

**STRATEGIES USED BY LEARNERS WITH PHYSICAL
DISABILITIES TO COPE WITH ENVIRONMENT IN REGULAR PRIMARY
SCHOOLS IN MUMIAS SUB-COUNTY, KENYA**

**BY
OKUMU W. MOHAMMED**

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DECLARATION

Declaration by the student:

I, Okumu W. Mohammed, declare that this thesis is my original work and has not been presented for a degree in any other institution.

Sign.....

Date.....

OKUMU W. MOHAMMED

PG/MED/106/2011

Declaration by supervisors

We declare that this thesis has been submitted for examination by our approval as university supervisors

Sign.....

Date.....

Prof. E. J. Kochung

Department of Special Needs Education

Maseno University

Sign.....

Date.....

Dr. Were Michael

Department of Special Needs Education

Maseno University

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DEDICATION

This thesis is dedicated to the Almighty God who gave me life to undertake the study. More so to my parents, wife and all my children for their encouragement throughout the study period.

ABSTRACT

Learners with physical disabilities face various challenges in regular schools which lead to high rate of drop out. Currently the learning environment including the location of institution, buildings, amenities, equipment and furniture pose accessibility challenges to learners with physical disabilities. Segregation and labeling lead to their drop out in regular schools. Teachers lack relevant skills and experience of handling learners with disabilities in regular classes. Despite these challenges faced by learners with physical disabilities in regular schools, Mumias Sub County had the highest proportion of 0.86 compared to Matungu sub-county with 0.83, Butere 0.80 and Khwisero 0.75. The mechanism used by learners with physical disabilities to cope in regular primary schools was not known hence the purpose of this study was to find out the strategies used by learners with physical disabilities to cope with environment in regular primary schools in Mumias Sub County. The specific objectives were to identify strategies used by learners with physical disabilities to cope with physical environment in regular primary schools; determine strategies used by learners with physical disabilities to cope with social environment in regular primary schools and to establish strategies used by learners with physical disabilities to cope with curriculum in regular primary schools. The study used theoretical framework. The study adopted a descriptive survey design. The target population consisted of 32 teachers, 64 regular learners and 21 learners with physical disabilities. Purposive sampling technique was used to select 29 teachers, 64 regular learners and 19 learners with physical disabilities. Data was collected by the use of questionnaire, interview schedule, and observation schedule. Research instruments were presented to lecturers in faculty education to ascertain their face and content validity. Reliability of the instrument was established through a pilot study using 10% of the study population not used in this study. Test-retest method was used to ascertain the instrument reliability and a score of 0.75 for learners with physical disabilities, 0.73 for teachers were attained by using Pearson product correlation. The quantitative data was analyzed using descriptive statistics such as frequency tables and percentages. Qualitative data was transcribed and put into themes and sub themes as they emerged. The findings of the study revealed that peer tutoring 15(78.95%) was a strategy used to cope with curriculum. High self-esteem 13(68.42%) was used in coping with social environment while adaptation 11(57.89%) was used to cope with physical environment. The study recommends that the county government should restructure physical environment to be friendly in regular schools, training teachers in Special Needs Education and positive attitude among learners in regular primary schools. The study concludes that good rapport, high self esteem and peer tutoring enhanced coping of learners with physical disabilities in regular schools. The study would be significant because its findings may be used by other learners with physical disabilities on coping strategies used hence leading to high retention in regular primary schools.

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LIST OF ABBREVIATION AND ACRONYMS

A	-	Adequate
CFP	-	Circle Friendship Program
CM	-	Coping mechanism
CP	-	Cerebral Palsy
DRR	-	Disaster Risk Reduction
DV	-	Dependant Variables
EARC	-	Educational Assessment Resource Centre
IEP	-	Individualized Education Plan
IV	-	Independent Variables
IV	-	Intervening Variables
LWDs	-	Learners with Disabilities
LWPDs	-	Learners with Physical Disabilities
MoE	-	Ministry of Education
MOEST	-	Ministry of Education Science and Technology
NA`	-	Not adequate
NGOs	-	Non Governmental Organizations
PD	-	Physical Disability
SNE	-	Special Needs Education
SPSS	-	Special Program for Social Sciences
UNESCO	-	United Nations Educational, Scientific and Cultural Organization

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Learners with physical disabilities in UK are expected to benefit from comprehensive long term services which empower them to be more active, productive and independent. Scanford *et, al* (2010). Learners with physical disabilities are confronted with many challenges in regular settings where attending school is an option for the exceptional individual. Apart from coping with the trauma of a disability which may be mild, moderate, severe or profound, the learner may find it difficult to access and afford several facilities and services while attending regular schools. The absence of significant facilities and services can severely limit independence, geographical mobility, and employment opportunities upon graduation, where such learner do not drop out. They created good rapport with regular learners as a strategy to cope with the physical and social environment.

According to Haki Elimu (2008), mixed methods were used to examine the challenges and opportunities for access to primary education for children with disabilities. Three major challenges were identified. First, the inappropriate architectural design of school buildings made them inaccessible especially to children with physical impairments. Peer support as a strategy was used by Learners with physical disabilities to access the buildings. Second, teachers, school administration and the public at large failed to identify children with disabilities and their needs. Third many teachers lacked trained, knowledge and experience regarding disability and lack of essential teaching and learning materials and facilities. Hence learners with Physical disabilities used peer tutoring as a strategy to overcome the challenge.

According to Reynolds (2006), inaccessible physical environment is a major barrier as regards to movement both in classroom and outside. Learners who continue with their studies find their own ways for survival in such environment in order to acquire education. Learners

in Gabon with physical disabilities find many mainstream schools inaccessible and that those that were accessible are more likely to be found in disadvantaged areas. Schools tend to be larger and consist of more complex buildings thus moving around the school pose greater challenges for learners with physical disabilities Walters (2010).Walters adds that learners with physical disabilities did not have a strategy to face difficulties getting around in bigger buildings and moving from one place to another for different social and academic activities. Inaccessible environment, lack of support from teachers and school make most of the learners with physical disabilities unable to cope in schools thus not boosting their morale. Combs, Elliott, and Whipple (2010), state that in physical education lessons, learners with physical disabilities are disadvantaged as the curriculum may not gear to include them. Khudorenko (2011), states that learners with physical disabilities face discrimination and bullying from their peers causing them to experience low self-esteem, isolation, depression, and in some cases aggression. These emotional breakdowns may lead to violence (Frances & Potter, 2010).

Reynolds (2006) states that UK did not create any provision for learners with physical disabilities. In some schools there are no ramps and learners with PDs depend on peers for accessing classes and toilets. Due to inclusion many learners with PDs attend regular public schools and some of them are in regular classrooms. Because these learners cannot run or play like others they initiate interaction with peers as a strategy of coping with them in the school environment. They create friendship with regular learners so that they can push them on wheelchairs, carry for them books and even take down notes for them in class. (Reynold, 2006).

According to Agbenyaga (2005), assistants are needed at schools to help monitor the children and their activities, especially in regular classrooms. Certainly one teacher for twenty to thirty learners is too much and can become overwhelming very quickly, therefore, an assistant is

beneficial to everyone involved (Kim & Sonja de Groot, 2005). They improvise walking sticks from their home environment to enable them access the environment with ease. In Zimbabwe, Hungwe *et, al* (2005) asserts that learners with physical disabilities who cannot do activities like able learners eventually withdraw as they may not be able to perform vigorous exercises.

A survey study by Karande (2014) that analysed school based factors influencing participation of physically challenged learners in public schools in Kiambu Municipality concluded that regular public schools have unfriendly environment which hinder movement and participation of physically disabled learners. Karande's study and the present study are related as they use descriptive survey design and address physical environment of LWPDs in regular primary schools. Karande study was limited to school based factors and the present study examined strategies used by learners with physical disabilities to cope with environment in regular primary schools in Mumias Sub-County.

Johnstone and Chapman (2009) employed a multi method case study to explore the challenges of regular education in Lesotho. She found that although there was a policy for inclusive education in Lesotho, its implementation was uneven. Teachers' attitudes toward learners with physical disabilities were favourable, but they did not make instructional adjustments to meet the learning needs of learners with physical disabilities hence learners with physical disabilities developed one on one attention as a strategy to cope with the curriculum.

In Ghana challenges exist in areas of access, quality education and retention especially for learners with disabilities. This is attributed to lack of professional activities of development for teachers, limited resources and ineffective monitoring system provided to schools. Negative attitude and prejudice is the most critical of all barriers to free universal education

especially for LWPDP. Interestingly, some teachers still name the curses from gods as the cause of disabilities. (Agbenyega, 2005).

Due to stigmatization many learners with PDs tend to dropout of regular schools. Dropping out has negative outcome for youth including an increased likelihood of being unemployed, underemployed, dependent on welfare (Belfield & Levin, 2007; Levin & Belfield, 2007), unhealthy (Archamba, Janosz, Morizot, & Pangan 2009; Hayes, Nelson, Tabin, Pearson, & Worthy 2002) and incarcerated (Sanford, *et al*, 2011, Stanard 2003). According to Groot (2005), LWPDPs in regular primary schools are rejected and neglected more than able bodied learners, Agbenyega (2005) states that negative attitude and prejudice is the most critical of all barriers to LWPDPs in regular schools hence they create good rapport as a strategy to cope with teachers and regular learners. Hungwe (2005) on the other hand states that LWPDPs who cannot do vigorous activities eventually withdraw while Belfield & Levin (2007) assert that many LWPDPs drop out due to stigmatization.

Ministry of Education Science and Technology policy on Special Needs Education (2009), in Kenya, states that learners with physical disabilities in schools and institutions are sometimes marginalized and are not represented in area like management and decision making process. They have not been actively involved in sporting, cultural and recreational activities thus denying them solidarity and team building.

According to the Ministry of Education Science and Technology on National special needs education policy framework (2009) states that the learning environment including the location of institutions, buildings, amenities, equipment and furniture pose accessibility challenges to learners with special needs and disabilities. The physical environment where learners with special needs and disabilities operate should allow them to access education with minimum hindrance. Schools and other related institutions environment that are

disability unfriendly to learners with physical disabilities include class learning environment, social amenities like libraries, toilets and lifts. Ministry was out to enhance provision of accessible, safe and friendly learning environment and facilities of learners with physical disabilities.

MOEST policy on SNE (2009) states that education for learners with special needs and disabilities have faced several challenges in regard to curriculum. The curriculum has been rigid, inaccessible and rigid methods of evaluating the curriculum. There is need to have curriculum that is adequately responsive to learners with physical disabilities.

Children's attitudes towards peers with disabilities are highly important because positive attitude promote acceptance and inclusion of the child with a disability within the classroom. (De Boer, Pijil, Post & Minnaet 2013). A study by Werner, Roth and Peretz (2015) that analysed children attitude toward children with and without disability in Israel found out that more positive attitude was reported towards children without disabilities regarding the cognitive and behavioural components.

A case study by Olufemi (2009) that examined the attitude of teachers towards learners with physical disabilities in regular schools in Nigeria, the results of various analyses in the study revealed that significant difference exists between married and single teachers in their attitude towards learners with special needs and that professionally qualified teachers tend to have a more favourable attitude towards the inclusion of special needs learners than their non-professionally qualified teachers. In Olufemi study and the current study both focus on learners with physical disabilities in regular schools. Olufemi (2009) study solely focused on professionalism and gender of teachers. The present study examined the coping strategies used by learners with physical disabilities towards attitude of teachers in regular primary schools in Mumias Sub County.

Although schools aspire to provide effective instructional curriculum and programs for learner with PDs, for them to learn better in regular schools environment some schools should have teachers trained in SNE to meet academic and non-academic needs. According to Walters (2010), teachers may help learners with PDs by being open, constant communication, compassion, a willingness to bend rules to accommodate them and one-on-one instructions.

Duquatte (2006) asserts that teachers to break concept into smaller chunks and talk slowly in order to give clear explanations on the content, utilize hands on activities and concrete materials, use prompts, cues praise and positive reinforcement. Instructional designers should pay attention to course elements that may be problematic for learners with PDs. Where model of differentiated curriculum instructions requires teachers to be flexible in their approach to teaching and adjust the curriculum and presentation of information to learners rather than expecting learners to modify curriculum for themselves (Hall, Strangman, and Meyer 2009). Many teachers in America have recently identified differentiated instruction as a method of helping more learners in diverse classroom setting experience success. The diversified needs of learners with physical disabilities were catered for in an inclusive setting. Botswana perceived that teachers' professional knowledge and skills are inadequate to effectively teach learners with physical disabilities in regular schools (Praisner, 2003). More so, teachers express fear and concern, that because they do not have the required knowledge and expertise to teach learners with disabilities who are included in their regular classes; it is contributing to a reduction in academic success of their schools. (Kenpro, 2010).

A study by Rabren (2009) on the assessment of the effects of co-teaching on Standardized testing in USA, the results demonstrated that learners with disabilities who had been co-taught for one year had significantly higher ability in reading and math than they did before being co-taught. These results suggest that co-teaching, as an instructional approach, provides students with disabilities adequate support for their achievements on standardized tests. This

study determined that co-teaching has positive effects on standardized testing, an area that many disabled learners struggle with. In Rabren (2009) study and the present study are related as they focus on curriculum. Rabren study was limited to assessment of the effects of the co-teaching while the present study is out to examine the strategies used by learners with physical disabilities in coping with curriculum in regular primary schools in Mumias sub county Kenya.

Despite the policy underlining free primary education in Kenya, the physically challenged learners are still marginalized in the society. There is lack of understanding that children in regular schools can boost their self-concept and their academic performance. Physically challenged learners end up creating poor self-concept because of isolation which can easily be avoided if they are given a chance to learn in regular schools. MOEST has been trying to implement the integration of physically challenged learners into regular formal schools in order to enhance their participation in formal education. (MOEST, 2003).

According to Agbenyega (2006), many regular education teachers in Kenya who feel unprepared and fearful to work with LWPD in regular classes display frustration, anger and negative attitude toward LWPDs in regular classrooms because they believe it could lead to lower academic standards.

According to baseline survey (2012-2014) carried out in Mumias Education and Assessment Resource Centre (EARC), the number of learners with physical disabilities assessed in four sub counties between 2012 and 2014 was 81. In Mumias Sub County a total of 15 learners were assessed. 13 learners out of 15 were able to cope in regular primary schools despite various challenges that they faced. Inappropriate architectural design of the buildings in many schools makes learners with physical disabilities not able to access environment easily. The negative attitude of regular learners and teachers reduce their self-esteem in regular schools.

Teachers lack trained knowledge and experience of handling learners with disabilities. More so rigid curriculum does not accommodate the needs of learners with physical disabilities in regular primary schools.

Among the four sub counties Mumias recorded the highest proportion with 0.86 compared to other sub counties. Matungu 0.83, Butere 0.80 and 0.75 in Khwisero. Learners assessed and placed in regular primary schools use their own mechanisms to cope in various regular primary schools. There s w need for research to be conducted to ascertain on strategies learners with physical disabilities used to cope retention in regular primary schools in Mumias Sub County. The main aim of the current study is to examine strategies used by learners with physical disabilities to cope with environment in regular primary schools in Mumias Sub County.

Table 1.1: Prevalence of LWPDs retained in regular schools 2012-2014 in the 4 sub counties

Sub county	No. Assessed	No. In school	Proportions
Mumias	15	13	0.86
Matungu	18	15	0.83
Butere	20	16	0.80
Khwisero	28	21	0.75

Source: Mumias Educational Assessment and Resource Centre (EARC) 2014.

The table 1.1 indicates the number of learners assessed between 2012 and 2014 year and were able to cope in the year 2014. Mumias Sub-County had 13 (0.86) learners with physical disabilities were able to cope in regular primary school. This is the highest proportion among the four sub counties. It was followed by Matungu with 15(0.83), Butere 16(0.80) and Khwisero recorded the lowest 21(0.75) learners with physical disabilities.

1.2 Statement of the Problem

According to baseline survey carried out in Mumias Education and Assessment Resource Centre (EARC) between 2012 and 2014 the number of learners with physical disabilities assessed in four sub counties was 81. In Mumias sub county a total of 15 learners were assessed and 13 learners out of 15 were able to cope in the regular primary schools despite various challenges that they faced. Inappropriate architectural designs of the buildings in many schools make learners with physical disabilities not able to access environment easily. The negative attitude of able bodied learners and teachers reduce their self-esteem in regular schools. Teachers lack trained knowledge and experience of handling learners with disabilities. The environment is not modified and rigid curriculum not adapted to be inclusive to all learners in regular schools. (MOEST 2009) .Among the four sub counties Mumias recorded the highest number in proportion with 0.86, Matungu 0.83, Butere 0.80 and 0.75 in Khwisero. Learners with physical disabilities assessed and placed in regular primary schools use their own mechanisms to manage themselves in various regular primary schools for learning. Despite of the challenges learners with physical disabilities are still in schools. There was therefore need for research to ascertain on strategies that learners with physical disabilities in Mumias Sub County used to cope with environment in regular primary schools. The main aim of the current study was to find out strategies used by learners with physical disabilities to cope with environment in regular primary schools in Mumias Sub County.

1.3 Purpose of the Study

The purpose of this study was to find out the strategies used by learners with physical disabilities to cope with environment in regular primary schools in Mumias sub county, Kenya.

1.4 Objectives of the Study

The objectives to the study were to:

- (i) Identify strategies used by LWPDs to cope with physical environment in regular primary schools in Mumias Sub County
- (ii) Determine the strategies used by LWPDs to cope with social environment in regular primary schools in Mumias Sub County.
- (iii) Establish the strategies used by LWPDs to cope with curriculum in regular primary schools

1.5 Research Questions

Research questions were derived from the objectives as follows:

- (i) What strategies do learners with physical disabilities use to cope with physical environment?
- (ii) What are the strategies used by learners with physical disabilities to cope with social environment?
- (iii) What strategies do learners with physical disabilities use to cope with curriculum in regular primary schools?

1.6 Scope of the Study

The study confined itself on strategies used by learners with physical disabilities to cope with environment in regular primary schools in Mumias Sub County.

1.7 Limitation of the Study

It was not possible to gather clear historical background of learners with physical disabilities as it took much time and resources looking for their parents and other stakeholders. The family was not free to explain how learners with physical disabilities cope at home and

schools in terms of social interaction and physical movement. The researcher therefore used class teachers and regular learners who freely interact and played with learners with physical disabilities.

1.8 Assumptions of the Study

The study was based on the following assumptions;

- (i) LWPDs shared the same facilities with learners without physical disabilities.
- (ii) Both regular and LWPDs were taught by the same teachers in the same class
- (iii) Teachers teaching LWPDs were all trained.

1.9 Significance of the Study

- (i) The results of this would be used to develop policies and strategies that would guide the County government and the sub county in particular, in their priorities in relation to special needs education.
- (ii) The research findings may give clear structures on strategies used by learners with physical disabilities to cope in regular primary schools. This study would also provide information and form a basis for developing sound policies to guide the structuring of special needs education in the regular primary schools in the sub county.
- (iii) Currently, the strength and the direction of the association between coping strategies used by learners with physical disabilities in regular primary schools are not known, even if there is an association. This has reduced the capacity to push forward positive cases related to elimination of such barriers at the district level. If the actual strength and direction of the association are known, the proportion of investment in teaching and learning facilities and equipment and the expected school retention for such learners could be easily estimated: this would provide a valid basis for planning for special needs education in the sub county.

iv) The organizations that fund special education programs would be able to examine and prescribe suitable ratios for different facilities and equipment so as to attain desired school retention for each learner with special needs.

(v) Schools and sub county education management would base their decisions on the activities of special needs education on facts evidenced by research findings, rather than on traditions, or on mere authority. This would improve the management of special needs education in the sub county, and in the country as a whole.

(vi) The study would also be beneficial to the learners with physical disabilities themselves. It would be possible for them to determine the strategies used to cope in regular primary schools. If they are educated on the results and recommendations of this study, they would be able to determine the volume investment that could make them to attain the desired strategies based on the models generated by the study. Like any other investigation, this study should produce hitherto unavailable knowledge which should make it a useful reference material to policy makers at the Ministry of Education, students, head teachers, general readers and researchers in the field of special needs education.

1.10 Theoretical Framework

Lazarus and Folkman (1984), one of the pioneers of the coping theory, defined coping as: constantly changing cognitive and behavioural efforts to manage specific external and internal demands that are appraised as taxing or exceeding the resources of the person. Coping strategies can be positive or negative, depending on whether they increase or reduce mental wellbeing. Coping is dependent on personality patterns and perceptual experiences. The strategy one chooses for adapting to a situation is highly individualized. Learners with physical disabilities in regular schools used various strategies to cope with the school environment whether positively or negatively.

Richard Lazarus and Susan Folkman in 1984 proposed yet another theory of coping in a macroanalytical approach, concentrating on the coping strategies that are focused on emotion or on the problem itself as well as the functions related to them. While the theory of Lazarus and Folkman was macroanalytical in its origin, it was expanded to the macroanalytical approach, where Lazarus *et al* was able to specify coping strategies and classify them into eight groups. These include self-control, confrontation coping, seeking social support, emotional distancing, escape and avoidance, accepting responsibility, positive reappraisal and strategic problem solving.

Macro analytical, trait-oriented coping theories state that there is a bipolar dimension in which a person copes with the stress in one or two opposite poles repression or sensitization. People who tend to be repressors cope with the stress by means of denying or minimizing its existence. They use the avoidance coping mechanism such that they are unable to realize the potential negative outcomes of the stressful experience. According to Goffman, (1963) stigma coping mechanism by learners with physical disabilities includes avoidance and withdrawal, education and secrecy.

Approximately 74% of learners with physical Disabilities have higher stress levels than the average person (Holtz & Tessman, 2006). Goffman (1963) further states that denial and pretence among learners with physical disabilities can be means of self protection but can also lead to reduced support as help may not be sought as offered.

This study seeks to establish the mechanisms learners with physical disabilities used to cope in regular primary schools despite of various challenges they encountered. The coping strategies included denial, pretence, emotional breakdown, avoidance and high self esteem. The theory is relevant because it specified and classified the coping strategies that learners with physical disabilities used in regular primary schools.

1.11 Operational Definition of Terms

Assistive devices:	Materials that enhance learning of learners with special needs.
Difficulties	Challenges that cause harm to learners in the education system.
Disability:	Barrier to participation of learners with impairment or illness
Educational resources:	Materials that enhance learning of learners with special needs.
Enrolment:	Admission of learners with special needs in public schools.
Impairment:	A limitation of physical, intellectual or sensory function.
Inaccessible environment:	Environment that does not allow learners with Disability to move freely.
Inclusive education:	Education that accommodates all learners regardless of their disability.
Inclusive schools:	Schools that accommodates all learners regardless of their disability.
Learners:	Young children legible for primary education who are in school.
Rigid curriculum:	Curriculum that does not carter for the needs of learners with diversified needs in an inclusive set up.
Special needs	Learning process whereby curriculum, teaching methods,

education: educational resources, medium of communication and learning environment have been modified to suit learners with diversified needs.

Coping: Managing personal challenges

Physical disability: Orthopaedic and neurological impairment affecting learners' educational activities.

Regular Learners: Learners without physical disabilities learning and socializing together with learners with physical disabilities in regular primary schools

Retention: The act of learners with physical disabilities being in school despite the challenges

Specialist curriculum: Different from regular curriculum but is meant to support implementation of regular curriculum

Specialized curriculum: Curriculum that has been adapted to suit the target learner through extensive modification of content learning outcome and learning resources

Strategies: Approaches put in place by learners with physical disabilities to manage themselves in regular primary schools

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Related literature in the area of strategies used by learners with physical disabilities to cope with environment in regular primary schools has been reviewed in this chapter. The review focuses on issues related to Strategies used by LWPDs to cope with physical environment in regular primary schools, strategies used by LWPDs to cope with social environment in regular primary schools and Strategies used by LWPDs to cope with curriculum.

2.2 Strategies used by LWPDs to Cope with Physical Environment in Regular Primary Schools

Learners with physical disabilities require physical environment which can be easily accessible with minimum hindrances in regular primary schools.

According to Ocloo and Subbey (2008) the majority of the classrooms in Botswana are inaccessible to learners with physical disabilities. In most schools, there had been some structural modifications made such as ramps and assisted toilets. However, the gradients of the ramps were too steep for learners with physical impairments who needed assistance from other learners to enter the buildings. In one of the rural schools, the new classrooms that were built did not create any provision for learners with physical impairments. In one school, there were no ramps and so learners with physical impairments had to depend on peers for accessing the toilets. Structural barriers tend to limit independent access to classroom and school activities, and impact negatively on participation and competence in the curricular and co-curricular activities. Fox, Hemmeter, Snyder, Binder, and Clarke (2011), learned that direct funding is not allotted to primary schools for buying equipment and structural modifications to support learners with disabilities. When one of the school heads was asked about this issue, she confirmed, "*Primary schools don't have a vote, we are not given any*

funds. We are given a fund just for small maintenance work we call it handyman's job. We are mostly dependent on the city Council for structural modifications”.

A study conducted by Schoger (2006) in USA, designed to have the LWPDs come into the regular learning environment to help the special LWPDs flourish within their own community. This study showed to be very successful for the LWPDs because they were able to work in an environment that was comfortable for them, they developed friendships with their peers, they felt a sense of respect which increased their self-esteem, and their cognitive learning increased significantly.

Comprehensive research by Haki Elimu (2008), on the accessibility of children with physical disabilities to education is designed and conducted by the staff of the non-governmental organization HakiElimu and the University of Dar as Salaam .They used mixed methods to examine the challenges and opportunities for access to primary education for children with disabilities. The inappropriate architectural design of school buildings made them inaccessible by learners with physical impairment. According to Lehtomäki, Tuomi, and Matonya (2014), educational opportunities for persons with disabilities were reported to be limited due to poor physical accessibility and inappropriate buildings and facilities, including lack of ramps, elevators, escalators and railings. Lehtomaki asserts that learners with physical disabilities paired with the able bodied to access buildings and even push those on wheelchairs while in school.

A Survey study by Kogei (2013), that analysed factors influencing enrolment of learners with disabilities in an inclusive education in primary schools in Nandi South district revealed that lack of physical facilities in the environment hindered enrolment of learners with disabilities in regular schools. The study concluded that pupils' enrolment in regular schools has hindered implementation in terms of physical facilities and straining of physical facilities.

Kogei study and the present study use descriptive survey design and address learners with disabilities. Kogei's study however, was limited to factors influencing enrolment and the present study examined the strategies used by learners with physical disabilities to cope with physical environment in regular schools.

Ministry of Education, Sector Policy for Learners and Trainees with Disabilities (2018) states that the UNCEF child friendly school manual observes that child friendly school models are concerned with the health, safety, security, nutritional status and psychological well-being of every child as well as appropriateness of teaching methods and learning resources used for schooling. Task Force on Special Education (MoE, 2003) recommended that learners and trainees with disabilities be provided a barrier free physical and social environment to operate with minimal support and maximize their functional potentials. In Kenya many regular and special institution do not have barrier free physical and social environment. This limits mobility, independence and compromises their safety and quality of learning. The school infrastructure is inaccessible to learners with physical disabilities because the necessary structural design does not adhere to policy guidelines on construction of institution of learning to come up with Disaster Risk Reduction (DRR) policies that are responsive to disability. The policy of the ministry of education is to establish barrier free environment in all institutions of learning and training and provide for the health and psychological needs of learners with disabilities.

2.3 Strategies used by LWPDs to Cope with Social Environment in Regular Primary Schools

Social environment involves the interaction among learners with physical disabilities, teachers and regular learners' regular primary schools.

Negative attitudes are a major obstacle to the education of disabled children. In some cultures people with disabilities are seen as a form of divine punishment or as carriers of bad fortune.

As a result, children with physical disabilities who could be in school are sometimes not permitted to attend. A community based study in Rwanda found that perceptions of impairments affected whether a child with a disability attended school. Negative community attitudes were also reflected in the language used to refer to people with disabilities. The attitudes of teachers, school administrators, other children, and even family members affect the inclusion of children with disabilities in mainstream schools. Some school teachers, including head teachers, believe they are not obliged to teach children with disabilities. In South Africa it is thought that school attendance and completion are influenced by the belief of school administrators that disabled learners do not have a future in higher education.

A survey study by Okutoyi (2012) that based on assessment on coping strategies by regular primary schools with hearing impaired learners in Kakamega County, realized that regular primary schools employed strategies such as learners with hearing impairment participating in joint group discussion and playing together with hearing learners in promoting positive attitude among learners in regular primary schools. Similarly, Okutoyi study and the present study both focus on learners with disabilities in regular primary schools. Okutoyi study aimed at coping strategies by regular schools with learners with hearing impairment hence the present study aims at finding out the strategies used by learners with physical disabilities to cope in regular primary schools.

In America Merian-webster Dictionary defines stigma as a mark of shame or discredit. Disabilities carry stigmas that many regular learners don't want to be associated with learners with disabilities. They see those with PDs as objects of pity and look down upon them hence withdrawal (Cowden, 2010). Stigmatisation has internal and external consequences which impact on peoples' quality of life, social and psychological well-being. It causes stress, anxiety and further stigma. It causes reduced acceptance, discrimination, rejection and social exclusion. It causes label avoidance and makes it difficult to pursue employment or access to

services. It can result in a lowering of self-esteem and self-efficacy (Goffman, 1963). People who perceives themselves as stigmatised may internalise stigmatising ideas. Stigma coping mechanisms include avoidance-withdrawal, education and secrecy (Goffman, 1963). Social embarrassment can result in people isolating themselves. Goffman (1963) further asserts that denial and pretence by LWPDs can be a means of self-protection but can also lead to reduced supports as help may not be sought or offered.

Self-esteem is expected to influence a student's attitude as well. Vignes *et al*, (2009) has found that the better a child's view of his or her own life, the better their attitude toward peers with a disability. In line with these findings Nowick (2006), found that the better a person's self-esteem, the more positive their attitudes with regard to affection, behaviour and cognition.

Across-sectional study by Dopoux (2006) that analysed teachers' attitude towards learners with disabilities in Haiti revealed that teachers favoured certain types of disabilities for integration in the regular settings. This is supported by other research showing that teachers are more disposed to accept learners with mild disabilities than learners with behavioural-emotional disabilities. Dopoux further adds that teachers found it difficult to teach learners with more severe disabilities particularly learners with social maladjustment and emotionally disturbed due to lack of training and large class size. Dopoux study and the present study address learners in regular settings and their social environment though Dopoux study is limited to teachers attitude towards learners with disabilities hence the present study aims at finding out strategies used by learners with physical disabilities in coping with social environment in regular schools in Mumias sub county

In Zambia teachers in primary and basic schools had expressed interest in including children with disabilities, but believed that this was reserved for specialists. Many had fears that such

conditions as cerebral palsy were contagious. They were encouraged to discuss their negative beliefs and to write about them reflectively.

According to Mutepfa *et al.* (2007), learners with physical disabilities would restructure the rules of the games to include their peers without physical limitations. It is observed during tea break that learners with and without disabilities share their meals without any problem. During focus group discussions, learners without disabilities revealed that they usually help the learners with physical impairment learners without disabilities seemed to have no problem with those with disabilities. During classroom and school observations, it was found that learners with and without disabilities freely interacted with each other during group work tasks and outside the classroom as well. From these observations, one can see that peer acceptance is a positive indicator, not an obstacle. It is supportive of the practice in regular primary schools in the South Central Region of Zimbabwe. The zone of proximal development states that learners learn when guided by a teacher or when working with more capable peers. A more competent person collaborates with a child to help him move from where he is now to where he can be with help.

This teacher accomplishes this feat by means of prompts, clues, modelling, explanation, leading questions, discussion, joint participation, encouragement, and control of the child's attention (Miller, *et al.* 2011). Learners with physical disabilities can learn from their peers without disabilities as well as with the support of teachers' guidance to gain a better understanding of the concept being taught. In Gambia the methods used by the teachers for helping LWPDs to cope with negative attitudes of normal children include among others, advice and caution not to harm the disabled. Other options like the punishment of culprit in the presence of the disabled victim and caution, warning followed by punishment. The strategies employed on the disabled include advice not to mind attitude of the normal children and encourage them to work together.

In USA learners with physical disabilities have much higher dropout rates than general education learners and consequently have much poor adult's outcomes. Although dropout prevention programs are implemented in many schools due to the negative attitude in school community, the impact of this retention is rarely evaluated. The last review of initiatives related to graduation for learners with PDs was conducted in 2004 (Cobb, Sample, Alwell & Johns 2015). Snyder and Dillow (2012) assert that learners with PDs in Zambia have particularly high rates of dropout as a result of negative attitude from the peers and teachers. In the year 2005-2009, 22% of learners aged 14-21 with PDs dropped out. Learners with PDs had the highest dropout rates of all the disabilities groups with 40% dropping out. Snyder and Dillow (2012) research did not state how 60% of learners with physical disabilities are able to cope in regular schools despite of the challenges hence this study is out to find out strategies used by LWPDs in coping with social environment in regular primary schools in Mumias Sub County.

According to Hewstone (2003) LWPDs in Belgium use direct and indirect experience as a strategy to cope to negative attitude. This affects the attitude formation process by altering the way in which available information is processed. Hewstone further argues that successful inter-group contact promotes more positive out-group attitudes, increases the perceived variability of the out-group which appears less homogenous. Inter-group contact can also promote increased out group trust. Direct experience entails actual interaction in the classroom where learners participate in structured free play activities with their classmates with and without disabilities. Having learners with and without disabilities play together in a structural environment encourages positive interaction especially when play involves toys and social activities that spawn social interaction (Favazza & Odom, 2005).

In Zimbabwe, researchers (Mpofu, 2003; Mpofu, Kasayira, Mhaka, Chireh, & Maunganize, 2007), have embarked on studies about the attitudes of Zimbabwe's school personnel

towards inclusion of learners with disabilities in regular schools. The findings of these studies reported negative attitudes of teachers toward including such learners in regular education classrooms. Head teachers of schools are found to show more favourable attitudes toward learners with physical disabilities than is shown by classroom teachers.

According to Mintz, Joseph (2014) LWPDs may choose silence as a strategy to avoid interrupting the face to face class discussion. They take time to listen to comments and to answer questions that they wanted to ask during class. Learners with cerebral palsy (CP) choose to wait to talk with his teacher at the end of the class. Studies indicated that learners with PDs used various strategies in improving relationship with teachers and peers such as direct and indirect experience, one-on one attention, aggression and anger. However LWPDs in Mumias sub county use various mechanisms hence the study is out to find out the strategies used in coping with social environment in regular primary schools.

A study carried out in America by Groot (2005) found that challenges which learners with physical disabilities may face in regular primary schools are inclusive classroom. Inclusive classrooms are classrooms where learners with and without disabilities are educated together, with extra support provided for the child with a disability. According to Sonja de Groot (2005), children, with physical disabilities, who are placed in regular setting tend to be rejected or neglected more than their typically developing peers and are involved more with the adults in the classroom than with their peers. It is not healthy for children at that age to socialize more with the adults in the classroom than with their peers. Sonja de Groot (2005) further adds that these children are most often rejected due to the fact that they cannot socialize in a physical way by running, climbing, jumping, skipping and hopping, which is customary to most school aged children. In typically developing young children, the rate of rejection by other children is about 10%. The rate of rejection however, goes up to 33% for children who are labelled as having physical disabilities. Sonja de Groot continues to observe

that learners in regular classroom, as a whole, become nervous around others with a physical disability. They do not know exactly how to handle it and instead of trying to make friends, they stay away altogether. According to Granlund *et al*, (2007) states that about 56% of children with physical disability who act out are acting out in some way that is related to their disability. People do not understand how much emotions such as anger and frustration are linked to disabilities. It is the most frustrating thing in the entire world to not be able to do certain things that you want to do or even worse, watch others freely do what you cannot on daily basis. This pent up frustration eventually leads to anger and the child wanting so desperately to take that anger out on someone, something, anyone or anything that is around. This, in turn, leads to children acting out in class or other places. As a strategy the learner with physical disability takes almost every chance he gets to try to gain some independence and tries to do things on his own (Sonja de Groot, 2005).

Furthermore, pent up anger can lead to stress which can be extremely detrimental to one's health. According to Holtz and Tessman (2006), stress can cause anything from muscle spasms and anxiety disorders to high blood pressure and even eating disorders or depression. Though stress seems so minor, it is nothing a person would want to test because stress, unfortunately, is something that can creep in and then begin to affect every part of one's body. Approximately 74% of learners with physical Disabilities have higher stress levels than the average person (Holtz & Tessman, 2006). Whether the stress levels of these learners are much higher is unknown, but studies have proven that they are, in fact, higher. The stares sometimes are the cruellest thing that can either lead to dropout or a mechanism a learner may use to cope. There are also different kinds of staring. There is the staring out of curiosity that ends just as quickly as it started. Then there is the persistent stare-the one that follows you for a whole minute or five. Then there is the 'yuk' stare (my personal peeve), the 'poor baby' stare, but the favourite is the stare with a smile. These adversely affect learners with

physical disabilities and opt to dropout as a result of stress. According to Khudorenko (2011) LWPDs face discrimination and bullying from their peers causing them to experience low self-esteem, isolation, depression, and in some cases anger and aggression as strategies to cope in regular set up. These emotional breakdowns can lead to violence (Frances & Potter, 2010).

According to a study conducted by Ntshangase, Mdikana, and Cronk (2008), included and mainstream adolescent boys do not have disparities in their overall levels of self-esteem. This result is very encouraging for schools promoting mainstreaming practices as it implies that overall sense of worth for mainstreamed learners is not disparate. It is important to note that according to this study, disabled learners did not indicate lower self-esteem than non-disabled students although it would seem the opposite would be true. Another study by Calabrese, Patterson, Liu, Goodvin, and Hummel (2008) found that the Circle Friends Program (CFP) was very beneficial in increasing social interactions both inside and outside the classroom. The CFP paired disabled learners with a non-disabled buddy and is supported by parents and sponsors. The CFP is not only a model for successful inclusion of learners with disabilities in and outside the classroom but has the potential to serve as a vehicle for facilitating school-wide inclusive educational practices. It was evident that the CFP helps foster a culture of acceptance.

2.4 Strategies used by LWPDs in Coping with Curriculum in Regular Primary Schools

Learners with physical disabilities require a curriculum that suits their diversified needs in regular primary schools. Oliver and Reschly (2010), in Finland explain that flexible approaches in education are needed to respond to the diverse abilities and needs of all learners with PDs. Where curricula and teaching methods are rigid and there is a lack of appropriate teaching materials for example, where information is not delivered in the most appropriate mode and teaching materials are not available in alternative formats children with

disabilities are at increased risk of exclusion. Assessment and evaluation systems are often focused on academic performance rather than individual progress and therefore can also be restrictive for children with PDs.

In order to provide a quality education for special needs learners in the general education classroom, all of the necessary resources must be available for both the learners and the teachers (Anderson, Klassen, & Georgiou, 2007). Resources are often extremely limited. There is lack of teachers because of funding, and these insufficient materials affect the success of the inclusion and those who are involved in the program. In Botswana over a period of 10 years, very little has been done to provide appropriate resources for learners with physical disabilities. Given the fact that there is a dearth of resources required for successful implementation of education in developing countries, teachers may be trained to be innovative so that they can produce their own instructional materials and adapt them to suit the needs of learners with disabilities. This can be achieved through in-service training, possibly in conjunction with teacher training institutions. These findings have been collaborated by other studies in developing countries, including Alur, (2002) and Singal (2005, 2006) in India, and Johnstone and Chapman (2009) in Lesotho. These researchers expressed concern about the dearth of resources as one of the challenges for the successful implementation of education regular primary schools; hence the study is out to establish the coping strategies used by LWPDs to cope with curriculum in regular primary schools. Learners with physical disabilities therefore improvise learning resources to cope up with the shortage of resources and in the process compete favourably with the able bodied learners (Alur 2002).

More so Johnstone and Chapman (2009) add that the most serious barriers to learning and development can be found within the curriculum and relates primarily to the inflexible nature of the curriculum which prevents it from meeting diverse needs among learners. When

learners are unable to access the curriculum, learning breakdown occurs. The nature of the curriculum at all phases of education involves a number of components which are all critical in facilitating or undermining effective learning of LWPDs. One of key components of the curriculum include the style and tempo of teaching and learning, what is taught, the way the classroom is managed and organized, as well as materials and equipment which are used in the learning and teaching process.

In Turkey, Sucuoglu, Sazak-Pinar and Akalin, (2010) asserts that the law mandating children with physical disabilities be placed in general classroom was accepted in 1983 and mainstreaming has been expanding throughout Turkey since then. Teachers however, were not trained to provide accommodations or modifications to adhere to this mandate. Learners are mainstreamed, even though few teachers are adequately trained in an academic setting to provide for the needs of learners with disabilities. Moreover, Akalin *et al* (2010) state that effectiveness of mainstreaming has been questioned in the light of the problems being encountered by the learners, their parents and especially the teachers since 1990. Equally important was a study conducted by Fallon, Zhang, Kim (2011), which focused on training teachers to manage the behaviours of students with disabilities in the regular classroom. Many general education teachers lack the skills and knowledge necessary to effectively manage these challenging behaviours. Learners with physical disabilities therefore overlooked their teaching methods that did not favour them. Fallon, Zhang, Kim (2011). Jull (2008) reiterates that inclusion of learners' with physical disabilities in the regular classroom is a great challenge. Just as inclusion has its benefits; it also has its disadvantages. Learners with physical disabilities tend to disrupt the classroom with behaviour issues. Because some are not as cognitively developed as their peers, the teaching-learning process is not as effective as it could be. It is difficult to serve the needs of every learner who is normally in the regular education class, and with the LWPDs the job becomes even more of a struggle for

the teacher and someone draws the short in of the stick, usually the special needs learners. Teachers have to treat LWPDs differently based on standards of their learning level. LWPDs are deprived of a suitable education when they are taught at a mismatched level with learners who are significantly above their level. These negatively affect learners' sense of self-esteem and dignity. Even in physical education classes, learners with physical disabilities are disadvantaged because the curriculum is not geared to include them they opt to engage in indoor games than vigorous ones (Combs, Elliott, & Whipple, 2010). The empirical studies in strategies used by LWPDs to cope with curriculum in regular primary schools have been scarce in Mumias Sub County.

Although the Kenyan Minister of Education approved a policy in 2009 that supports the equitable access to quality education and training of learners with special needs, special needs education still faces many challenges. The factors that hinder the provision of education for special needs learners include vague guidelines that describe the implementation of an inclusive policy, insufficient data on children with special needs, ineffective assessment tools, curriculum, and a lack of qualified professionals, (Lynch, McCall, Douglas, McLinden, Mogesa, Mwaura, & Njoroge, 2011). Major issues that were discussed include the stigmatization of persons with disabilities, a lack of funding to equip teachers with the resources, materials and support required to meet learners needs, a lack of curriculum adaptations, differentiation, appropriate methodology and qualified personnel, inappropriate and biased assessment measures and the misdiagnosis of learning disabilities, which leads to the misplacement of learners in schools.

According to Tomlinson (2005) in America all learners are alike, and basing on this knowledge, the school curriculum should include differentiated instruction as an approach to teaching and learning of learners with physical disabilities. Such strategy gives learners multiple options for taking in information and making sense of ideas. Differentiated

instruction is a teaching theory based on the premise that instructional approaches should vary and be adapted in relation to individual and diverse learners in classrooms. The model of differentiated instruction requires teachers to be flexible in their approach to teaching and adjust the curriculum and presentation of information to learners rather than expecting learners to modify themselves for the curriculum (Hall, Strangman & Meyer, 2009).

Peer learning helps learners to build effective listening and communication skills (Harding, 2009).

According Wilmhurst and Brue (2010), a special education program in the United States, Canada and the UK is customized to address each individual learner's unique needs. Special teachers use the initials IEP when referring to a learner's individualized education plan. Special teachers provide a continuum of services, in which learners with physical disabilities receive varying degrees of support based on their individual needs. Special education programs are individualized so that they address the unique combination of needs in a given learner. Some regular schools in Burkina Faso and Sierra Leone do not have special teachers to prepare the IEP and therefore learners overlook teaching methods used by teachers as strategy to cope in regular primary schools (Odom, Buysse, & Soukakou, 2011). According to McDuffie, Mastropieri, & Scruggs (2009) peer tutoring has been found to be effective for learners with disabilities.

Oliver and Reschly (2010) provide information on teacher organization and preparation in the classroom. The article states that special education teachers as well as regular education teachers are not adequately prepared to manage learners with PDs who manifest behaviour disorders in the classroom. LWPDs used one-on one attention as a strategy to benefit from teachers and other peers. Schumm *et al* (2006) states that one-on one attention helps the

learner to understand the activity or assignment. The simple fact is that communication with teachers on a one-on one basis tends to communicate with other learners in the classroom.

Anderson, Klassen, and Georgiou (2007), detailed how the teachers in their study lacked the knowledge they need to be more effective at teaching and dealing with learners with physical disabilities in regular classroom.

It is essential that teachers are trained in the skills and strategies to support learners with physical disabilities in the classroom as well as the ability to differentiate instruction for learners with Special needs. Frequent classroom distractions take away from the learning experience of all learners. The teacher is the manager of the classroom and he or she must have rules in place to impede negative behaviours as much as possible. Akalin, Sazak-Pinar, and Sucuoglu (2010), conclude, the results of research focused on classroom management revealed that effective classroom management increased academic achievement and decreased problem behaviours of learners. It is the responsibility of the teacher to structure their classroom so that it has minimal distractions and create a learning environment for all students. Akalin, Sazak-Pinar, and Sucuoglu (2010) state the behaviour of the learners has a direct correlation to learner achievement. Final results of the research found that classroom management is to be considered as a powerful cluster of techniques and strategies in terms of creating meaningful learning experiences for all learners including learners with physical disabilities. LWPDs in a classroom that is not well managed tends to withdraw from classroom activities as a strategy on coping in regular school.

A case study by Mowat (2010) that focused on the impact of social interaction on educational outcome for learners with emotional and behaviour disabilities in USA found out that it is essential that teachers are trained in the skills and strategies to support behaviour management in the classroom. Mowat (2012) study and the present study are related in that

they address learners with special needs in schools. The present study however, focuses on strategies used by learners with physical disabilities to cope with curriculum in regular primary schools in Mumias sub county Kenya.

According to Mazurek and Wenstrup (2013) studies and experiments indicated that most of the LWPDs can play a number of games without any support or special effort. Little efforts are needed to make the games adapted to children with visual and multiple disabilities. Mazurek further reported that learners with orthopaedic disabilities could also do yogasans (yogic postures exercises). Available research evidence also reveals that music, dance and yogasans have a therapeutic effect on LWPDs and have helped improve their attention and concentration.

Ministry of Education (2018) states that Kenyan curriculum plays an important role of providing quality, relevant and holistic education to all learners and trainees. Specialized and specialist curriculum have been developed to cater for learners and trainees who may not access the regular curriculum due to their disabilities. This regular teacher training curriculum does not adequately address the needs of learners and trainees with disabilities, which is a major gap in implementation of inclusive education. Education and training for learners and trainees with disabilities has been hindered by inaccessible curriculum, low capacities among teachers and instructors to implement differentiated and individualized curricular and rigid methods of evaluating the curriculum.

The sessional Paper No.14 of 2012 on Education Training and Research stipulates that SNE requires appropriate adaptation of curriculum, teaching methods, educational resources, medium of communication and the learning environment to cater for individual differences in learning and adaptation/accommodation of evaluation procedures.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the methods that were used to carry out this study. It focused on: - Research design, area of the study, study population, sample and sampling technique, research instruments, validity and reliability, data collection procedure and data analysis.

3.2 Research Design

This study adapted descriptive survey research design. According to Oso and Onen, (2009), survey is a present oriented methodology used to investigate population by selecting samples to analyse and discover occurrences. It provides quantitative descriptions of part of population, and is basically concerned with explanations, descriptions and explanations of opinions, attitudes, preferences and perceptions of groups of people of interest to the researcher. As Fraenkel and Wallen (1993) points out, surveys generally explain events as they are, as they were or as they will be. Thus according to Fraenkel and Wallen (1993), a survey is the best design when a researcher wants to describe events or opinions without manipulating them. The design allowed the description of the variables in the study without manipulation. It also enabled the researcher to gather, summarize, interpret and analyze the data collected. The design was used as it allowed the description of characteristics of the population as they were without manipulating them.

3.3 Area of Study

The study was conducted in regular primary schools in Mumias Sub County. It lies between latitude 0°, 20' 60.40 N and 34 29' 11.04 E. (GOK, 2013). It covers an area of 590 km squared and has a population of approximately 45,485 people. It borders Siaya to the South, Kakamega to the East and Bungoma to the North. It has approximately 50km of tarmac road, 20km running from Mumias town Bungoma town. Electricity has been distributed across the sub county including the urban and rural areas. Geographically it has a flat land without hills

or slopes. (Mumias District Development Plan, 2012).It has a radial drainage pattern, River Nzoia being the widest and longest river that cuts across the sub county. The main economic activity is agriculture with both crop planting and animal rearing which play a key role in contributing to the peoples livelihoods. Sugarcane is the major economic activity that people rely mostly for their lives. Maize, potatoes, cassava, millet and beans are grown on small scale for food.

3.4 Study Population

The study involved 16 regular primary schools with learners with physical disabilities. In Mumias Sub County there are 100 regular primary schools and out of this 16 schools had learners with physical disabilities distributed in the 16 schools within Mumias Sub County. The population consisted of 64 regular learners. 4 Regular learners in every school were targeted because they played; interacted and shared desks hence were in a better position to give elaborate information on strategies learners with physical disabilities used to cope in regular schools. 32 class teachers were targeted because they offered academic instructions and were in the best position to outline strategies learners with physical disabilities used to cope in curriculum. The target population for learners with physical disabilities were 21.

3.5 Sample and Sampling Techniques

A sample size of 112 participants was selected from 117 participants that had been targeted. To realize the sample size, purposive sampling technique was used to select 64 regular learners out of 64. Regular learners were selected because they often play and interact together and are in better position to give information on learners with physical disabilities. 19 learners with physical disabilities out of 21 were purposively sampled for the study. They are the key participants to explain the strategies they used to cope in regular schools. Out of 32 teachers in charge of learners with physical disabilities 29 were purposively chosen for the study. The population of learners with physical disabilities, regular learners as well as

teachers is quite small to obtain a sample out of it and therefore the researcher ensured all categories of population were included in the sample (Best & Khan, 2006).

Table 3.1: Sample Frame

Respondents	Target	Sample	%
LWPDs	21	19	90%
Regular learners	64	64	100%
Teachers	32	29	91%
Total	117	112	

3.6 Instrumentation

The study used questionnaires, observation schedule and interview schedule.

3.6.1 Questionnaire

Questionnaires were used in the study because the sample size of 112 that would be used in the study is large and given the time constraints, questionnaire was the ideal tool for covering such large sample in the short time (Oso & Onen, 2009).

Questionnaire, as a tool of research enabled the researcher to get information about current conditions, practices and be able to make enquiries concerning the attitude and opinion quickly and precisely. Two sets of questionnaires were used for teachers and learners with physical disabilities. Teachers questionnaire consisted of 14 items covering the three areas of the objectives: social environment, Physical environment and Curriculum. Learners with physical disabilities questionnaire had 25 items divided into 3 sections covering the 3 objectives. Questionnaires consisted of questions with statements and a 4 Likert Scale consisting of statements ranging from Strongly Agree to Strongly Disagree to measure opinions of learners with physical disabilities and teachers. Questionnaire as a tool of research enables a researcher to get information about the most recent conditions and

practices and be able to make enquiries concerning the attitude and opinion quickly and precisely. (see appendixes I and II)

3.6.2 Questionnaire for class teachers

A questionnaire for class teachers contained a statement of introduction and the instruction on how to fill the questionnaire. Likert scale was used to measure the attitude of the teachers on strategies used to cope by learners with physical disabilities in regular primary schools (Appendix I).

A questionnaire for class teacher contained a statement of introduction and on how to fill the questionnaire.

3.6.3 Questionnaire for learners with physical disabilities

A questionnaire for learners with physical disabilities had also a statement of introduction and instruction on how to fill the questionnaire. Likert scale was used to measure the attitude of learners with physical disabilities on physical environment, social environment and curriculum.(See appendix II).

3.6.4 Interview Schedule

Interview is a method of collecting data where by an investigator gathers data directly from respondent through face to face contact (Carter & Scates, 1954).The use of interview was appropriate to this study as it provides important personal and confidential information about the respondents. The interview also enables the researcher to make follow up leads and take advantage of small cues to gather more information. The interview schedule consists of items meant to elicit responses from the respondents in line with the objectives of the study. Face to face interviews were conducted with regular learners with the aim of getting data about strategies learners with physical disabilities used to cope in regular primary schools. (See appendixes III.)

3.6.5 Observation Schedule

The observation schedule allows the researcher to see for himself, what the respondents do rather than building on what they say (Wolcott & Harry. 2001).

The researcher used observation to collect information on the availability, adequacy adaptation, and improvisation of devices and equipment. The researcher observed the adapted toilets, ramps, doors, play ground, class organisation and the nature of stairs. The researcher discovered strategies learners with physical disabilities used to cope up with physical environment in regular schools.

3.7 Validity and Reliability of Research Instruments

3.7.1 Validity of the Research Instruments

Validity refers to the degree to which results obtained from analysis of data represents the true picture of what the study intends to explore (Mugenda & Mugenda, 2003). Content validity is a qualitative means of ensuring that a measure includes adequate and representative set of items to cover the intended items (Drost, 2011).

In this study content validity of the instruments was determined by the experts from the faculty of education. The supervisors ensured that the items were clear to the participants and that they tested what they were meant to test and that the correct language was used. According to Bryman and Bell, (2003), face validity is qualitative means of ascertaining whether a measure on the face appears to reflect the content. Face validity was viewed by the supervisors and ascertained that the items covered the concept they purported to measure.

3.7.2 Reliability of Research Instruments

Reliability refers to the extent to which a research instrument consistently measures whatever it is expected to measure (Best & Khan, 2006). Reliability of questionnaire of teachers, learners with disabilities and regular learners were determined through a pilot study of 10% of the study population. These teachers, learners with physical disabilities and regular

learners did not take part in the study. Test-retest reliability method was used to establish the reliability of questionnaires. The instruments were administered twice in a period of two weeks and the results were computed using Pearson product moment correlation which yielded to a reliability of 0.75 and 0.73 for learners with physical disabilities and teachers respectively.

3.8 Data Collection Procedure

Permission to carry out research in schools was obtained from the School of Graduate Studies (SGS) Maseno University. A permit was granted by Maseno University Ethics and Review Committee (MUERC). A courtesy call was paid to the sub county director of education to seek permission to collect data from sample schools. A visit to sample schools was made to request for permission from the head teachers to collect data from the respondents. The objective for the visit was explained to the respondents and after which the questionnaires were distributed and assurance to the respondents of confidentiality of the information provided was done. Respondents were requested to fill the questionnaires to allow the researcher to go with them the very day. Where this was not possible the researcher agreed with the respondents on the appropriate day and time. Another visit was paid to schools to interview the respondents (regular learners) who shared the desks with learners with physical disabilities in the same class. One on one interview was conducted and responses recorded verbatim. Later the researcher moved around the school compound and classes to observe the environment and recorded.

3.9 Data Analysis

Data analysis refers to categorizing; ordering, manipulating and summarizing data to obtain answers to research questions (Fraenkel et al. 2008). Rating scale was used to establish coping strategies for both teachers and learners with physical disabilities on school retention of learners with physical disabilities in regular schools. The scores were rated using Likert scale

as follows: Strongly Agree (SA) =4 points, Agree (A) =3 points, Disagree (D) =2 points and Strongly Disagree (SD) =1 points. In the interpretation of the scores above 4 implied a positive attitude while scores below 2 implied negative attitude. In case of negatively stated statements the scoring procedure was reversed. The editing and tabulation of data was done using the Statistical Packed of Social sciences (SPSS) version 20.0. Quantitative data was analysed using descriptive statistics in form of tables and percentages while interview and observation checklist were analysed qualitatively. Regular learners were given numbers to hide their identity during interviews and information gathered was reported verbatim.

3.10 Ethical Considerations

Ethical issues were put into consideration and strictly adhered to when carrying out this study. The responsibility of the researcher was to safeguard the rights and safety of the people involved in the study (Rice, 2008). This responsibility was clearly articulated in literature as part of research ethics and included issues regarding consent, confidentiality, privacy and anonymity (Rice, 2008).The researcher sought permission from relevant authorities including the parents of the learners who took part in the study.

There were no risks expected from the respondents as information gathered from teachers, regular learners and learners with physical disabilities was handled confidential by the researcher. All data was coded and stored in hard disks, hard copies under key and lock. It would only be accessible to members of research team.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presented and discussed the study findings based on the objectives of the study: Views of class teachers, views of learners with physical disabilities and views of regular learners on strategies used by learners with physical disabilities to cope with, Physical environment, Social environment and Curriculum. The opinions of the respondents were measured using Likert scale and the data from the field was edited, coded and analyzed using SPSS software. The analyzed results were used to get the relevant statistics which were then presented in both descriptive and tabular form.

4.2 Views of Teachers In Relation to Strategies Used By Learners With Physical Disabilities to cope with physical environment In Regular Primary Schools

According to the first objective the researcher was to find out from teachers strategies used by learners with physical disabilities to cope with physical environment in regular primary schools.

Table 4.1: Strategies used by learners with physical disabilities to cope with physical environment $n= 29$

QUESTION	RESPONSES								Total	Mean
	SA		A		D		SD			
	f	%	f	%	f	%	f	%		
Learners with physical disabilities improvise mobility and adaptive devices to enhance movement	6(20.68)		3(10.24)		5(17.24)		15(51.72)		29	2.00
Teachers allows regular learners to help LWPDs various activities	7(24.13)		5(17.24)		16(55.17)		0(0.00)		29	2.58
Overall mean										2.29

Key: LWPDs-Learners with Physical Disabilities

The findings on table 4.1 shows that 15(51.72%) of the respondents strongly disagreed that learners with physical disabilities improvised walking devices like sticks for those with mobility difficulties to enable them move around the school environment.6(20.68) strongly agreed.5(17.24) disagreed while 3(10.34) agreed. Movement of learners with physical disabilities in physical environment enhances learning. Improvisation of facilities for movement and other devices like chairs and adapted toilets enable learners with physical disabilities to cope in regular primary schools. Teachers were not concerned with the improvisation of mobility and adaptive devices. The findings of this study is in line with Kogei, (2013) which revealed that lack of physical facilities in the environment hindered enrolment of learners with physical disabilities in regular schools hence unable to cope with environment in regular primary schools. The findings revealed that most of the learners who

had mobility difficulties did not use local materials to make assistive devices like sticks which enabled them to cope with physical environment.

The results from the recorded observation schedule showed that learners with physical disabilities improvised walking devices from locally available materials to enhance their mobility. Most of the learners with physical disabilities used sticks as their walking devices. They also adapted toilets to suit their diversified needs. This indicates that many learners with physical disabilities come from poor families which could not be able to afford buying crutches for their children. More so regular schools did not consider learners' nature of disabilities to modify the environment to accommodate them hence learners with physical disabilities opted to modify the school environment by themselves for their retentions in various schools.

In the interview with regular learners one of them provided the following justification on improvisation of walking devices ;

My friend made his walking stick from a tree. (Regular learner no.1).

The findings indicated that some learners with physical disabilities could not be able to move around the school environment without a support. They therefore decided to make devices that could enable them move from the locally available materials. According to table 4 (16(55.17) of the respondents indicated that teachers did not allow regular learners to help LWPDs in various activities.7(24.13) strongly agreed while 5(17.24) agreed. A few that agreed had knowledge of special needs education while the majority had negative attitude hence did not allow regular learners to do some work on behalf of learners with physical disabilities. They preferred working with regular learners as they were faster in doing activities compared to learners with physical disabilities. Teachers felt that allowing regular learners help learners with physical disabilities would waste time. Lehtomaki, *et. al.* (2014)

did not concur with this study and stated that learners with physical disabilities paired with regular learners to access buildings and even push those on wheelchairs while in school.

4.3 Views of Learners on Strategies used by Learners with Physical Disabilities to cope with Physical Environment

The first objective was to find out strategies used by learners with physical disabilities in coping with physical environment.

Table 4.2: Strategies used by learners with physical disabilities to cope with physical environment. n=19

Table 4.2 shows that 14(73.68%) of the respondents strongly agreed that regular learners pushed learners with physical disabilities to access school environment while 5(26.32 %) of

QUESTION	RESPONSES								Total	Mean
	SA f	%	A f	%	D f	%	SD f	%		
Regular learners push LWPDs to access class environment	14 (73.68)		0 (0.00)		5 (26.32)		0 (0.00)		19	3.47
Regular learners carry LWPDs through narrow doors	13 (68.42)		5 (26.32)		1 (5.26)		0 (0.00)		19	3.63
Walking stick are improvised by LWPDs to enhance movement	12 (63.16)		4 (21.05)		2 (10.53)		1(5.26)		19	3.42
LWPDs adapt the playground to suit their needs in physical education	11 (57.89)		4 (21.05)		4 (21.05)		0 (0.00)		19	3.36
By use of regular learners LWPDs create wide space in classroom for easy movement in and out of class	11 (57.89)		7 (36.84)		0 (0.00)		1 (5.26)		19	3.47
Specific toilet in the school is adapted by LWPDs for their use	11(57.89)		5 (26.32)		2 (10.53)		1 (5.26)		19	3.36
Overall mean										3.45

the respondents disagreed. According to the study it was revealed that regular learners pushed learners on wheelchairs to access some areas which hindered them to move on their own. This indicates that learners on wheelchairs who could not access various parts of the school environment due to inappropriate architectural designs of school buildings were pushed by regular learners. The study concurs with the study conducted by Lethotomalik, Tuom, and Matonya (2014), who asserted that learners with physical disabilities paired with the able bodied learners to access buildings and even pushed those on wheelchairs while in school. Schools with stairs learners with physical disabilities could not be able to climb. Learners without physical disabilities hold their hands as they moved around buildings.

Results from the interview schedule showed that regular learners pushed learners with physical disabilities on their wheelchairs. One of them provided the following justifications;

We push them when going to the toilet, at home; in and out of the class. We also push them when playing in the field during physical education lesson and games time. When the bell rings to the assembly and after break teacher on duty normally requires us to run to class and we therefore push them to safe time. (Regular learner no.15).

The study is in line with the study carried out by Lehtomaki, (2014) that learners with physical disabilities paired with learners without physical disabilities to access buildings and even push those on wheelchairs while in school.

Findings in table 5 indicate that 13(68.42%) of the respondents strongly agreed that regular learners carried learners with physical disabilities through narrow doors. 5(26.32%) agreed while 1(5.26%) disagreed. This indicates that some schools did not adapt doors and paths for easy accessibility of learners with physical disabilities. Regular learners who sympathised with the nature of the disabilities carried them into classes that were not accessible on a wheelchair.

Findings from the interview schedule showed that most of the schools had not adapted doors for easy accessibility of learners on wheelchairs since the doors were narrow. One of the respondents said:

My friend cannot get into the class on a wheelchair but leaves it out because the door is narrow for a wheelchair. (Regular no.49)

The results in the observation schedule indicated that there was no structural adjustment of doors to easily accommodate learners on wheelchairs. They were pushed by their friends where they could not access easily. Many schools did not adapt doors to enable learners on wheelchairs to access easily hence they were carried through narrow doors. A study conducted by Walters (2010), does not concur with the present study. According to Walters's learners with physical disabilities faced difficulties getting around in bigger buildings and moving from one place to another for different social and academic activities. The findings of this study showed that learners with physical disabilities created a good rapport with regular learners as a coping strategy hence they pushed and even carried them to access the school environment.

Findings in table 4.2 indicate that learners improvised sticks and used them as crutches for support while moving around the school environment. This was strongly agreed by 12(63.16%) of the respondents. 4(21.05%) agreed that learner with physical disabilities improvised walking sticks while 2(10.53) disagreed. These findings imply that most of learners with physical disabilities were from poor social economic background in that their parents could not afford to buy crutches for their children. Use of improvised crutches enabled learners with physical disabilities to easily move up and down the stairs. Instead of buying crutches learners with physical disabilities used sticks because they were readily available in the community.

Results from observation schedule indicated that there were stairs in most of the regular primary schools in Mumias Sub County. Very few regular primary schools in the sub county had ramps .This forced learners with physical disabilities to improvise sticks for support to move up and down the stairs.

Table 4.2 indicates that 11(57.89%) of the respondents strongly agreed that learners with physical disabilities adapted the play ground to suit their physical needs in physical education and enabled them participate in physical education like other peers. 4(21.05%) agreed. The findings reveal that most of the learners with physical disabilities demanded for the adaptation of various fields where they participated so as to be included in participation. They did not want to look like they were completely unable to participate among regular learners in regular primary schools despite their disabilities.

The findings of the present study revealed from the observation schedule that most regular primary schools had not adapted the play grounds to suit the needs of learners with physical disabilities. Learners with physical disabilities demanded for the adaptation before participating in a particular game.

According to table 4.2 the findings indicate that 11(57.89%) of the respondents strongly agreed that indeed learners with physical disabilities used regular learners to create space in the classroom while 7(36.84%) indicated that regular learners created space in classroom for easy accessibility. These findings suggest that regular learners could arrange the classroom in order for learners with physical disabilities to move from one place to another without much disturbance. They created space for learners on wheelchairs to move in and out of the class. Their sitting positions enabled them to move when called upon by the teacher to carry out an activity just like others. In regard to this the findings from the observation schedule indicated

that classes where learners with physical disabilities learn from, sitting arrangement was well organised to accommodate them especially those on wheelchairs.

The findings on table 4.2 indicate that 11 (57%) of the respondents indicated that there were specific toilets in some schools which were adapted to suit some learners with cerebral palsy. These findings imply that learners with physical disabilities in some schools adapted a toilet particularly for them as they could not be able to use other toilets for regular learners.

The results from the observation schedule indicated that out of 16 regular primary schools, only in 9 schools learners with physical disabilities had adapted toilets using a jericane. This implied that learners with physical disabilities could not be able to use toilets for regular learners as they were not designed to accommodate them. The present study is not in line with Karande (2014) study which analysed school based factors influencing participation of learners with physical disabilities. Karande (2014) concluded that regular public schools had unfriendly environment which hindered movement and participation of physically disabled learners. In the present study learners with physical disabilities had employed their own coping strategies they used to cope with the physical environment hence recording a high number of retention in regular primary schools in Mumias Sub County. Learners with physical disabilities modified environment to suit their needs rather the school factors influencing their retention in regular primary schools.

4.4 Teachers Views on Strategies used by Learners with Physical Disabilities to cope with Social Environment

According to the second objective the researcher was to find out strategies used by learners with physical disabilities in coping with social environment.

Table 4.3: Strategies used by learners with physical disabilities to cope with social environment. n=29

QUESTION	RESPONSES								Mean
	SA		A	D		SD		Total	
	f	%	f %	f	%	f	%	Total	
Inclusion of learners with physical disabilities in regular schools is a challenge.	17	(56.62)	4(13.79)	5(13.79)		3(10.34)		29	3.20
Learner with physical disabilities are stigmatized by able-bodied learner	18	(62.07)	7(24.13)	4(13.79)		0(0.00)		29	3.34
Regular teacher have negative attitude to LWPDs as they lower school mean score	17	(56.62)	9(31.03)	0(0.00)		3(10.43)		29	3.37
LWPDs approach teacher individually after lessons for areas not understood well	22	(75.86)	5(17.24)	2(6.90)		0(0.00)		29	3.68
Overall mean									3.39

The opinion of teachers in various schools was that inclusion of LWPDs in regular schools was a greater challenge. This was evident by 17(56.62%) of the respondents who strongly agreed while 3(10.34%) strongly disagreed that inclusion of learners with physical disabilities in regular schools was a greater challenge. The findings of this study concur with Jull (2008) who reiterates that inclusion of learners with physical disabilities in regular classroom is a great challenge. Jull further adds that LWPDs tend to disrupt the classroom with behaviour issues and teaching becomes ineffective. It is believed that it is difficult to serve the needs of every learner who is normally in regular education class with LWPDs. The Salamanca statement clearly states that regular schools with inclusive orientation are the most effective means of combating discrimination, creating welcoming communities, building an inclusive society and achieving education for all. Kenpro (2010) concurs with this study where teachers

express fear and that they do not have the required knowledge and expertise to teach learners with physical disabilities who are included in their regular classes, hence contributing to a reduction in success of their schools.

Majority 18(62.07%) of the teachers strongly agreed that learners with physical disabilities were stigmatised by regular learners. 7(24.13%) agreed while 4(13.79%) disagreed. Stigmatisation has internal and external consequences which impact on people's quality of life. Cowden (2010) concurs that regular learners see those with physical disabilities as objects of pity and look down upon them hence withdrawal. These findings suggest that learners with physical disabilities were stigmatised in regular primary schools and there was therefore need for learners with physical disabilities to create a good rapport for their retention in regular primary schools.

It was evident from table 4.3 that 17(56.62%) of the respondents strongly agreed that regular teachers had negative attitude towards learners with physical disabilities while 9(31.03%) agreed. The attitude of teachers in various regular schools was not positive which contributed to drop out of learners with physical disabilities in regular primary schools. The findings of the current study do not concur with Dopoux (2006) who argues that in Haiti teachers favoured certain types of disabilities for integration in regular settings. He further adds that teachers were more disposed to accept learners with mild physical disabilities than learners with behavioural and emotional disabilities. These findings imply that most of the teachers had created negative attitude to learners with disabilities which contributed to low retention in some regular primary schools.

The results in table 4.3 indicate that 22(75.86%) of the respondents strongly agreed that LWPDs approached teachers individually after lessons for areas not understood well. This was a strategy LWPDs used as they knew that approaching teachers alone gives good

opportunity of getting the concept unlike in a big group. The present study does not concur with a study by Sonja de Groot (2005) who revealed that learners with physical disabilities who were placed in regular settings tended to be rejected or neglected more than their typically developing peers and were involved more with adults in the classroom than with their peers. There is therefore need for a good rapport between learners with physical disabilities and regular learners.

4.5 Views of LWPDs on strategies used by learners with physical disabilities to cope with social environment

The second objective was to find out strategies used by learners with physical disabilities to cope with social environment in regular primary schools

Table 4.4: Strategies used by learners with physical disabilities to cope with social environment. n=19

QUESTION	RESPONSES								Total	Mean
	SA		A		D		SD			
	f	%	f	%	f	%	f	%		
Denial and pretence can be means of self-protection by LWPDs	16	(84.21)	2	(10.53)	1	(5.26)	0	(0.00)	19	3.78
LWPDs have high self-esteem despite stigmatization by able bodied learner in regular primary school.	13	(68.42)	4	(21.05)	1	(5.26)	1	(5.26)	19	3.52
LWPD use direct/indirect experience to cope to negative attitude in school environment	17	(89.47)	1	(5.26)	1	(5.26)	0	(0.00)	19	3.84
LWPD Initiate interactions with able bodied learners in the school.	15	(78.95)	2	(10.53)	2	(10.53)	0	(0.00)	19	3.68
LWPD sometimes develop emotional breakdown as a way of coping with other peers.	17	(89.47)	2	(10.53)	0	(0.00)	0	(0.00)	19	3.89
LWPD do not mind negative attitude of other bodied peers and instead encourage them to work together.	14	(73.68)	4	(21.05)	1	(5.26)	0	(0.00)	19	3.68
LWPD act out verbally or physically when angered by their peers.	18	(94.74)	1	(5.26)	0	(0.00)	0	(0.00)	19	3.94
Use avoidance and withdrawal as a way to cope on stigmatization by other learners in school environment.	17	(89.47)	2	(10.53)	0	(0.00)	0	(0.00)	19	3.89
LWPD create good report with able bodied learners for assistance in various activities	16	(84.21)	2	(10.53)	1	(5.26)	0	(0.00)	19	3.78
Overall mean										3.77

KEY: LWPDs- Learners with Physical Disabilities

The findings of the study in reference to table 4.4 revealed that 16(84.21%) of the respondents strongly agreed that denial and pretence could be means of self protection.

2(10.53%) agreed while 1(5.26%) disagreed. This indicates that in certain circumstances learners with physical disabilities would not accept that they could do certain activities as a way of protecting themselves to what they cannot do. Findings of this study concur with study findings by Goffman (1963) who asserts that denial and pretence can be means of self protection but can also lead to reduced support as help may not be sought as offered.

Table 4.4 indicates that 13(68.42%) of the respondents supported that learners with physical disabilities had high self esteem despite stigmatisation by regular learners in regular primary schools. Self esteem normally influences the attitude of learners with physical disabilities. Vignes *et al.*,(2009) however, found out that the better a child's view of his own life, the better their attitude towards peers with a disability. In line with these findings Nowick, (2006) points out that the better a person's self esteem the more positive their attitude with regard to affection, behaviour and cognition. On the other hand Khudorenko (2011) argues that LWPDs face discrimination and bullying from their peers causing them to experience low self esteem. The findings reveal that learners with physical disabilities had high self-esteem hence a coping strategy that enabled them for inclusion in regular primary schools.

Majority of the respondents 17 (89.47%) in the study strongly agreed that learners with physical disabilities used direct /indirect experience to cope to negative attitude in the school environment. 1(5.26%) agreed while 1(5.26%) disagreed. This indicates that learners with physical disabilities shared issues concerning their disabilities freely with others in regular schools without fear. Learners with physical disabilities did not discriminate themselves from regular learners because they had disabilities and did not withdraw because of their diversified needs. They interacted freely through direct/indirect experience as a strategy of coping with negative attitude of regular learners and teachers. Hewstone, (2003) concurs with the study that learner with physical disabilities use direct /indirect experience as a strategy to cope to negative attitude. He adds that it affects the attitude formation process by changing

the way in which available formation is processed. Hewstone (2003) further argues in relation to the study that successful inter-group contact promotes more positive out group attitude.

The findings of the study in table 4.4 showed that 15(78.95%) of the respondents strongly agreed that learners with physical disabilities initiated interactions with the regular learners in schools. 2(10.53%) agreed while 2(10.53%) disagreed. This indicated that learners with physical disabilities were not inferior among regular learners in regular schools. They actively took part in any interaction among the friends in schools.

Table 4.4 indicates that 17 (89.47%) of the respondents strongly agreed that sometimes learners with physical disabilities developed emotional break down as a way of coping with other peers in regular schools. 2(10.53%) agreed. The findings showed that learners with physical disabilities sometimes became annoyed when mistreated as a strategy of coping in regular schools. Francis & potter (2010) established that emotional breakdown among learners LWPDs may lead to violence.

Findings from table 4.4, 14(73.68%) of the respondents indicated that LWPDs did not mind negative attitude of other regular learners and instead encourage them to work together.4 (21.05%) agreed while 1(5.26%) disagreed. This showed that learners with physical disabilities did not want to lower their self esteem because of their disabilities as they had a right for education in any of the schools.

The emotional breakdown of LWPDs leads to act out verbally or physical when angered by their peers. This was strongly agreed 18 (94.74%) while 1(5.26%) agreed. Learners with PDs have high emotions such as anger and frustrations which are linked to disabilities. Frustration leads to anger and in turn leads to children acting out in class or in other places. Granlund *et al*, (2007) states that about 56% of children with physical disabilities who act out are acting out in some way that is related to their disability. Kim and Sonja de Groot (2005) states that

as a strategy LWPDP takes almost every chance he gets to teachers to gain some independence and tries to do things on his own.

The findings of the study in table 4.4 showed that 17(89.47%) of the respondents indicated that LWPDPs used avoidance and withdrawal as a strategy to cope. This indicated that learners with physical disabilities avoided situations they could not manage and hence withdraw to avoid embarrassment among regular learners. Goffman, (1963) supported the study by stating that stigma coping mechanism include avoidance and withdrawal, education and secrecy.

Table 4.4 indicates that 16 (84.21%) of the respondents strongly agreed that learners with physical disabilities created good rapport with regular learners. 2(10.53%) agreed while 1(5.26%) disagreed. The findings imply that learners with physical disabilities created friendship with regular learners as they required some help from them. This was a strategy by learners with physical disabilities to be part and parcel of the school environment without discrimination due to their disability. Results from the interview showed that learners with physical disabilities withdrew from activities when stigmatised .One of the regular learners said,

Learners with physical disabilities act out verbally when annoyed, withdraw and avoid participating with others in various activities. (Regular learner no.19).

This indicated that learners with physical disabilities reacted by shouting when annoyed and stopped any activities in which they were involved.

From the interview schedule, it was indicated that learners with physical disabilities played and interacted freely in the school environment. One of the regular learners said:

One of the learners with a big head is a very good leg ball goal keeper and plays Kati well. (Regular learner no.26).

This study concurs with the study conducted by Okutoyi (2012) which states that learners with hearing impairment participated in joint discussion and playing together with hearing

learners in promoting positive attitude among learners in regular schools. Learners with physical disabilities are part and parcel of the school community and have a right to participate in different games of their choice

4.6 Views of Teachers in Relation to Strategies Used by Learners with Physical Disabilities to cope with curriculum In Regular Primary Schools.

The third objective was to establish from teachers (N=29) views, on strategies used by learners with physical disabilities to cope with curriculum in regular primary schools.

Table 4.5: Strategies used by learners with physical disabilities to cope with curriculum. n=29

QUESTION	RESPONSES								Mean	
	SA		A		D		SD			
	f	%	f	%	f	%	f	%		Total
Teachers make instructional adjustment to meet learner with physical disabilities	4	(13.79)	7	(24.14)	18	(62.07)	0	(0.00)	29	2.51
Teachers prepare an IEP for LWPDs in regular primary schools.	7	(24.14)	3	(10.34)	17	(58.62)	2	(6.90)	29	2.51
There are teachers trained in SNE in regular primary schools.	10	(34.48)	1	(3.45)	18	(62.07)	0	(0.00)	29	2.72
Teacher practice co – teaching as a strategy of enhancing learner with physical disabilities.	3	(10.34)	7	(24.14)	17	(58.62)	2	(6.90)	29	2.37
LWPDs are disadvantaged because curriculum is not geared in including them.	16	(55.17)	4	(13.79)	7	(24.14)	2	(6.90)	29	3.41
LWPDs participate in peer tutoring in class.	24	(82.76)	3	(10.34)	2	(6.90)	0	(0.0)	29	3.75
Overall Mean										2.87

KEY: IEP-Individual educational program, SNE-Special Needs Education, LWPDs-Learners with Physical Disabilities.

According to table 4.5, 18(62.07%) of the respondents disagreed that teachers made instructional adjustment to meet learners with physical disabilities. 7 (24.14%) of the respondents agreed that teachers made instructional adjustment to meet learners with physical disabilities. This means that there were a few teachers who had skills and knowledge in special needs education to adapt the curriculum to suit learners with disabilities in regular primary schools. This study does not concur with Tomlinson (2005) study who stated that learners are alike and basing on this knowledge the school curriculum should include differentiated instruction as an approach to teaching and learning of LWPDs. He further adds that such strategy gives LWPDs multiple options for taking in information and making sense of ideas. Differentiated instruction is teaching theory based on the premise that instructional approaches should vary and be adapted in relation to individual and diverse learners in classroom. Hall, Strangman and Meyer,(2009) however do not concur with this study as they state that model of differentiated instruction requires teachers to be flexible in their approach to teaching and adjust the curriculum and presentation of information to learners rather than expecting learners to modify themselves for the curriculum. These findings suggest that most of the teachers 18 (62.07%) did not modify the curriculum to suit the diversified needs of learners with physical disabilities in regular primary schools.

According to table 4.5, 17(58.62%) of the respondents disagreed indeed that teachers in regular primary schools used IEP in teaching learners with physical disabilities. 2(6.90%) strongly disagreed and 7(24.4%) strongly agreed. According to the study teachers trained in special needs education were compared to those not trained. Odom, Buysse and Soukakou, (2011) on the other hand concur with the study by stating that some schools in Burkina Faso and Sierra Leone did not have special teachers to prepare the IEP and therefore learners overlooked teaching methods which contributed to their drop out. The results of the study indicated that lack of preparation of the IEP by teachers would contribute to learners with

physical disabilities not to cope with the curriculum in regular primary schools. IEP addresses each individual learner's unique needs and special teachers provide a continuum of services in which learners with physical disabilities receive varying degrees of support based on their individual needs.

Majority (62.07%) of the respondents disagreed that teachers were trained in SNE. The number was minimal in regular schools compared to teachers who were not trained in special needs education. Only 10 (34.48%) of the respondents strongly agreed with the opinion. The results of the study concur with the findings of Fallon, Zhang; Kim (2011) who found out that general education teacher lacked the skills and knowledge necessary to effectively manage learners challenging behaviour. It is essential that teachers trained in skills and strategies to support learners with physical disabilities in the classrooms. Mowat, (2010) however, emphasized in his study that teachers were to be trained in the skills and strategies to support behaviour management of learners with physical disabilities in the classroom.

Teachers did not practice co-teaching in areas of difficulties to enable learners with physical disabilities understand concepts as indicated by 17(58.62%) of the respondents. 7(24.14%) of the respondents agreed while 3(10.34%) strongly agreed. The findings of this study do concur with the findings of Rabren, (2009) who noted that co-teaching as an instructional approach provides learners with adequate support for their achievements on standardised tests. These findings suggest that learners with physical disabilities who could not get concepts from teachers in the classroom used one on one attention as a strategy to understand a concept.

Majority 16(55.17%) of teachers strongly agreed that learners with physical disabilities were disadvantaged because curriculum was not geared to include them. 7(24.14%) of the respondents disagreed while 4(13.79%) agreed. This showed that teachers did not modify the curriculum to suit learners with physical disabilities. The results of this study were supported

by Combs, Elliot, and Whipple, (2010) who found out that in physical education classes LWPDs are disadvantaged because the curriculum was not geared to include them as they opt to engage in indoor games than vigorous ones.

Table 4.5 indicates that 24(82.76%) of teachers in the study stated that learners with physical disabilities participated in peer tutoring in classes. 3(10.34%) of the respondents agreed while 2(6.90%) disagreed. The study therefore concurs with Mc Duffie, Mastrapieri and Scruggs (2009) study where peer tutoring has been found to be effective for learners with disabilities. These findings imply that most of the learners with physical disabilities 24(82.76%) practiced peer tutoring as a coping strategy in a regular classroom hence contributed to high retention in regular primary schools.

4.7 Views of LWPDs on Strategies Used by Learners with Physical Disabilities to Cope With Curriculum in Regular Primary Schools

According to the third objective the researcher was to establish strategies used by learners with physical disabilities in coping with curriculum in regular primary schools.

Table 4.6: Strategies used by learners with physical disabilities to cope with curriculum in regular primary schools. *n*=19

QUESTION	RESPONSES				Total	Mean
	SA f %	A f %	D f %	SD f %		
Peer tutoring helps to build effective learning and communicate skills to learners with physically disabilities in regular primary schools	15 (78.95)	3 (15.79)	1 (5.26)	0(0.00)	19	3.74
Learners with physical disabilities use one on one attention to benefit from teachers and other able regular learners	14 (73.68)	3(15.79)	2(10.53)	0(0.00)	19	3.63
LWPDs choose silence to avoid interrupting face to face class discussion.	17(89.47)	2(10.53)	0(0.00)	0(0.00)	19	3.89
LWPDs demand for more time to complete their tasks.	13(68.42)	5(26.32)	1(5.26)	0(0.00)	19	3.63
LWPDs request for alternative passive activities instead of vigorous activities in P.E	15(78.95)	4(21.05)	0(0.00)	0(0.00)	19	3.78
During class time LWPDs ask teacher question on concepts not understood repeatedly even if the teacher gets annoyed.	16(84.21)	2(10.53)	1(5.26)	0(0.00)	19	3.78
LWPDs complete academic tasks such as writing notes and excises like able bodied learners.	12(63.16)	3(15.79)	4(21.05)	0(0.00)	19	3.42
LWPDs at times reject activities they cannot perform in P.E	14(73.68)	4(21.05)	1(5.26)	0(0.00)	19	3.68
LWPDs improvise teaching/ learning resources and adaptive devices.	15(78.95)	1(5.26)	2(10.53)	1(5.26)	19	3.57
LWPDs restructure roles of games during P.E to include peers without physical limitations.	16(84.21)	2(10.53)	1(5.26)	0(0.00)	19	3.78
Overall mean						3.69

KEY: LWPDs – Learners with Physical Disabilities.

An overwhelming majority 15(78.95%) strongly agreed that peer learning helped to build effective learning and communication skills to learners with physical disabilities in regular schools.3(15.79%) agreed while 1(5.26%) disagreed. This concurs with Mc Duffie, Mastropier & Scruggs (2009) who argue that peer tutoring has been found to be effective for learners with physical disabilities in regular schools. This was a coping strategy learners with physical disabilities used to learn together with regular learners despite of various challenges.

Results from the interview schedule indicated that learners with physical disabilities did peer tutoring freely without fear in the classroom. One of the respondents said,

My friend with club feet really calculates mathematics better than us and teaches us in class.
(Regular learner no.20)

The findings of the study indicated that 14(73.95%) of the respondents strongly agreed that learners with physical disabilities used one on one attention to benefit from teachers and other regular learners.3(15.79%) agreed while 2(10.53%) disagreed. This study concurs with Schumm et al, (2006) who points out that one- on- one attention as a strategy helps learners to undertake the activity or assignment. He adds that communication with the teacher one on one basis tends to communicate with other learners in the classroom. These findings suggest that learners with physical disabilities created more time with their teachers individually for concepts not clearly understood while in class together with regular learners.

From the interview schedule one of the respondents said;

My friend on a wheelchair asks me to push him to the staffroom to see a mathematics teacher to teach him alone the sums he does not understand during class lesson. (Regular learner no.12).

The findings in the interview indicate that learners with physical disabilities realized the need for one on one attention with the teacher. They could understand some concepts while with teachers alone rather than in class with the rest of the learners (Schumm et al, 2006).

Table 4.6 shows that 17(89.47%) of the respondents were in strong agreement that learners with physical disabilities chose silence to avoid interrupting face to face class discussion while 2(10.53%) agreed. This indicates that during lessons learners with physical disabilities feel shy to actively participate because they could be laughed at by regular learners in case they give wrong responses. However, keeping silent did not mean that they lacked ideas. This study was supported by Mintz, Joseph (2004) who stated that learners with physical disabilities may choose silence as a strategy to avoid interrupting the face to face classroom discussion. Learners with cerebral palsy (CP) choose to wait to talk with their teachers at the end of the class.

It can be observed from the table that majority of the respondents 15(78.95%) strongly agreed that learners with physical disabilities requested for alternative passive activities instead of vigorous activities in physical education while 4(21.05%) agreed. This indicates that learners with physical disabilities who could not take in vigorous games for passive activities like indoor games to also involve them.

Table 4.6 indicates that 16(84.21%) strongly agreed that learners with physical disabilities asked teachers questions in concepts not understood without any fear. 2 (10.53%) agreed while 1(5.26%) disagreed. This implies that learners with physical disabilities competed regular learners favourably despite their disabilities.

During class lessons both regular learners and learners with physical disabilities actively participated by asking and answering questions asked by the teacher. She said during interview:

When a mathematics teacher asks what is 5+5 a friend with a short hand carries up the other hand and answers the question correctly and a teacher asks us to clap for him.(Regular Learner no.33).

Table 4.6 revealed that 12(63.16%) of the respondents strongly agreed that learners with physical disabilities completed academic tasks such as writing notes and exercises like regular learners. 3(15.79%) agreed while 4 (21.05%) disagreed.

This indicates that learners with physical disabilities completed assignments given by their teachers though some could take more time.

The results in table 4.6 shows that 14 (73.68%) of the respondents strongly agreed that learners with physical disabilities at times rejected activities they could not perform in physical education. 4(21.05%) agreed while 1(5.26%) disagreed. The findings indicate that learners with physical disabilities could not participate in all activities in physical education due to the nature of their disabilities. Some would prefer indoors activities which are part of physical education. However, Mazurek *et al*, (2013) studies and experiment indicated that most of the learners can play a number of games without any support or special effort. Mazurek further reported that learners with orthopaedic disabilities could also do yogasans (yogic postures exercises).

Table 4.6 indicates that learners with physical disabilities improvised teaching / learning resources and adaptive devices as indicated by 15(78.95%) of the respondents. The findings reveal that LWPDs were able to make teaching/learning resources when instructed by their teachers despite of their disabilities.

Majority of the respondents in table 9 indicate that 16(84.21%) strongly agreed that learners with physical disabilities restructured rules of games during physical education to include peers without physical limitations. When playing learners with physical disabilities will demand for a game that they could participate alongside regular learners. A number of respondents 2(10.53%) agreed and 1(5.26%) disagreed. The finding of this study were supported by Mutepfa (2007) who state that in Zambia learners with physical disabilities

would restructure the rules of games to include their peers without physical limitations. These findings reveal that despite disabilities learners with physical disabilities were interested in participating in various games hence there was need for them to restructure rule of the games to suit their diversified needs in regular schools.

Findings from the interview schedule showed that learners with physical disabilities actively participated in class when the teacher was teaching. A standard seven regular learner said,

My friend who is epileptic carries up his hand when a teacher asks questions in class and answers correctly. (Regular learner no.32).

This indicates that learners with physical disabilities in regular schools equally take part in learning like other learners without disabilities. They justify to others that disability is not inability. Learners with physical disabilities are capable of asking and answering questions correctly like learners without disabilities.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter the results and discussions of the collected data on views of class teachers, learners with physical disabilities and regular learners on strategies used by learners with physical disabilities to cope with Physical environment, Social environment and Curriculum were summarized, concluded, recommended and suggestions for further research were discussed.

5.2 Summary of Findings

5.2.1 Views of Teachers on Strategies used by Learners with Physical Disabilities to Cope with Physical Environment in Regular Primary School.

Findings of the present study indicated that lack of physical facilities for moving around in school environment really hindered retention of learners with physical disabilities hence drop out schools. However the study revealed that 15(51.72%) of the respondents stated that learners with physical disabilities improvised mobility and adaptive devices to enhance learning in regular primary schools.

Teachers in regular schools allowed regular learners to help learners with physical disabilities in various activities such pushing them on wheelchairs when moving around the school environment.

5.2.2 Views of Learners with Physical Disabilities on Strategies used by Learners with Physical Disabilities to cope with Physical Environment in Regular Primary School

Majority of learners with physical disabilities 14(73.68%) strongly agreed that indeed regular learners pushed them on wheelchairs to access various parts of the school environment due to inappropriate architectural design of the school buildings.

From the findings regular learners carried learners with physical through narrow doors. Some schools did not adapt doors for easy accessibility and therefore regular learners assisted lifted them 13(68.42%).

The results of the present study also indicate that some learners with physical disabilities could not be able to get crutches to support themselves in mobility and therefore opted to improvise sticks to enable them move around the school environment 12(63.16%).

It was also evident from the present study that learners with physical disabilities who used wheelchairs in classroom needed enough space for movement while in class. Regular learners assisted learners with physical disabilities to create wide space for them to move easily by ensuring that their desks were well arranged 11 (57.89%)

From the findings learners with physical disabilities adapted toilets to suit their special needs 11(57.89%). Learners with physical disabilities adapted one of the toilets in the school for their use.

5.2.3 Views of Teachers on Strategies used by Learners with Physical Disabilities to Cope with Social Environment in Regular Primary School

Teachers had various views in regard to strategies used by learners with physical disabilities on how they interacted with teachers and other regular learners in regular primary schools as follows:

Findings of the present study indicate that Inclusion of learners with physical disabilities was a great challenge in regular primary schools as shown by 17(56.62%) of the respondents. Schools should accommodate all children regardless of their physical, intellectual, social, or other conditions.

According to the present study learners with physical disabilities were stigmatized by able bodied learners in regular schools (62.07%).

The results of the present study indicate that majority of regular teachers had negative attitude to learners with physical disabilities because they lower the school mean score. This was illustrated by 17(56.62) strongly agreeing. However, Learners with physical disabilities equally performed better than regular learner in regular primary schools.

Learners with physical disabilities had confidence to approach teachers individually after lessons for areas not well understood as illustrated by 22(75%) . Direct approach to teachers enabled learners with physical disabilities to understand the concepts not understood in the classroom.

5.2.4 Views of Learners with Physical Disabilities on Strategies used by Learners with Physical Disabilities to cope with Social Environment in Regular Primary School

The findings of the present study also indicate that denial and pretence was one of the strategies learners with physical disabilities used for self protection in regular primary schools (84.21%).

The study indicated that despite of stigmatization by regular learners in regular primary schools, learners with physical disabilities had high self esteem. This was a strategy that enabled learners with physical disabilities to cope up with regular learners in the school as shown by 13(68.42%).

Majority of learners with physical disabilities (89.47%) strongly agreed that direct/indirect experience was a strategy that enabled them to cope to negative attitude in regular primary schools.

The study showed that learners with physical disabilities experienced emotional breakdown when annoyed by others as a coping strategy. Emotional breakdown eventually led to acting out to others. Learners with physical disabilities normally have high emotions such as anger and frustration and therefore when annoyed they fail to control their emotion hence act out.

The results of the present study shows that majority of the respondents 17(89.47%) showed that learners with physical disabilities used avoidance and withdrawal as a strategy to cope in regular schools.

It was also evident from the results of the study that learners with physical disabilities created a good rapport with regular learners in regular schools so that they could support them in various activities which they could not perform.

5.2.5 Views of Teachers on Strategies used by Learners with Physical Disabilities to Cope with Curriculum in Regular Primary School

Model of differentiated instruction requires teachers to be flexible in their approach to teaching and adjust curriculum and presentation of information to learners with physical disabilities. This approach gives learners with physical disabilities multiple options for taking in information and making sense ideas.18(62.07%) of the respondents indicated that teachers did not make instructional adjustment that meet learners with physical disabilities. This contributed to low retention of learners with physical disabilities in regular primary schools.

It also emerged from the study that 17(58.62%) of the respondents showed that teachers did not prepare IEP for learners with physical disabilities in regular primary schools. Preparation of IEP by teachers would enable learners with physical disabilities to cope in regular schools by teachers providing services of which learners receive basing on their individual needs.

It was also evident from the present study that 18(62.07%) of the respondents stated that teachers were not trained SNE to have acquired skills and strategies to support learners with physical disabilities as well as knowledge of differentiating instructions for learners with special needs in regular classrooms.

The findings of present study illustrate that teachers did not practise co-teaching in various schools 17(58.62%).Co-teaching provides learners with enough support for their

achievements on standardised tests and has positive effect on standardised testing in areas many disabled learners struggle with.

The findings indicate that 16(53.17%) of the respondents stated that learners with physical disabilities were disadvantaged because curriculum was not geared to include them. Some teachers had not acquired skills and knowledge in special needs to adjust curriculum to suit learners with physical disabilities.

The findings of the present study also indicate that majority 24(82.76%) of the respondents strongly agreed that learners with physical disabilities participated in peer tutoring in class despite their diversified needs.

5.2.6 Views of Learners with Physical Disabilities on Strategies used by Learners with Physical Disabilities to cope with Curriculum

It was evident from the study that peer tutoring helped to build effective learning and communication skills to learners with physical disabilities in regular primary schools 15(78.95%).

The findings from the study showed that learners with physical disabilities used one-on-one attention as a strategy to benefit from teachers and other able bodied learners which enabled them to cope in regular schools 14(73.68%).

The findings of the present study also indicate that keeping silent is also a tool that can be used to solve certain situations in a community .In relation to this study learner with physical disabilities used silence as a strategy to avoid face to face class discussion 17(89.47%).

Findings of the present study indicate that rules schools could not actually favour learners with physical disabilities especially in physical education. From the study 16(84.21%)of the respondents showed that learners with physical disabilities sometimes restructured rules of

games during physical education and as a result they are also included in activities as part of the curriculum.

The results of the present study also indicated that learners with physical disabilities could not take part in all physical education activities as they have diversified needs. 15 (78.95%) of the respondents strongly agreed that they requested for alternative passive activities instead of vigorous ones during physical education lesson

5.3 Conclusion

The general view from the findings is that the coping of learners with physical disabilities in various regular primary schools despite of challenges was as a result of various coping strategies that learners with physical disabilities used .With reference to the above results; coping of learner with physical disabilities in regular schools was achieved through the contribution of several strategies. Among the key ones include:

(i) In line with identifying strategies used by learners with physical disabilities to cope with physical environment in objective one ,the findings of the present study indicate that learners with physical disabilities improvised mobility devices such as walking sticks for moving around the stairs and ramps. They also adapted toilets for their diversified needs while in school.

(ii) In line with determining strategies used by learners with physical disabilities to cope with social environment in objective two, the results of the present study indicate that coping strategies were; high self esteem, denial and pretence, direct/indirect experience, restructuring rules, silence and good rapport.

iii) In line with establishing the strategies used by learners with physical disabilities to cope with curriculum in objective three, the findings of the present study indicate that learners with

physical disabilities used coping strategies such as; peer tutoring, one-on-one attention and demanding for more time to complete tasks.

5.4 Recommendations

Based on the above findings and conclusion of the study the researcher would wish to recommend the following:

1. Strategies used by learners with physical disabilities to cope with physical environment;

The Ministry of Education should restructure physical environment in regular primary schools to be friendly for easy accessibility of learners with physical disabilities.

2. Strategies used by learners with physical disabilities in coping with social environment;

All regular primary schools should be inclusive and both learners with or without disabilities to develop positive attitude towards each other for in schools.

3. Strategies used by learners with physical disabilities in coping with curriculum;

The ministry of education should enhance more training of teachers in SNE to gain knowledge and skills of handling both learners with and without disabilities. NGOs to come in and assist in provision of assistive devices to learners from poor families to reduce the rate of drop out.

5.5 Suggestions for Further Research

Based on the study's findings the following topics are recommended for research:

1. The present study identified the strategies used by learners with physical disabilities to cope with physical environment. Learners with physical disabilities improvised mobility devices as well as adapting physical environment to suit their needs. There is need for further research to investigate on the influence of physical environment for learners with physical disabilities to cope in regular primary schools.

2. There was evidence in this study that learners with physical disabilities used direct/indirect experience to cope in regular primary schools. This therefore requires further research on the effects of direct/indirect experience to learners with physical disabilities in regular primary schools.

3. The findings of this study indicated that a good number of teachers in regular primary schools are not trained in SNE and therefore do not have skills and knowledge of handling learners with physical disabilities. This leads to low retention of learners with physical disabilities in regular primary schools. There is need for further research on effects of untrained teachers in SNE to learners with physical disabilities in regular primary schools.

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APPENDICES

APPENDIX I: QUESTIONNAIRE FOR CLASS TEACHERS

INTRODUCTION

You have been identified as a participant in this study entitled “Strategies used by learners with physical disabilities to cope with environment in regular primary schools in Mumias sub county, Kenya. I kindly request you to take a few minutes to answer these questions. All the information will only be used for the purpose of this academic research. Do not write your name or the name of your school on the questionnaire.

SECTION A: Respondent’s views on strategies used by learners with physical disabilities to cope with curriculum, social environment and physical environment in regular primary schools.

Please tick the column which most represents your views of the following statements. There is no correct or wrong answer. The best answer is the one that honestly reflects your views.

Key: SA- Strongly Agree A- Agree D - Disagree SD – Strongly Disagree

	SA	A	D	SD
<p>1. Teachers allow regular learners to help learners with physical disabilities in various activities.</p> <p>2. Learners with physical disabilities improvise mobility and adaptive devices to enhance learning.</p> <p>3.Regular teachers have negative attitude to LWPDs as they lower school means core</p> <p>4.Learners with physical disabilities are stigmatised by able bodied learners</p> <p>5.Learners with physical disabilities approach teachers individually after the lesson for areas not understood in class</p> <p>6.Teachers make instructional adjustment to meet learners with physical disabilities needs</p> <p>7.Teachers prepare an IEP for learners with physical disabilities in regular primary schools</p> <p>8.Learners with physical disabilities participate in peer tutoring in class</p> <p>9.Inclusion of learners with physical disabilities in regular primary schools is a great challenge</p> <p>10.There are teachers trained in special needs education in regular primary schools</p> <p>11.Teachers practice co-teaching as a strategy of enhancing learning to learners with physical disabilities</p> <p>12.Learners with physical disabilities are disadvantaged because curriculum is not geared to include them</p> <p>13.Regular teachers are not prepared to manage LWPDs in regular primary schools</p>				

APPENDIX II: QUESTIONNAIRE FOR LEARNERS WITH PHYSICAL DISABILITIES

INTRODUCTION

You have been identified as a participant in this study entitled “Strategies used by learners with physical disabilities to cope with environment in regular primary schools in Mumias sub county, Kenya. I kindly request you to take a few minutes to answer these questions. All the information provided will be treated with strict confidentiality and will only be used for the purpose of this academic research. Do not write your name or the name of your school on the questionnaire

SECTION B: Respondent’s views on strategies used by learners with physical disabilities in coping with curriculum.

Please tick the column which most represents your views of the following statements. There is no correct or wrong answer. The best answer is the one that honestly reflects your views.

Key: SA- Strongly Agree A- Agree D - Disagree SD – Strongly Disagree

	SA	A	D	SD
1. Peer tutoring helps to build effectively learning and communication skills to learners with physical disabilities in regular primary schools				
2. Learners with physical disabilities use one on one attention to benefit from teachers and other able bodied peers				
3. Learners with physical disabilities choose silence to avoid interrupting face to face class discussion				
4. Learners with physical disabilities demand for more time to complete their tasks				
5. Learners with physical disabilities request for alternative passive activities instead of vigorous activities in physical education				
6. During class time learners with physical disabilities ask teachers questions on concepts not understood repeatedly even if the teacher gets annoyed.				
7. Learners with physical disabilities complete academic tasks such as writing notes and exercises like regular learners				
8. Learners with physical disabilities at times reject activities they cannot perform in physical education				
9. Learners with physical disabilities improvise teaching /learning resources and adaptive devices				
10. Learners with physical disabilities restructure rules of games during physical education to include peers without physical limitations.				

SECTION C: Respondent’s views on strategies used by learners with physical disabilities to cope with social environment.

Please tick the column which most represents your views of the following statements. There is no correct or wrong answer. The best answer is the one that honestly reflects your views.

Key: SA- Strongly Agree A- Agree D - Disagree SD – Strongly Disagree

	SA	A	D	SD
1. Denial and pretence can be means of self protection by learners with physical disabilities in regular primary schools				
2. Learners with physical disabilities have high self-esteem despite stigmatisation by able bodied learners in regular primary schools				
3. Learners with physical disabilities use direct/indirect experience to cope to negative attitude in school environment				
4. Learners with physical disabilities initiate interactions with able bodied learners in the school.				
5. Learners with physical disabilities sometimes develop emotional breakdown as a way of coping with other peers.				
6. Learners with physical disabilities do not mind the attitude of regular and instead encourage them to work together.				
7. Learners with physical disabilities act out verbally or physically when angered by other peers				
8. Use avoidance and withdrawal as a way to cope on stigmatisation by other learners in the school environment.				
9. Learners with physical disabilities create good rapport with able bodied learners for assistance in various activities				

SECTION D: Respondent’s views on strategies used by learners with physical disabilities to cope with physical environment in regular primary schools

Please tick the column which most represents your views of the following statements. There is no correct or wrong answer. The best answer is the one that honestly reflects your views.

Key: SA- Strongly Agree A- Agree D - Disagree SD – Strongly Disagree

	SA	A	D	SD
1.regular learners push learners with physical disabilities on a wheelchair to access schools environment				
2. Regular learners carry learners with physical disabilities through narrow doors and ramps.				
3.Walking sticks are improvised by learners with physical disabilities to enhance mobility				
4. Learners with physical disabilities adapt the play ground to suit their needs in physical education.				
5. By use of peers learners with physical disabilities create wide space in classrooms for easy movement in and out of classroom.				
6. A specific toilet in the school is adapted by learners with physical disabilities for their use.				

APPENDIX III: INTERVIEW SCHEDULED FOR REGULAR LEARNERS

1. How do learners with physical disabilities access physical environment on their wheelchairs?
2. How do LWPDs get assistive mobility devices for moving around the school environment?
3. How do learners with PDs share concepts they understand with regular learners in the classroom?
4. How do learners with PDs participate during class lessons?
5. Do LWPDs use one-on-one attention to benefit from teachers?
6. Are there any special toilets for LWPDs in regular schools?
7. How do LWPDs access school environment in terms of individual mobility?
8. What is the size of classroom doors in the school?
9. What is the reaction of learners with physical disability when stigmatised by regular learners?
10. How do LWPDs play and interact in the school environment?

APPENDIX IV: OBSERVATION CHECKLIST

To be filled by the researcher while observing the lesson proceedings and general school environment.

The purpose of this instrument is to find out the accessibility of school environment, education resources and assistive devices used in the school.

Class..... No. of pupils..... Teachers gender..... Date

PART 1: ENVIRONMENT

Facilities	N A	A
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Adapted toilets

Ramps

Wide doors

Adapted play ground

Class organization

Stairs

Key: A= Not Available A=Available

APPENDIX V: AUTHORITY LETTER



MASENO UNIVERSITY
SCHOOL OF GRADUATE STUDIES

Office of the Dean

Our Ref: PG/MED/00106/2011

Private Bag, MASENO, KENYA
Tel:(057)351 22/351008/351011
FAX: 254-057-351153/351221
Email: sgs@maseno.ac.ke

Date: 02nd October, 2017

TO WHOM IT MAY CONCERN

**RE: PROPOSAL APPROVAL FOR OKUMU MOHAMED —
PG/MED/00106/2011**

The above named is registered in the Master of Education in Special Needs programme in the School of Education, Maseno University. This is to confirm that his research proposal titled “Coping Strategies Used by Learners with Physical Disabilities on School Retention in Regular Primary Schools in Mumias Sub County, Kenya” has been approved for conduct of research subject to obtaining all other permissions/clearances that may be required beforehand.

Prof. J.O. Agure
DEAN, SCHOOL OF GRADUATE STUDIES



APPENDIX VI: MASENO UNIVERSITY ETHICS REVIEW LETTER



MASENO UNIVERSITY ETHICS REVIEW COMMITTEE

Tel: +254 057 351 622 Ext: 3050
Fax: +254 057 351 221

Private Bag – 40105, Maseno, Kenya
Email: muerc-secretariate@maseno.ac.ke

FROM: Secretary - MUERC

DATE: 15th August, 2018

TO: Okumu W. Mohamed
PG/MED/106/2011
Department of Special Needs Education
School of Education, Maseno University
P.O. Box Private Bag, Maseno

REF: MSU/DRPI/MUERC/00568/18

RE: Coping Strategies used by Learners with Physical Disabilities on School Retention in Regular Primary Schools in Mumias Sub County, Kenya. Proposal Reference Number MSU/DRPI/MUERC/00568/18

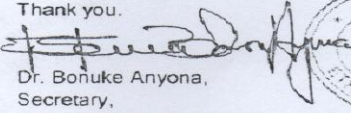
This is to inform you that the Maseno University Ethics Review Committee (MUERC) determined that the ethics issues raised at the initial review were adequately addressed in the revised proposal. Consequently, the study is granted approval for implementation effective this 15th day of August, 2018 for a period of one (1) year.

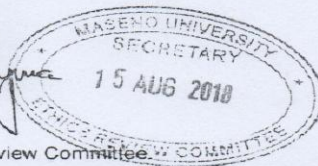
Please note that authorization to conduct this study will automatically expire on 14th August, 2019. If you plan to continue with the study beyond this date, please submit an application for continuation approval to the MUERC Secretariat by 15th July, 2019.

Approval for continuation of the study will be subject to successful submission of an annual progress report that is to reach the MUERC Secretariat by 15th July, 2019.

Please note that any unanticipated problems resulting from the conduct of this study must be reported to MUERC. You are required to submit any proposed changes to this study to MUERC for review and approval prior to initiation. Please advise MUERC when the study is completed or discontinued.

Thank you.


Dr. Bonuke Anyona,
Secretary,
Maseno University Ethics Review Committee.



Cc: Chairman,
Maseno University Ethics Review Committee.

MASENO UNIVERSITY IS ISO 9001:2008 CERTIFIED



APPENDIX VII: TEACHERS SERVICE COMMISSION LETTER

TEACHERS SERVICE COMMISSION

Telephone: Mumias
208011860
Email: tscnfmias@yahoo.com



TSC UNIT –
MUMIAS/MATUNGU
KAKAMEGA COUNTY
P. O. BOX 352 - 50102
MUMIAS.

Date: 12th January, 2018

When replying please quote

Ref. N°:
MMS/MTG/TSC/378566/80

The Head teacher

Mumias Sub-County

REF: RESEARCH
OKUMU W. MOHAMMED TSC/378566

The above named is a student at Maseno University who is to undertake his research project on 'coping strategies used by learners with physical disabilities on school retention in regular primary schools in Mumias district'.

Kindly accord him the necessary assistance in order to accomplish the research.

Wuya
FOR: **LINCEN PLOTTI**
FOR: TSC COUNTY DIRECTOR
KAKAMEGA COUNTY

12 JAN 2018
DIRECTOR
KAKAMEGA COUNTY

CC:
The Secretary
Teachers Service Commission
Private Bag
Nairobi