.I/29


19th September, 2008

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION – WASHIANGA J.O. WASHIGTON

The above named has been granted authority by this office to carry out research
On, '**An Investigation into Provision of Support Services to Learners
with Physical Disabilities in Kisumu District.**

The research ends on 30th November, 2008.


REBECCA BUTALANYI
DISTRICT EDUCATION OFFICER
KISUMU EAST
DISTRICT EDUCATION OFFICER
KISUMU