# TEACHERS LEVEL OF SUPPORT TO RETAIN LEARNERS WITH DISABILITY IN REGULAR PRIMARY SCHOOLS IN KISUMU WEST SUB-COUNTY, KENYA

BY

OBARA A. DORINE

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DEPARTMENT OF SPECIAL NEEDS EDUCATION

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# DECLARATION

This thesis is my original work and has never been presented for a degree in any other institution.

**Declaration by Candidate**

**Obara A. Dorine**

(PG/MED/7013/2011)

Signature………………….. Date……………………

**Declaration by Supervisors**

This thesis has been submitted for examination with our approval as the university supervisors:

**Dr. Were Michael**

Department of Special Needs Education,

Maseno University.

Signature……………………. Date……………………

**Professor. Odeck Aloys**

Department of Special Needs Education,

Maseno University.

Signature……………………. Date……………….……

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**DEDICATION**

I dedicate this climax of my educational journey to my late parents John and Jane Wanjare for teaching me to believe that anything is possible. To my loving husband Robert O. Ogone for his endless assistance to see me through this study. To my children Emma, Rita, Victor, Susan, Nelson and John who kept on encouraging me not to give up my study.

# ABSTRACT

The Government of Kenya made inclusive education a policy requirement in the provision of education to all children. Research has shown that the support given by teachers plays a very important role in curriculum implementation that ensures success in a child`s career. Education Assessment records in Kisumu county indicate that between the year 2012 and 2016, 846 learners who are physically challenged had been assessed and placed in regular schools in Kisumu West, Kisumu Central and Kisumu East sub-counties, out of which 246 had dropped out of school. However, Learners who are physical challenged often drop out of school more as compared to their regular counterparts particularly in Kisumu West Sub-County. The number of learners who are physically challenged enrolled in regular primary schools has been decreasing due to dropouts despite the fact that officers in Kisumu EARC conducted sensitization programs and workshops yearly for teachers and stakeholders in education. This decrease is confirmed at 138 (31.9%), which is higher as compared to the dropout of neighboring sub-counties namely: Kisumu East 31 (21.8%) and Kisumu Central 77(28.4%). Reason for this high dropout has not been established. The purpose of this study was therefore to determine teachers' level of support to retain learners who are physically challenged in regular primary schools in Kisumu West Sub-County. Objectives of this study were to; establish teachers' level of support in the use of teaching and learning resources of learners who are physically challenged; establish teachers' level of support in curriculum adaptation, find out teachers level of support in teaching and learning strategies and determine teachers' level of support in creation of awareness on learners who are physically challenged. A conceptual framework was used to show the interaction of dependent and independent variables. The study adopted descriptive survey research design. Target population of the study consisted of 15 head teachers, 30 teachers, 6 EARC coordinators and 90 learners who are physically challenged. Saturated sampling technique was used to select 13 head teachers and 4 EARC coordinators, while purposive sampling was used to select 27 teachers and 81 learners who are physically challenged. Data was collected using questionnaires, interview schedules and observation checklist. Face and content validity of instruments was established through expert judgment and revision. Reliability of instruments was established through test-retest method on 10% of study population using Pearson correlation. Reliability coefficient for head teachers questionnaire was 0.8, teachers' questionnaires was 0.9; Learners who are physically challenged questionnaires was 0.7. This was above the accepted value of 0.7. Correlation coefficient analysis was used to establish teachers' level of support to retain learners who are physically challenged. Quantitative data was analyzed using frequency counts, percentages and mean. Qualitative data from interview and observation schedules were collected, organized and categorized into themes and sub-themes, which were reported. Findings of the study indicated that most regular primary schools did not have adequate adapted teaching and learning resources required for learners who are physically challenged. Lack of curriculum adaptation that responds to needs of individual learners enhanced dropout of learners who are physically challenged. Majority of teachers did not use differentiation, IEP and peer teaching strategies required for learners who are physically challenged. The study also established that teachers did not provide enough awareness creation on learners who are physically challenged. The study recommended that Ministry of Education should ensure adequate supply of adapted teaching and learning resources, teachers in regular primary schools be trained in SNE, Differentiation, individualized educational plan and peer tutoring should be applied in regular primary schools according to SNE policy 2018. Findings of this study would be useful to teachers, EARC coordinators, and Ministry of Education in ensuring equal educational opportunities for learners with Special Needs Education in primary schools.

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## LIST OF ABBREVIATIONS AND ACRONYMS

**EARC** : Education Assessment and Resource Center

**EFA** : Education for All

**FPE** : Free Primary Education

**GOK** : Government of Kenya

**GPE** : Global Partnership for Education

**IE** : Inclusive Education

**IEP** : Individualized Education Program

**KICD** : Kenya Institute of Curriculum Development

**MOEST** : Ministry of Education Science and Technology

**NGOs** : Non-Governmental Organizations

**PWD** : Persons with Disabilities

**R.O.K** : Republic of Kenya

**SNE** : Special Needs Education

**SCEO** : Sub County Education Office

**UPE** : Universal Primary Education

**UN** : United Nations

**UNCRPD** : United Nations Convention on the Rights of Persons with Disabilities.

**UNESCO** : United Nations Educational Scientific and Cultural Organization.

**UNICEF** : United Nations International Children`s Fund

**WHO** : World Health Organization

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# CHAPTER ONE

# INTRODUCTION

## 1.1 Background to the Study

Primary schooling is important for the achievement of national development and access to it has formally been accepted as a human right for over half a century (UNICEF, 2009). Inclusive education (IE) promotes education of all pupils in mainstream schools including those who are physically challenged (Topping, 2005). Many countries of the world have still not fully achieved the Universal Primary Education (UPE); about 101 million children both disabled and non-disabled are out of school (UNESCO, 2007). Global emphasis on education can be traced back to 1948 when the United Nations (UN) declared education a basic right for all. It is for this reason that Kenya is party to the Salamanca Statement and Framework for Action of 1994 that put emphasis on schools to accommodate all children regardless of their physical, intellectual, social, emotional, and linguistic or other conditions, thus committed towards inclusive education (UNESCO, 1994). Similarly, recent policy initiatives in Kenya have focused on the attainment of Education for All (EFA) by 2015. This is in line with the government's commitment to international declarations, protocols and conventions as resolved in world conferences on quality EFA held in (Thailand, 1990 and Dakar, 2000).

The principal premise of IE was that schools are about belonging, nurturing and educating all students regardless of their differences in ability (Kozleski, Artiles, Fletcher & Engelbrecht, 2007). Inclusive Education is defined as a strategy to ensuring "education for all" (Ainscow, Booth & Dyson, 2006). In an inclusive school, children are given equitable support so that every child can be able to participate physically, socially and academically with their peers (Pearce, 2009). However, children who are physically challenged need extra attention in terms of teaching and learning resources, curriculum adaptation, teaching and learning strategies and creation of awareness towards inclusion. The success and failure of such

educational approach hinge on the knowledge, attitudes and responses that teacher's exhibit in classrooms (Ross-Hill, 2009). This depends on "teachers` support" meaning a wide variety of instructional methods and educational services provided to students in the effort to help them accelerate their learning progress, catch up with their peers and generally succeed in school.

According to Lakhan (2006), the philosophy of inclusive education is a worldwide advocacy of provision of education to children with special needs in the mainstream schools. Inclusive education seeks to enable the community, systems and structures to combat discrimination, welcome diversity and promote participation by all learners including learners with special needs. It also means identifying, reducing or removing barriers within and around the school that may hinder learning (Ngugi and Kabuchoru, 2009). Every learner has a fundamental right to learn. However, research has shown that although most countries seem to share the same ideology and commitment towards implementation of inclusion, the concept of inclusion has different meanings in different contexts (Swart and Pettipher, 2005). According to Lakhan (2006), his research study was on teachers' opinion how they could support learners with special needs who are already in mainstream schools. However, this study is on teachers support to retain learners who are physically challenged in regular primary schools in Kisumu West Sub County, Kenya.

The World Health Organization (WHO) estimates that 10% of any populations are disabled and in addition approximately 85% of the world's children with disability aged below 15 years live in the developing countries (World Bank, 1994). In United States of America (USA) about 96 percent of students with disabilities attend mainstream schools while 4% attend institutions dedicated to students with severe disabilities. Six percent of gifted and talented students are provided with special services in mainstream school settings (United

States Department of Education, 2008). This demonstrates success and commitment registered by educators to implement quality education.

In 2009, Germany ratified the Convention on the Rights of Persons with Disabilities and the number of pupils learning in inclusive classes rose during the last few years ( Klemm, 2013), still three out of four pupils with diagnosed special needs do not visit inclusive school setting (Dietze, 2011). In China, dropout rate of learners with physical disabilities is about 40%, the students are unhappy with their studies (Li Jingrong, 2004). Ringstaff and Kelly (2002) focus on the impact of technology on academic success with the use of learning materials. The EFA forum Report (2000) cites the problem of inadequate specialized equipment and instructional materials in all schools such as hearing aids for the deaf, Braille materials and white cane for the visually impaired as well as wheelchairs and crutches for the physically challenged. However, lack of such important facilities hampers the effectiveness of learners with physical disabilities. It is for this reason that the present study sought to examine teachers' level of support in the use of teaching and learning resources of learners who are physically challenged in regular primary schools in Kisumu West Sub-County, Kenya.

Regular schools with inclusive education are the most effective means of combating discriminatory attitudes creating welcoming communities, building on inclusive Society and achieving an effective education to the majority of children and improve the efficiency and ultimately the cost- effectiveness of the entire education system. In England, the 2004 document removing barriers to achievement: The Government`s strategy for physically challenged (Ofsted Report 2004) made a clear commitment to inclusive education by embedding inclusive practice in every school and early years setting. In Australia, several states have made a commitment to IE. For example, the aim of Building Inclusive Schools (BIS) strategy since it commenced in 2002, has been to raise awareness across all levels of the education system of changing societal expectations in relation to the education of the

students with disabilities that have strong effect on schools (Avramidis and Norwich, 2002; Cologon, 2010). In developing countries less attention is paid in improving quality of education and provision of education to people belongs to any class. In this regard, UNESCO report (2015) on the state of the world's children, points out, that about one hundred and thirty million children in the developing world are denied their right to education. Poor funding, inefficient use of resources and unequal provision of education fuels the learning crisis. High rate of repetition and drop-out of learners with physical disabilities remain a significant challenge (GPE, 2014/2015). Quality education plays a dynamic role in productivity, social and economic growth of a country. Countries in Africa like Ethiopia, Uganda, Burkina Faso, South Africa and Kenya have enacted legislations and policies to implement inclusive education (UNESCO, 2008).

In South Africa the inclusive education pilot project provided adequate teacher capacity building leading to increased enrolment (Republic of South Africa, 2002).

The initiative laid a solid foundation for pragmatic inclusive education since it involved all stakeholders in education.

In Bangladesh, the most recent education policy, known as the National Education Policy-2010, indicates the need for inclusion of children with physical disabilities as a strategy of reducing dropout rates in primary education (MoE, 2010).

The South African government made provision for special needs education in its education planning. In December 2008, Treasury announced that it would grant 9.5 billion South African Rand to the development and improvement of education for special needs children, over the next three years. The department said that there were about 88 000 learners with special needs in approximately 400 special schools in South Africa. It is also estimated that a further 288 000, such children were not attending school (UNICEF, 2007). The constitution

of the Republic of South Africa (1996) legalized special needs education. Their education white paper 6 formulated policies on special needs education building on inclusive education and training system (2001) and by 2009 there were 392 special schools.

In Uganda, the government is constantly adopting its education structure and content to promote quality learning for all learners independent of special learning needs. The overall structure of education to cater for learners with special needs in education introduced in early 1990s is still the backbone in the education for all learners. To ensure that all learners with special needs were given relevant and quality education in inclusive schools, all schools in Uganda were grouped in clusters of 15-20 schools and each cluster had a special needs education coordinator (MOEST and Uganda 2003). Hannu (2000), the success of inclusive education which serves all children depends on a flexible and relevant curriculum that can be adapted to the needs of learners who are physical challenged.

Mittler (2002) argues that curriculum must be sensitive and responsive to the diverse cultures, beliefs and values. Okech (2009) also noted that the current curriculum does not serve the needs of the learners with disability in Uganda. Learner (2006) also noted that the regular school curriculum is rigid, more of a routine and does not provide space for adaptation. Kauffman (2004) stated that the scale and scope of curriculum adaptation would only be determined after a thorough assessment of an individual learner which regular teachers are not able to do due to lack of relevant skills in education of physically challenged. Mittler (2002) in his study on experience in including children with disabilities in ordinary schools focused on curriculum to be sensitive and responsive to the diverse cultures, beliefs and values. Owuor (2014) revealed that the curriculum content does not support inclusive education. These studies however, did not establish teachers` level of support in curriculum adaptation. The current study sought to establish the teachers' level of` support in curriculum adaptation for learners who are physically challenged in regular primary schools in Kisumu

West Sub-County, Kenya. In Kenya, despite the government's order on all regular schools not to reject any child, many learners with physical disability are still waiting for placement in learning institutions (MoEST, 2003). Free Primary Education (FPE) led to crowding in schools which has posed a big challenge to learners with disabilities and special educational needs since they end up not getting extra attention they need. This was an indication that there could be some barriers that hinder these children from effective learning. It was necessary to establish such barriers.

Kenya National Survey for Persons with Disabilities (2008), stated that Kenya has a population of 35.72 million. Ten percent of the population had disability (4.44million) and children with mobility problem constitute 26.2% of the disabled population.
It further stated that 67% of the disabled population had primary education, 19% attained secondary level education and only 2% had reached university level (Kenya UNCRPD report, 2011). The where about of the remaining 22% is yet to be established?

Even though there have been different efforts in Kenya to determine the disability status through census and civil societies, NGO's and government, the available data has never been adequate to give a complete picture of National dropout percentage of learners who are physically challenged. (KNSPD, Preliminary Report.2008). It is also evident that while 1.3 million children join primary schools at the start of FPE, only 875,300 made up to class 8. It noted that there were more drop-out in primary schools than secondary schools. Therefore, a policy think tank has expressed serious concern about the high drop-out among primary school pupils in Kenya even after the introduction of FPE (2003). (Daily Nation, 22nd, October, 2015).

Pupils with physical disabilities often require access to services that are different from that of other learners. However, teaching strategies should be adjusted to facilitate differentiation

(Bailey, 1998). It is logical that effective instructional practices for most learners can also be effective for pupils said to have physical disabilities if delivered in a specific way (Berry, 2011; Landrum and McDuffie, 2011; Vaughn & Linan-Thompson, 2003).

Wang'ang'a (2014) in her study of teaching strategies used by teachers to enhance learning to learners with multiple disabilities in four selected counties (Baringo, Kiambu, Kisumu, Nairobi) in Kenya, used a study sample which consisted of 9 head teachers and 57 teachers educating learners with multiple disabilities totaling to 66 respondents. She used a triangulation mixed method design and collected data by use of questionnaires, interviews and observation guides. The data was analyzed both quantitatively and qualitatively. Her findings revealed that the choice of instructional methods was determined by the needs of the learners and majority of teachers were inadequately prepared to teach learners with multiple disabilities because their training was for a specific disability. Mc Cathy (2007) argued that knowing the subject matter, understanding how students learn, and practicing effective teaching methods translate into greater student interest and achievement. However, the above studies did not focus on teachers' level of support in the teaching/learning strategies used in teaching learners who are physically challenged. The current study aimed at finding out teachers' level of support in the teaching/learning strategies used in teaching learners who are physically challenged in regular primary schools in Kisumu West Sub-County.

The success or failure of inclusive education can be influenced by teacher characteristics, the way in which education is organized and factors outside schools or external factors. Stough and Palmer (2003) and Thomas (2008) in their research conducted in the United States of America and Canada both agree that teachers `and professional subject knowledge is key to improvement of student's achievement and retention of learners with special needs. Further, they both contend that expert special educators have extensive knowledge of effective pedagogy in behavior management and tailored instruction to meet student`s individual

needs. Thus in America, teachers have been trained at master and doctoral levels to deal with learners with physical disability (Stough & Palmer, 2003 & Thomas, 2008). Teachers may feel challenged but it is important to continue to learn about children with special needs and have a positive attitude to keep children feeling successful. Teachers' attitudes become very critical in building a successful inclusion classroom. General and special educators may differ in opinion but both need to collaborate to create a successful inclusion room. Through their support, the retention rate of learners with disabilities may be improved.

A study by Ali, Mustapha and Jelas (2006) in Malaysia on teacher attitude was measured with a self-rated questionnaire. Their findings were that overall teachers had positive attitudes towards inclusive education and agreed that inclusive education intensifies social interaction, while it decreases negative stereotypes of special educational needs children. The authors argued for cooperation between mainstream and special education teachers in order to implement inclusive education. In Scotland, Disability Rights Commission (DRC) (2001) showed an increase in awareness of the Disability Discrimination Act (DDA) with over 50% saying they have heard of it. Ali *et al*., (2006) did research on attitude and perceived knowledge of mainstream and special education teachers of primary schools towards inclusive education. Ochieng (2018) observed lack of awareness of the existing support structures for learners living with a disability as the main factor hindering access to quality education. The studies did not establish awareness creation about learners who are physically challenged to mainstream and special teachers in inclusive education.

However, the current study sought to determine teachers' level of support in creation of awareness about learners who are physical challenged in regular primary schools in Kisumu West Sub-County, Kenya. In Kisumu County, according to statistics obtained from Kisumu Educational Assessment and Resource Centre (EARC) indicated that there was dropout of learners who are physically challenged in regular primary schools. Table 1.1, shows

enrolment, retention and dropout of learners who are physically challenged between 2012 and 2016 in Kisumu West Sub-County, Kisumu East Sub-County and Kisumu Central Sub-County, Kenya.

**Table 1.1: Enrolment and Dropout rate of Learners who are Physically Challenged in Regular Schools, in the 3 Sub-counties namely, Kisumu West, East and Central.**

| Year | Sub-County | Enrolment | Retention | Dropout | Dropout % |
|------|-----------|-----------|-----------|---------|-----------|
| 2012 | Kisumu West | 69 | 47 | 22 | 31.9 |
|  | Kisumu East | 43 | 39 | 4 | 9.3 |
|  | Kisumu Central | 50 | 39 | 12 | 22 |
| 2013 | Kisumu West | 91 | 66 | 25 | 27.5 |
|  | Kisumu East | 23 | 17 | 6 | 26.09 |
|  | Kisumu Central | 52 | 37 | 15 | 28.8 |
| 2014 | Kisumu West | 72 | 46 | 26 | 36.1 |
|  | Kisumu East | 27 | 19 | 8 | 29.6 |
|  | Kisumu Central | 51 | 31 | 20 | 39.2 |
| 2015 | Kisumu West | 94 | 62 | 32 | 34.0 |
|  | Kisumu East | 21 | 15 | 6 | 28.5 |
|  | Kisumu Central | 61 | 47 | 14 | 22.9 |
| 2016 | Kisumu West | 107 | 74 | 33 | 30.8 |
|  | Kisumu East | 28 | 21 | 7 | 25.0 |
|  | Kisumu Central | 57 | 41 | 16 | 28.1 |
|  | **TOTAL** | **846** | **601** | **246** | **29.1** |

**Source: Kisumu Educational Assessment and Resource Centre, 2016**

From Table1.1; between the years, 2012 and 2016, 846 children were assessed as having physical disability. Out of these, 246 (29.1%) dropped out of school. This dropout rate is high given that Kisumu County had 6081 teachers trained, of which some are trained in Special Needs Education. The monthly statistical report (December, 2016) from the County Director of Education office shows that among the sub-counties in Kisumu County, Kisumu West has the highest number of dropouts of learners who are physically challenged. Table 1.2; shows enrolment and dropout rate of learners who are physically challenged in the two neighboring Sub-Counties.

**Table 1.2: Dropout rate of Learners who are Physically Challenged in the Neighboring Sub-Counties**

| Sub-county | Enrolment | Dropout | Drop out % |
|---|---|---|---|
| Kisumu West | 433 | 138 | 31.9 |
| Kisumu East | 142 | 31 | 21.8 |
| Kisumu Central | 271 | 77 | 28.4 |
| **TOTAL** | **846** | **246** | **29.1** |

**Source: Kisumu Educational Assessment and Resource Centre, 2016**

Table 1.2; further shows that Kisumu West Sub-County enrolled the highest number of learners who are physically challenged (433) and the highest dropout rate of 138 (31.9%). Kisumu Central enrolled 271 learners who are physically challenged and a dropout rate of 77 (28.4%) and Kisumu East Sub-County enrolled 142 learners who are physically challenged and a dropout rate of 31 (21.9%). Despite the creation of awareness to both the teachers and stakeholders by the EARC personnel as well as the technical support they give the teachers in managing learners who are physically challenged in the regular primary schools, the dropout rate of learners who are physically challenged in Kisumu West Sub-County was higher 138(31.9%) than the neighboring sub-counties, as shown in  Table 1.3.

**Table 1.3: Baseline Survey on 15 Schools enrolled more than Five Learners who are Physically Challenged in Kisumu West Sub-County in 2017**

| Zones | Schools | Number of learners who are physically challenged | | |
|---|---|---|---|---|
| | | Classes:  Four | Five | Six |
| Chulaimbo | 3 | 10 | 5 | 3 |
| Nyahera | 3 | 9 | 7 | 2 |
| Ojola | 3 | 8 | 5 | 5 |
| Otonglo | 3 | 7 | 7 | 4 |
| Sianda | 3 | 8 | 6 | 4 |
| **Total** | **15** | **42** | **30** | **18**  = 90 |

**Source: Field Data**

A baseline survey carried out by the researcher in three regular primary schools in each of the five zones, Kisumu West Sub-county in February 2016 revealed that learners who are physically challenged were in regular primary schools. The number of learners decreased as they transitioned to higher level. For example, number of learners who are physically challenged decreased in classes four, five and six as shown in Table 3. This became a concern of the researcher to conduct a study on teachers' level of support to retain learners with disability in regular primary schools in Kisumu West Sub-County, Kenya.

## 1.2 Statement of the Problem

Despite the governments' continuing efforts over the years to solve the problem of dropout from schools among children who are physically challenged, this problem has persistently been on the increase. A policy (2018) that promote disability inclusion and mainstreaming across all education institution has been issued in regular schools. However, schooling in Kisumu West Sub-County has not always met the strategic needs of the learners who are physically challenged like provision of adequate physical facilities and equipment to cater for their special needs like their counterparts in regular schools. It is also evident that in the year 2012 to 2016, 138 (31.9%) learners who are physically challenged dropped out of school in Kisumu West Sub-County, 77 (28.4%) learners who are physically challenged dropped out of school in Kisumu Central Sub-County and 31(21.8%) learners who are physically challenged dropped out of school in Kisumu East Sub-County. A baseline survey done in 15 schools within the five zones in Kisumu West Sub-County (2017) revealed that number of learners who are physically challenged decreased as they move to higher classes. The reason for this high dropout in Kisumu West, Sub-County was yet to be investigated. This study therefore aimed at determining teachers' level of support to retain learners who are physically challenged so as to seek for other alternatives in which the dropout rates can be reduced. The key factors investigated were curriculum adaptation, teaching and learning resources, teaching and learning strategies and creation of awareness on learners who are physically challenged. Based on this background, this study intended to determine teachers' level of support to retain learners who are physically challenged in regular primary schools in Kisumu West Sub-County, Kenya.

## 1.3 Purpose of the Study

The purpose of this study was to determine teachers' level of support to retain learners who are physically challenged in regular primary schools in Kisumu West Sub-County, Kenya.

**1.4 Study Objective**

The objectives of the study were to;

(i)      Establish teachers` level of support in the use of teaching and learning resources of learners who are physically challenged in regular primary Schools in Kisumu West Sub County, Kenya.

(ii)     Establish teachers` level of support in curriculum adaptation for learners who are physically challenged in regular primary schools in Kisumu West Sub County, Kenya.

(iii)    Find out teachers` level of support in teaching and learning strategies used in teaching learners who are physically challenged in regular primary schools in Kisumu West Sub County, Kenya.

(iv)     Determine teachers' level of support in creation of awareness on learners who are physically challenged in regular primary schools in Kisumu West Sub County, Kenya.

**1.5 Research Questions**

The study was guided by the following research questions:

(i)  To what extent do teachers the use of teaching and learning resources of learners who are physically challenged y in regular primary schools in Kisumu West Sub- County, Kenya?

(ii)  To what extent do teachers support curriculum adaptation for learners who are physically challenged in regular primary Schools in Kisumu West Sub County, Kenya?

(iii)  To what extent do teachers support the teaching and learning strategies used in teaching learners who are physically challenged in regular primary schools in Kisumu West Sub County, Kenya?

(iv) To what extent do teachers support creation of awareness on learners who are physically challenged in regular primary schools in Kisumu West Sub County, Kenya?

**1.6 Assumptions of the Study**

The study was based on the following assumptions:

(i) That learners who are physically challenged were in regular primary schools in Kisumu West Sub-County, Kenya.

(ii)  Teachers were aware that they were supposed to provide support to learners who are physically challenged in regular primary schools.

(iii) That information obtained from the respondents was accurate and relevant.

## 1.7 Scope of the Study

The study focused only on teachers` level of support to retain learners who are physically challenged in Kisumu West Sub County, Kenya. The study was carried out in fifteen regular primary schools having large number of learners who are physically challenged in the sub-county with teachers teaching them.

## 1.8 Limitations of the Study

The use of questionnaires might have produced information that was influenced by ceiling and floor effects, by the respondents either overstating or suppressing their responses to impress the researcher. This was assessed by the use of interview schedules.

## 1.9 Significance of the Study

The outcome of the study may be significant to head teacher and teachers in identifying teachers level of support to retain learners who are physically challenged in regular schools. It may be useful to Ministry of Education, EARC officers and parents in ensuring equal educational opportunities for learners with Special Needs Education in regular primary schools. The knowledge generated by this study may therefore enable other Development in designing appropriate instructional goals for special needs education. Educational Assessment and Resource centers may benefit in their mission to identify, assess, intervene and properly place learners with special needs.

**1.10 Conceptual Framework**

The conceptual framework outlines an illustration that the study employed in analyzing the teachers level of support to retain learners who are physically challenged in regular primary schools in Kisumu West Sub- County, Kenya



**Independent Variable**       **Dependent Variable**

TEACHER SUPPORT

- Teaching and learning resources
- Curriculum adaptation
- Teaching and learning strategies
- Creation of awareness on learners who are physically challenged

**Intervening Variables**

School Culture

Improved retention of learners with physical disability in regular schools.
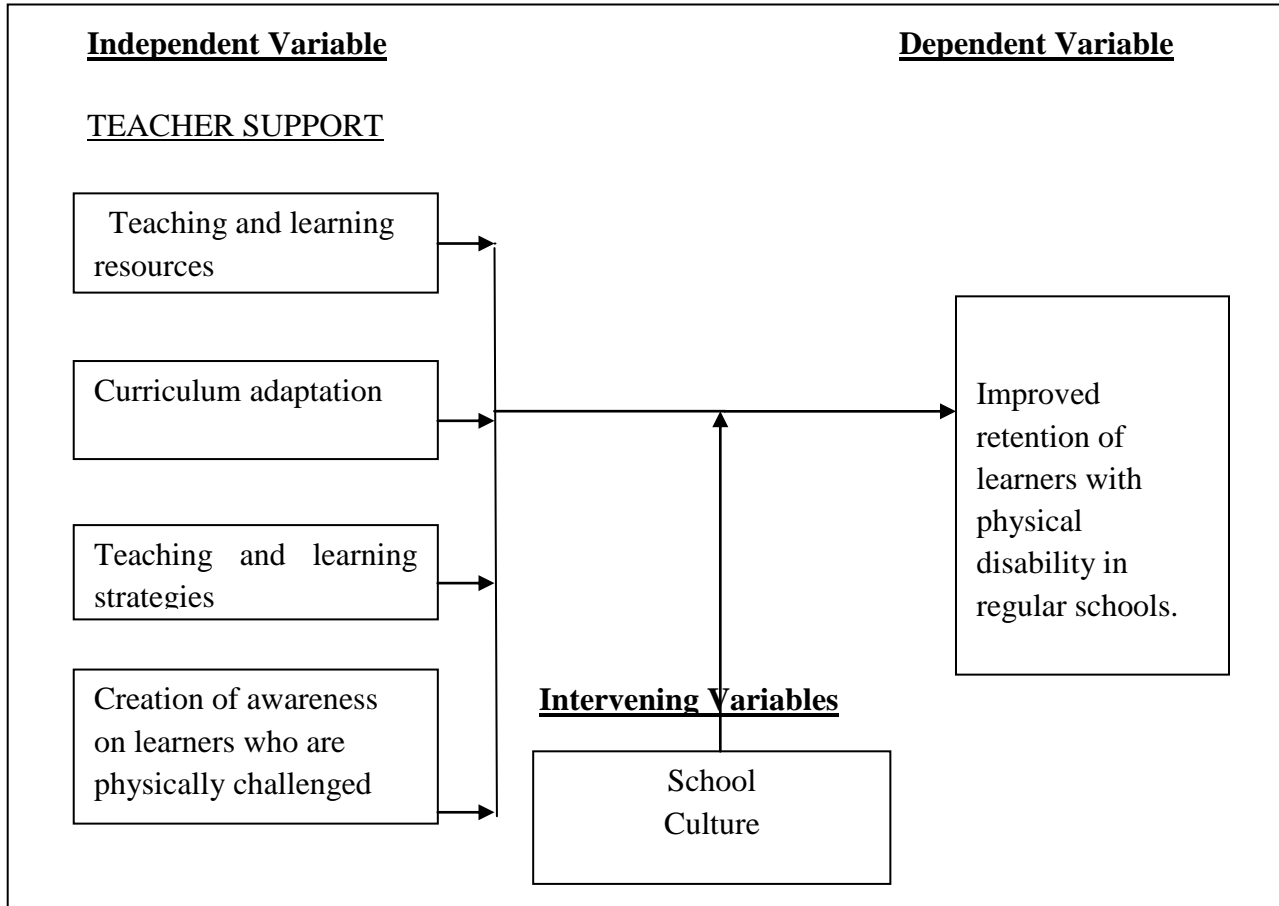
**Source: Researcher's own adaptation**

**Figure 1.1: Conceptual Framework Showing Interaction of Teachers` Level of Support To Retain Learners who are Physically Challenged in Regular Primary Schools**

This study was based on the conceptual framework Figure 1.1 implies a significant relationship between the dependent and independent variables of the study. The independent variables are learning and teaching resources, curriculum adaptation, teaching and learning strategies and creation of awareness on learners who are physically challenged, if these factors are well manipulated and strategized by the teachers would lead to improved retention and quality education of learners who are physically challenged in regular primary schools.

Intervening variables in this study refers to school culture. Culture is viewed as a representation of process that a group of people share and cherish (Erickson, 1986). Consequently culture plays an important role in students` learning styles and understanding of meanings (Cush *et al*., 1992) in a given school or context as illustrated in Figure 1.1. These factors can directly affect retention and dropout of learners who are physically challenged either positively or negatively. This can further affect successful implementation of inclusive education in regular primary schools.

Inclusion of learners who are physically challenged in regular primary schools was the dependent variable. This was determined by successfully providing quality education and retaining learners who are physically challenged in schools. Usually there is only one dependent variable and it was the outcome variable the researcher attempted to predict (Kombo & Tromp, 2009).

### 1.11  Operational Definition of Terms

**Adaptations** – Refers to changes in teaching strategies, materials and assessment Methods that allows student with special needs to achieve the prescribed learning outcomes in the curriculum.

**Assistive Devices-**These are appropriate aids, appliances, technologies and other support Systems that facilitate effective learning of learners with special educational needs.

**Dependent variable** – This is what one measures in the experiments.

**Inclusive Education-** Refers to the process of addressing learners` needs within the regular School using all available resources to create opportunities to learn in preparing them for life.

**Independent variable** – Is the factor that one purposely change or control in order to see what effect it has.

 **Learner** -   Refers to a person who is gaining knowledge or skills obtained by study according to the Oxford Advanced Dictionary.

**Learners with Special Educational Needs-** These are learners who require special service provision and support in order to access education and maximize their learning

potential. In this study, the two categories will be considered i.e., Physically Challenged and Mild Mentally Handicapped.

**Physical disability**- Refers to a person who is slow to do physical activities because of a Problem with a certain part of the body e.g. legs or hands.

**Regular school -** Refers to a school for non-handicapped children (normal learners) in public primary schools.

**School culture** – Refers to the beliefs, perceptions, relationships, attitude, and written and unwritten rules that shape and influence every aspect of how a school functions.

**Special Needs Education-** It is a system for providing a conducive learning environment for learners who may require extra support in order to achieve their potential

**Teacher's support-** Refers to a wide variety of instructional methods, educational services or school resources provided to students in the effort to help them accelerate their learning progress, catch up with their peers and generally succeed in school.

## CHAPTER TWO

## LITERATURE REVIEW

### 2.1 Teachers' Level of Support in the use of Teaching and Learning Resources of Learners who are Physically Challenged

In the field of Education, TLM is a commonly used acronym that stands for "teaching and learning resources." Broadly, the term refers to a spectrum of educational materials that teachers use in the teaching and learning process. They may include charts, model, text books, overhead projector, computers, classrooms and improvised materials. Due to their disabilities, learners who are physically challenged require more human and material resources for their education than their non-disabled peers. They need these resources at individual level as well as at classroom level, (M.O.E, 2003). Careful selection of teaching and learning resources contributes to nurturing concepts from basic ideas. They also help to download the often abstract concepts to understandable process (KICD, 2007).The effective implementation of curriculum calls for the provision of adequate and appropriate facilities, equipment and teaching and learning resources.

Moodley (2002) observed that in order for the learners to be active participants in the learning and teaching process, institutions must ensure that teaching and learning materials are used as well as made available to all the learners with special needs according to their needs. Research has shown that availability of learning materials can have substantive effect on curriculum implementation since learners remember 90% of what they say, see and do. They also help to download the often-abstract concepts to understandable process (Maina, 2009). Research on provision of services to learners with physical disability in inclusive classrooms in New Zealand by Bevan Brown in 2006; found that there was shortage of special education professionals and resources.

UNESCO (2004) points out that the learners must be provided with learning materials in formats that meet their individual needs. In an inclusive setting, learners would require other resources over and above what is provided by the school. These include resources to enhance mobility and communication such as wheel chairs, crutches, positioning devices, optical and non-optical devices and hearing devices (Randiki, 2002). In inclusion, it is emphasized that teachers should use locally available resources to support learning (Moodley, 2002). Making use of local artisans to repair the devices can also help in reducing the problem and make the educators able to deliver positively. This may improve the retention of learners who are physically challenged in the public institutions.

Leung and Mak (2010) investigated 51 Hong Kong primary school teachers' acceptance of inclusion. A large number of teachers (74.5%) reported negative attitudes and expressed concerns about students' learning progress. They expressed a fear of increased difficulty in managing the classroom environment and also noted the insufficiencies relating to their schools' resources as well as limited support from the government. Hue (2012) reported that guidance teachers in secondary schools believed that students with particular types of special needs, needed to have more support and would be better educated in special schools. In summary, even though the concept of inclusion was introduced to Hong Kong a few decades ago, many regular primary and secondary teachers are not accustomed to including students with physical disability in their classroom (Poon-McBrayer, 2004).

World Bank (2012) found out that many African countries do not have enough resources to meet the demand of education. A report by all the Sub-Saharan conference on Education For All indicate that most countries in Africa experience shortage of all kinds of teaching and learning materials with difference in availability between rural and urban schools.

In Botswana, Research has concentrated on inclusion of learners with specific categories of disabilities. For example, Gaotlhobogwe (2001) explored the availability of learning support systems for inclusive education for learners with visual impairment. Recently, Brandon (2006), Kuyini and Mangope (2011) and Chhabra, Srivastava and Srivastava (2010) studied attitudes of teachers and student teachers 'towards inclusive education. These studies indicated that teachers in Botswana schools did not have favourable attitude towards inclusion for physically challenged learners. They were concerned about inadequate equipment and availability of paraprofessionals; additionally they raised concerns about provision of resources and funding to support the physically challenged learners in regular classrooms. The study concentrated on inclusion of learners with specific categories of disabilities. The current study was focusing on learners who are physically challenged in regular schools.

Momoh (2010) conducted a research on the effects of instructional resources on students' performance in West Africa School Certificate Examinations (WASCE). The achievements of students in WASCE were related to the resources available for teaching. His finding revealed that material resources have a significant effect on student's achievement as well as retention.

In Kenya, a Government Report on the National Conference of Education For All observed that in most primary schools in Kenya, pupils lack desks and chairs and the absence of these have diverse effects in learning (R.O.K, 1992). Ministry of Education Science and Technology. (2010) observes that there is inadequate provision of teaching and learning resources for learners with disabilities. The limited availability of curriculum support materials also limited the ability of the teachers to employ a variety of content teaching and learning activities for effective curriculum delivery. In the generalization of inclusive education the level of aid, support and expertise must be as per the demand. High cost of

special equipment for learners with special needs is also hindrance towards realizing EFA; as a result there is inadequate provision of appropriate teaching and learning materials for learners who are physically challenged. This corresponds with Republic of Kenya (2005) and Ministry of Education (2009) stating that implementation of inclusive education in Kenya was compounded by lack of equipment and teaching/learning resources in teaching learners who are physically challenged in regular primary schools.

Karande (2014) in her study of factors influencing participation of learners with physical disability in public primary schools in Kiambu Municipality, used a study sample which constituted of 20 head teachers, 100 teachers and 43 learners with physical challenges totaling 143 respondents. She used descriptive research design and collected data by use of questionnaires and observation and schedules. The data was analyzed both quantitatively and qualitatively. Her findings revealed that majority of teachers were not trained in handling learners with physical disabilities resulting into learners not participating effectively in the learning process. The current study; however was to establish teachers` level of support in the use of teaching and learning resources for learners who are physically challenged in regular primary schools in Kisumu West Sub-County, Kenya.

## 2.2 Assistive Technology

This is an item, piece of equipment or product system whether acquired commercially of the shelf, modified or customized that is used to increase, maintain or improve the function capability of a child with disability. Technology has emerged as a means of mediating the environment for learners with SNE. Ringstaff and Kelley (2002), conducted a study in rural West Virginia at Hundred High School, on the impact of technology on academic success and showed favorable results. The school took advantage of a program called NET schools and received funding from the E-rate program. NET schools provided every student and teacher with a laptop. Once ports were installed, all the students and teachers connected to a Local

Area Network. The results were astonishing. The desire to learn increased and students who had previously been disinterested in school became more active participants. After only six months, eighty percent of the students were accessing the Internet daily to gain supplemental instruction. In the past, their only source of information had been from the school library which contained out of date texts. Amuto (2002), such software make work easier on both the learners and the teachers, this also makes learning enjoyable and reduces stress on learners with visual impairments.

Moodley (2002) suggested that the availability of learning materials can have substantive effect on curriculum implementation. Leung and Mark (2010) focused on difficulty in managing the classroom environment and insufficiencies relating to their school`s resources. Study by Ringstaff & Kelly (2002), focused on the impact of technology on academic success. However, these studies did not focus on the teachers' level of support in the use of teaching and learning resources. The current study was to establish teachers` level of support in the use of teaching and learning resources for learners who are physically challenged in regular primary schools in Kisumu West Sub-County, Kenya.

## 2.3 Teachers` Level of Support in Curriculum Adaptation for Learners who are Physically Challenged

Curriculum adaptation refers to the modification of the regular curriculum to suit individual learners with special needs and disabilities. It is developed to ensure quality of education provided in all schools by ensuring that all pupils in the country receive similar learning experiences and activities (KICD, 2007). When a curriculum approach takes into account the pupils current individual needs and his future needs and is designed to meet his needs it is known as a functional curriculum (Ellis 1986).

Curricula should be adapted to children's needs, not vice-versa (Salamanca Framework for Action, 1994). Children with special needs should receive additional instructional support in

the context of the regular curriculum, not a different curriculum. The guiding principle should be to provide all children with the same education, provide additional assistance and support to learners who require it. Knowledge acquisition should not only be theoretical but should be related to learners own experience and practical concerns for motivational purposes. Mittler (2002) argues that curriculum must be sensitive and responsive to the diverse cultures, beliefs and values. Assessment procedures should be reviewed in order to keep learners informed and to identify difficulties and assist learners to overcome them. Education for learners with special needs and disabilities has faced challenges in regard to the curriculum development. The curriculum and support materials for these learners come later when their counterparts in regular schools set up are already familiar with the curriculum contents and requirements. These delays make the learners lag behind in the syllabus implementation which affects their performance in schools. Other problems have been rigid and inaccessible curriculum and rigid methods of evaluating the curriculum. There is need to have a curriculum that is adequately responsive to the different categories of children with special needs. It should be flexible in terms of time, teaching/learning resources, methodology, mode of access, presentation and content. Learners with disabilities require expanded curriculum that consists of knowledge and skills related to academic subjects.

Information regarding disabilities best teaching practice and guidelines on permissible assessment variations has been identified as urgent needs of teachers involved in inclusive programs (Cochran 1998; Romano & Chambliss 2000). In Uganda, Okech (2009) also noted that the current curriculum does not serve the needs of the disabled. A culturally sensitive curriculum has been designed to reach out to semi-nomadic cattle keepers living in a fragile ecological environment in North Eastern Uganda. This has assisted in reducing the number of children who had been out of school in this area (UNESCO 2001). Agbenyega & Deku (2011) saw teachers` unwillingness to include students with disabilities as a factor of

insufficient knowledge of inclusion and the inability to manage diverse needs, as well as the lack of ability to adapt curriculum and instructional strategies to facilitate learning outcomes (Scruggs & Mastropieri, 2004).

Kenya Institute of Education has made effort to develop pre-school curriculum for children with visual and hearing impairments; developmental and independent living skills syllabus for learners with Visual Impairments; perceptual training, communication and mathematical skills syllabuses for learners with mental handicaps; foundation syllabus for learners who are deaf-blind. Despite this effort, it is notable that several curricula for learners with special needs require modification and review (MoEST. 2010). The government and other stakeholders need to undertake coordinated and collaborative interventions to develop suitable curricula for learners with SNE. All students, regardless of their needs, should be provided with appropriate access to mainstream curricula (National Counsel for Special Education (NCSE), 2010). Children with physical disabilities can have access to a broader curriculum through the use of additional resources and differentiation (NCSE, 2010).

Mc Cathy, (2007), carried research in USA and established that quality teachers are the single greatest determinant of student achievement. They further asserted that teachers` education, ability and experience account for variation in student achievement than all other factors. Knowing the subject matter, understanding how students learn, and practicing effective teaching methods translate into greater student interest and achievement. Manyara (2001), laid emphasis on different motivational strategies the principals use in order to encourage teachers in curriculum implementation leading to improved retention of students.

According to Adeyemo, (2005), ICT in the context of SNE refers to communication systems and techniques which are specific to various learners with special needs and disabilities. Currently ICT has not been optimally applied to the SNE teaching and learning processes.

These include both augmentative and alternative modes of communication such as spoken language and sign language, Braille, tactile communication, readers for the blind, print, audio and visual tapes, and ICT skills. Provision of SNE services has not adequately integrated the use of ICT. Existing information and communication services remain largely inaccessible and unaffordable to persons with special needs and disabilities. Different disabilities require specific approaches to meet their information and communication needs. This requires heavy investment and increased funding levels. This is a challenge that the government and partner organizations have to address in the delivery of SNE services.

Owuor (2014), conducted a study on determinant of inclusion of learners with special needs in public primary schools, Kisumu County and used a study sample of 24 head teachers, 120 teachers and 240 learners totaling to 384 respondents. She used descriptive survey design. Both quantitative and qualitative were used to analyze data. Her finding was that 65% of teachers, had a positive attitude and 95% of teachers had a problem of having pupils with special needs in their classrooms. Her study revealed that the curriculum content does not support inclusive education. Mc Cathy (2007), laid emphasis on education, ability and experience of teachers that account for variation in student achievement. However, the current study was to establish teachers` level of support in curriculum adaptation for learners who are physically challenged in regular primary schools in Kisumu West Sub-County.

## 2.4 Teachers` Level of Support in Teaching and Learning Strategies used in Teaching Learners who are Physically Challenged

Teaching and Learning strategies are those teaching techniques that enable students to learn and engage with the curriculum in the classroom. Teachers should use a variety of teaching strategies across all curriculum areas. While inclusive teaching strategies refer to any number of teaching approaches that address the needs of students with a variety of backgrounds, learning styles, and abilities. These strategies contribute to an overall inclusive learning

environment, in which students feel equally valued. It is also important that the method and practice of teaching employed in the classroom reflect an understanding of social identity development so that teachers can anticipate the tensions that might occur in the classroom and be proactive about them" (Ambrose *et. al*., 2010).

Giangreco, (1993) believes that the following teaching innovations are congruent with inclusive education: cooperative learning, task analysis, peer tutoring, collaborative problem-solving, individualized educational programme (IEP) and differentiation (NCSE, 2010). The way instruction is delivered in the mainstream classroom needs to be flexible enough to meet the diverse requirements of all students and realization of teacher`s goals.

**Cooperative learning** is an instructional method that makes use of small heterogeneous group of students who work together to achieve common learning goal (Heward, 2006). It involves learners of various ability level working together to solve a problem. In cooperative learning, learners who have difficulties are assisted by others who mastered the skill needed to solve the problem. A task is given to a small group of learners who are expected to complete it by working cooperatively with one another. Research shows that cooperative learning is effective for learners who are physically challenged because it helps them to interact with others and participate in a lesson as well as learn from others. However, this is possible if group are varied and their team mate are supportive and helpful (Abosi, 2007).

**Individualized educational programme** is one of the most recommended strategies for teaching learners with physical disabilities in regular classroom. Lerner (2006) describes IEP as a written document for each learner that provides an opportunity for teachers, parents, school administrator, related service personnel and learners themselves to work together to improve educational results for learners with physical disabilities. Chalmers (2006), observes that the most critical stage of all IEP stages is the implementation and teaching stage where

the teacher strives to help the learner achieve educational goal and improve his/her performance.

**Peer tutoring** is a strategy for the general education classroom in which two learners work on learning tasks together. One learner is the tutor and serves as a teacher; the other child is the tutee and serves as the learner (Kirk *et al*, 2006). The learner is able to learn more effectively from a classmate whose thinking process is closer to that of the child than of the teacher. There are academic gains because the best way to learn something is to teach it to someone else. The tutor serves as a model of appropriate academic and non-academic behavior. The relationship between the two learners also provides opportunity for establishing additional relationship within the classroom. Appropriate methods help learners who are physically challenged to participate actively in class. Inappropriate methods lead to repetitive failure which is the main cause of dropout of learners who are physically challenged (Sagahutu, 2008). As observed by Swanson (2001), teachers teaching in classroom should have at their disposal a variety of special teaching methods to motivate learners who are physically challenged to remain in schools and reduce dropout rate.

**Differentiated instruction** refers to teaching that is adapted to take into account the range of individual differences and need of students in any one classroom. It comprises modifications to the curriculum, teaching structures, and teaching practices combination to ensure that instruction is relevant, flexible and responsive, leading to successful achievement (Meese, 2006).

The Policy changes however, have overtaken teachers, and they find themselves facing students with a wide range of disabilities, learning difficulties, and in some cases, extremely challenging behaviors. Those teachers who trained more recently are finding that pre-service courses were not enough to prepare them for the realities of teaching students with a wide

range of disabilities and behaviors. One-semester pre-service course can certainly raise awareness and introduce prospective teachers to strategies that expand a teacher's repertoire, but they rarely result in high levels of teacher confidence and expertise. Teachers report significant feelings of inadequacy in regard to teaching students with special educational needs (Carol *et al.* (2003); Gould & Vaughn, (2000). Creating a conducive learning environment is important so that all children can learn well and achieve their full potential. The appraisal exercise on SNE (Kochung Report, 2003) noted that it is important for learners with special needs to have barrier free environment to maximize their functional potentials.

Any policy of inclusion can be seen as part of a human rights agenda; therefore, the policy requires that access to and equality regarding education for all students' needs are to be met (Florian, 2008). The physical environment of the school, including buildings and the school area, could be barriers for inclusion. Most teachers are reluctant to include pupils with disability due to infrastructure that are very likely to hinder access for learners with disability (Abbott, 2006). A pleasant physical environment and a supportive infrastructure are likely to improve access to education for all children (Polat, 2011). Buildings and classroom layout should be structured to accommodate students with disabilities. Daveta (2009) found in her study that inadequate facilities, including the general structure of school buildings and school compounds, were identified by teachers as contributing factors to the non-inclusion of students with disabilities.

According to Opdal *et al.* (2001), 90% of participants suggested that schools should change in terms of the buildings and classroom sizes, and should have electricity and supply special desks and other furniture to be suitable for inclusion. The unsuitable physical environments in mainstream schools, with inaccessible buildings and classroom spaces, have contributed to teachers attitudes leading to dropout of learners (Evans & Lunt, 2002). Providing a supportive physical environment and proper strategies is therefore crucial for improved

retention of learners who are physically challenged in the inclusive education (Jerlinder *et al*., 2010)

Although the ministry has directed the entire regular schools to enroll all the learners despite their challenges. The present study went further to find out teachers level of support in the teaching and learning strategies used in teaching learners who are physically challenged in regular primary schools.

Noting that in regular schools, the teaching methods used were tailored for children assumed to have special needs, it has not been established through a study in inclusive schools in Kisumu West sub-county if the methods used were suitable for children who are physically challenged and if the teachers were able to vary them according to their needs. This should be established as well as how this affected the retention and dropout of learners who are physically challenged in regular schools.

## 2.5 Teachers` Level of Support in Creation of Awareness on Learners who are Physically Challenged

Teachers at primary level should be the right type of teacher with the right type of knowledge and skills or competencies that can do justice to the children with disabilities than teacher with general pedagogy backgrounds. Apart from guidance and counseling teachers require specific abilities to knowledge of different types of disabilities, causative factors, development of instructional strategies (2015)

Creation of awareness refers to empowering everyone with the knowledge required to be responsive to the broader needs of a range of people with disabilities, information about the appropriate language, and practice of proper etiquette to communicate. (Gilson & Depoy, 2000). According to McGrattan, 2001, awareness means educating people regarding disabilities and giving people the knowledge required to carry out a task thus separating a good practice from poor. In schools, disability awareness is extremely important because it

educates students so they may become better citizen(Lindsay and McPherson,2011).Researcher have found that disability awareness programs at schools have led young children to gain empathy and have positive attitudes, classrooms are more inclusive and diverse which allow students to learn more from their peers(Rillotta and Nettlebeck, 2007)

Awareness creation empowers members of the school community in various aspects of inclusive education practices. Program on awareness creation can have a positive impact on the school environment thereby making members of the school community better in the participation of implementing inclusive education practices (Lindsay and McPherson, 2011). Awareness programs encourage embracing of, understanding and increase knowledge about inclusive education practices (Ison *et al*, 2010) which results in the increase in interest towards inclusive education in general. Gachathi Report (1976) recommended the creation of awareness on the part of the public on the causes of disabilities with a view of facilitating the prevention.

Tindall (2013) created disability awareness through sports, exploring the participation, attitudes and perceptions of post primary female students in Ireland. The study aimed at providing a detailed description of post primary students' reaction to disability awareness experience using extended contact theory, sports education and disability sports of sit-volleyball as the framework. The results indicated that participating in disability sport was more favorable among the students. Students expressed an interest in further disability sport experience as part of their regular physical education curriculum. The study concentrated on post primary female students while the current study created awareness on learners who are physically challenged in regular primary schools. Creation of awareness was done through sports, exploring, participation and perceptions. The current study used workshops, seminars, media, school meetings and resource person activities in creating awareness.

Leigh et al (2013) carried research in Otego Dunedu University, New Zealand and explored the integration of disability awareness into tertiary teaching. The study was intended to intensify disability awareness within. The result showed that little was being done to create awareness for disability among the staff. This study promotes awareness on disabilities. Inclusive education is not about disability but for all individuals to be brought on board to create a leveled ground for everybody to involve and feel accepted and belong (Thomsoms and Villa, 2011). The current study considered awareness creation to all school community members on retaining learners who are physically challenged in regular primary schools.

Poorna and Agrawal (2015) investigated the knowledge and awareness of learning disabilities among teachers of primary schools in Haridwar region, India. Learning disabilities are very big challenge for schools and teachers. If the learning disabilities are ignored, unnoticed and unanswered such children's needs are not met in regular classrooms or special education within the school. The purpose was to assess the level of and awareness of Learning Disabilities among teachers of primary schools. The study used 48 primary school teachers in 10 schools based on lottery method. The results revealed the low level of knowledge and awareness about learning disabilities among teachers of primary schools. The focus of the study was on Learning Disability awareness among teachers. It used a population of 48 teachers selected on lottery method. The current study however looked at creation of awareness on learners who are physically challenged, with a population of 141 respondents in regular schools.

In Ghana, Opuku and Badu (2015) conducted study 'Towards an inclusive society in Cameroon: Understanding the perceptions of students in the university of Yaoundé II about persons with disabilities'. The purpose was to examine the perception of students in the University of Yaoundé II about persons with disabilities in Cameroon. A cross sectional study design using quantitative methods was employed. A sample of 500 students were

selected by simple random sampling technique. The data analysis used descriptive and inferential statistics. Results indicated that 68.8% of the respondents did not know about the actual population of persons with disabilities in Cameroon, though 14.6% had relatives with disabilities and 79.8% agreed that education had influenced their perception about persons with disabilities. Findings revealed that issues of disability have not been taken serious in Cameroon. Therefore, there is need for sensitization of the general population towards disability. The focus of the study was on understanding the perceptions of students in the University of Yaoundé II about persons with disabilities. It had a sample of 500 participants and used descriptive and inferential statistics. The current study however used a sample of 13 head teachers, 27 teachers, 81 learners who are physically challenged and 4 EARC coordinators, and employed descriptive survey design.

Limumba et al (2017) in their study on teachers' involvement in creation of awareness to members of school community on inclusive education practice in regular primary schools in Siaya County. The study determined teachers' involvement in awareness creation on inclusive education. He used a study sample which constituted of 194 teachers and 65 head teachers totaling 259 respondents. Descriptive research design was used, data collected by use of questionnaires interview schedules, observation guide and document analysis. The data was analyzed both quantitatively and qualitatively. His findings revealed that teachers were involve in creation of awareness to members of the school communities to a fair small extent. The study considered creation of awareness on inclusive education practices in regular schools, targeting staff, learners and stakeholders. The current study however looked at creation of awareness on learners who are physically challenged in regular primary schools.

It is also a reality that not only learners who are physically challenged are targeted, also affected are those with other forms of disabilities therefore awareness creation should address

issues that would be beneficial to all learners in the school environment to reduce school dropout(William Bost, 2007).

The study done by Meijer *et al.* (2007) notes that the need for positive teacher attitudes and for teachers to create a 'sense of belonging' to support effective inclusive practice. Cook (2002) and Silverman (2007) point out that teachers' attitudes and beliefs directly affect their behavior with students and so have a great influence on classroom climate and student outcomes. The teacher education must, therefore, be concerned with the promotion of teacher attitudes as well as instructional competences (Andrews, 2002; Reinke and Moseley, 2002). Pearson (2007) notes that the complexity of inclusive education should be accommodated by the inclusion of work on attitudes and beliefs in teacher education rather than 'relying solely on a technicist, competency-oriented approach (Edwards *et al.*, 2002) which is better suited to the transmission of bureaucratic and procedural knowledge'. Pearson (2009) says that teacher education is a context in which changes in attitudes, beliefs and values do occur. Atkinson (2004) and Forlin *et al.* (2009) note that if the negative attitudes of teachers are not addressed adequately, they may continue to hamper the progress of inclusive education efforts in schools.

A study by Ali, Mustapha and Jelas (2006) in Malaysia on teacher attitude was measured with a self-rated questionnaire. Their findings were that overall teachers had positive attitudes towards inclusive education and agreed that inclusive education intensifies social interaction, while it decreases negative stereotypes of special educational needs children. The authors argued for cooperation between mainstream and special education teachers in order to implement inclusive education. The formation and modification of teacher attitudes are important areas of education in an inclusive setting (Weisman and Garza, 2002). Loreman, Forlin & Sharma (2007) in their study compared four countries, teacher attitudes, using a questionnaire and found that teachers are positive towards inclusive education for children

with special needs, mainly with social, emotional and behavioral disabilities. Before implementation of any special education programme for learners with disabilities within regular schools, it is important to determine the attitude of educators towards learners with special needs. This would help in alleviating the fears and improve their retention.

The Leonard Cheshire Disability (2002) implemented an inclusive education intervention covering five primary schools and communities in Oriang in Rachuonyo district. Prior to the Oriang Cheshire Inclusive Education Project (OCIEP), needs assessment revealed that only a handful of children with disabilities from neighboring districts resided at Oriang Cheshire Home and attended a nearby primary school. The needs of these children were not met in an environment where, among other factors, teachers lacked the skills to support children with special needs. Peers were not prepared to work with children who looked different because of their special needs; Mutisya (2008) administrators, learners, parents and community in general should have a positive attitude towards inclusion of children with disabilities lack of adaptive aids for children with special needs. MOEST (2003), emphasized on recommendations on FPE in making learners with disabilities learn. Studies by KNCHR (2007) focused on recommendations to the government in making learners with disabilities learn in regular schools. However, these findings by the above authors did not focus on teachers` level of support to retain learners who are physically challenged in regular primary schools. The present study sought to determine teachers' level of support to retain learners who are physically challenged in regular primary schools in Kisumu West Sub-County, Kenya.

## CHAPTER THREE

## RESEARCH METHODOLOGY

This chapter covers the research methodology used in the study as follows;

### 3.1 Research Design

The study adopted a descriptive survey design. Descriptive survey design was relevant for this study because it involves collection of data from a sample of a population in order to determine the current status of that population with respect to one or more variables (Mugenda & Mugenda, 2008). It can provide information about the distribution of a wide range of peoples characteristics and of relationship between such characteristics (Creswell, 2009).The use of descriptive survey design in this study enabled the researcher to find out facts without manipulation of data, seeking opinion, describe, analyze and interpret teachers` level of support to retain learners who are physically challenged in regular schools.

### 3.2 Area of Study

The study was conducted in Kisumu West Sub-County in regular primary schools that enrolled learners who are physically challenged. This Sub-County is one of the seven sub-counties forming Kisumu County. Vihiga and Nandi County board it in the North, Kericho County to the East, Homabay County to the South, Winam Gulf and Siaya County to the West. It lies within Longitudes $34^0$ $34^o$ and $34^0$ $45^0$E, and Latitudes $0^0$ $20^0$ and $0^0$ $45^0$ N. The total area of Kisumu WestSub-County is 358.7 square kilometers. It covers about 17.2 percent of the total area of Kisumu County which is 2,086 $Km^2$. Kisumu West Sub-County was chosen because of high number of learners who are physically challenged who have dropped out of school after being placed in schools. The study involved 15 regular primary schools. There are 706 primary schools and about six thousand one hundred teachers. It is majorly inhabited by Luo Community whose major occupations are agriculture and fishing. They attach great importance to the better quality education to their children in order to

increase earning in the modern sector. Education is seen as the only vehicle, of employment since the county has limited resources with poverty incidence at the rate of 45% (Republic of Kenya, 2009).

## 3.3 Study Population

The study population constituted of 15 head teachers, 30 teachers, 90 learners who are physically challenged and 6 EARC coordinators. The total population was 141.Two teachers handling Maths and English or Kiswahili in learners' classes, per school were purposively selected from all the 15 regular primary schools in 5 Zones (Chulaimbo, Sianda, Ojolla, Nyahera and Otonglo) in Kisumu West Sub County, Kisumu. Teachers were preferred in this study because of being in direct contact with the learners and directly involved in the implementation of curriculum. Head teachers were also preferred due to their vital role to supervise, coordinate and plan for the curriculum implementation in the school while EARC coordinators gave advisory services. In the current study, 6 learners who are physically challenged in classes four, five and six were chosen from each of the 15 regular primary schools giving a total of 90 learners (Baseline Survey, 2016).

## 3.4 Sample and Sampling Techniques

Sampling is the process of selecting smaller portions of the larger population to be studied in order to draw conclusions from the sample to the population from which the sample was drawn (Orodho, 2009). Saturated sampling technique was used to select 13 head teachers, 4 EARC coordinators. Saturated sampling techniques is a non-probability sampling technique in which all the members of the target population are selected because they are few to make a sample out of them (Gall & Borg, 2007). Purposive sampling technique was used to select 27 teachers teaching Mathematics and English or Kiswahili to learners who are physically challenged,  81 learners who are physically challenged were purposively selected among other learners in the sampled regular primary schools, in the five zones in Kisumu West sub-

county. Purposive sampling is a non-probability sample that is selected based on characteristics of a population and objective of the study. Two head teachers, three teachers, two EARC coordinators and 9 learners were used for pilot study. This population was not part of the actual study (Palys, T. 2008). This is shown in Table 3.1.

**Table 3.1 : Study Population and Sample Frame**

| Category of respondents | Total Number | Pilot | Sample Size | Percentage |
|---|---|---|---|---|
| Head teachers | 15 | 2 | 13 | 87% |
| Teachers | 30 | 3 | 27 | 90% |
| EARC | 6 | 2 | 4 | 67% |
| Learners | 90 | 9 | 81 | 90% |
| **Total** | **141** | **16** | **125** | **89%** |

**Source: Researcher's field data**

### 3.5 Instruments of Data Collection

The study used questionnaire, interview schedules and observation schedule as the main instruments of data collection. There were three sets of questionnaires for head teachers, teachers and learners who are physically challenged. Interview schedule was used to collect information from head teachers and EARC coordinators. Observation schedule was used to gather information regarding the availability and use of teaching/learning resources, and various strategies used by teachers to assist learners who are physically challenged.

### 3.5.1 Head teachers Questionnaire (HTQ)

Burke and Larry (2011) noted that questionnaires were commonly used to obtain important information about a population within a quick space of time. De Vaus (2002) defines a questionnaire as a highly structured data collection technique whereby each respondent is asked the same set of questions. The questionnaire was used to establish teachers' level of support to retain learners who are physically challenged. The questionnaires used consisted of

both open-ended and closed-ended question items with five point likert scale format type of questions. Head teachers questionnaires had structured items addressing specific issues on the learning resources, curriculum adaptation, teaching strategies and creation of awareness that contribute to support in retaining learners who are physically challenged. The respondents were also asked to rate their responses on a five point rating scale (HTQ Appendix A).

### 3.5.2 Head teachers Interview Schedule (HIS)

Interview is a conversation whereby the researcher gets information from respondents by interacting with them face to face. It is a flexible tool in collecting data, enabling multisensory channels to be used; verbal, non-verbal, spoken and heard (Cohen, et al, 2007). This method was recommended in this study because it enabled the researcher to explore complex issues in support to retain learners who are physically challenged. The interview consisted with one section of 5 items with open-ended questions. The data collected was used to find out how the use of teaching and learning resources, curriculum adaptation, suitable methods of teaching and creation of awareness improved retention and reduced dropout of learners who are physically challenged in regular primary schools (Appendix D).

### 3.5.3 Teacher's Questionnaire (TQ)

Questionnaires were administered to the class-teachers to seek for information on teachers' level of support to retain learners who are physically challenged. Questionnaire for the teachers had five parts which sought to solicit demographic information, teaching and learning resources, curriculum adaptation, suitable methods of teaching and creation of awareness on learners who are physically challenged in regular primary schools. The questionnaire consisted of closed-ended and open-ended questionnaire items with five point likert scale format type of questions. Closed-ended questions were included because they are easy to administer, easy to analyze and therefore economical in terms of time and money.

The closed-ended questions used five- option Likert scale.  The respondents were also asked to rate their responses on a five point rating scale (Appendix B).

### 3.5.4 Learner`s Questionnaire (LQ)

The item was administered to learners who are physically challenged. It was used to gather information on teaching and learning resources, strategies employed by regular schools in coping with peers in classroom, views on improving retention and reduce dropout. The questionnaire consisted of closed-ended and open-ended questionnaire items with five point likert scale format type of questions.  (See Appendix C).

### 3.5.5 Assessment  and Resource Centre Coordinators' Interview Schedules (EARCIS)

Interview is a conversation where the researcher asked the respondents questions intended to yield in-depth information on the theme of the study. It is an effective tool in collecting data that may be difficult to access when applying other research techniques such as questionnaire. In this study, EARC coordinators were asked to address matters on information regarding teaching and learning resources, teaching strategies and creation of awareness to members of the school. Probing was used by the researcher to get deeper information. A friendly relationship with prospective respondents prior to the actual interview was a prerequisite for obtaining maximum cooperation and accurate information. Interview schedules were flexible and yielded high response rate and offered opportunity to collect in-depth information (See Appendix E).

### 3.5.6 Observation Schedule (OS)

An observation checklist is used by the researcher to collect data about what defined behaviors and activities a researcher observes during data collection period (Gay et al, 2009). The researcher with the help of observation checklist, observed the availability and use of teaching and learning resources in the classrooms.

These included physical facilities in the school like, presence of level playground, learning resources, toilets, spacious classrooms, ramps, if they are adapted to the needs of learners who are physically challenged. Observation was also used in this study to collect information on various strategies used by the teachers to assist learners who are physically challenged. It involved observing a total of two lessons for Mathematics and English or Kiswahili subjects in randomly chosen classes where learners who are physically challenged were. The advantage of observation was that it blended well with other gathering instruments such as questionnaire and interviews (Creswell, 2009) (See Appendix F).

### 3.6 Validity and Reliability of the Research Instruments

Validity refers to the quality of data gathering instruments or procedure that enable instrument to measure what it is supposed to measure while, reliability is the degree of consistence that a research instrument demonstrates (Creswell, 2009).

### 3.6.1 Validity of the Research Instruments

Validity refers to the degree to which results obtained from analysis of data actually represent the phenomenon under study (Mugenda and Mugenda (2003). In this study, face and content validity were used. Face validity is a qualitative means of a ascertaining whether a measure on the face of it appears to reflect the content of a concept (Creswell, 2009). Content validity is a qualitative means 0f ensuring that a measure includes an adequate and representative set of items to cover a concept (Drost, 2011). In the current study, the determination of face and content validity of the research instruments confirmed the accuracy and connection among the questions asked and variables measured. Face and content validity are ensured by obtaining subjective judgments by the experts of the concerned field (Creswell, 2003; Drost, 2011). To verify the validity of the instrument used, the research instruments were presented to experts from Special Needs Education and Rehabilitation, who were conversant with topic of study to ascertain. The experts read and judged the instrument independently and made

recommendations on each part testing each objective. Later, the researcher made corrections based on recommendations before the instruments were used in the field.

### 3.6.2 Reliability of the Research Instruments

The reliability is a measure of the degree to which a research instrument yields consistent of data after repeated trials (Mugenda & Mugenda, 2003; Orodho, 2004). Reliability of the research instruments was established using test-retest method through a pilot study. For pilot study, ten percent of the study population which was not part of the actual study was selected; where 13 head teachers, 27 teachers, 81 learners who are physically challenged and 2 EARC coordinators were involved. The study used three instruments; head teachers, teachers and learners questionnaire, head teachers' and EARC coordinators interview schedule and observation checklist. Tests were administered to the respondents by the researcher herself for the first time. Later, the tests were re-administered to the respondents after two weeks. Means scores from the test were then correlated using Pearson product moment correlation coefficient (Formula used is shown below ). Reliability coefficient for; the head teachers' questionnaire was 0.8, teachers' questionnaire was 0.9 and questionnaire for learners who are physically challenged was 0.7. This was above the acceptable value of 0.7 and above (Mugenda & Mugenda, 2003; Orodho, 2004) which confirmed that the tests were reliable. The data collected through qualitative technique was counter checked thematically to ascertain consistency. Any inadequacies, inconsistencies and weaknesses of the research instruments identified during the pilot study were corrected.

**Pearson's' coefficient formula was used**

$$r = \frac{n\left(\sum xy\right) - \left(\sum x\right)\left(\sum y\right)}{\left[n\sum x^2 - \left(\sum x\right)^2\right]\left[n\sum y^2 - \left(\sum y\right)^2\right]}$$

## 3.7 Data Collection Procedures

The researcher obtained a research permit to visit regular primary schools in Kisumu West Sub-County from the Maseno University Ethics and Research Committee (MUERC) through Maseno University School of Graduate Studies (SGS). The researcher then paid courtesy calls at the County Director of Education Office, Sub-county Director Education Office and the head teachers' offices in the 13 regular primary schools. Permission was sought from the head teachers and researcher met the participants for good public relations and to inform them that ethical principles has to be upheld throughout the study. The researcher later on visited the schools and administered the questionnaires personally to both head teachers, teachers and learners who are physically challenged (Bobbie, 2008).Help was sought from teachers teaching English or Mathematics in the classes where learners who are physically challenged were. Interview schedules were administered to the head teachers and EARCs coordinators by the researcher herself. The questionnaires were collected immediately the research participants completed filling them. This ensured high return rate of the questionnaires.

## 3.8 Data Analysis

Data analysis is the process of systematically searching and arranging notes, data and other materials obtained from the field with an aim of increasing understanding and enable one to present them to others (Orodho, 2009). The research produced data that require both quantitative and qualitative analysis. Quantitative data collected from the questionnaires was coded manually, entered into the Statistical Package for Social Sciences (SPSS) data sheet before analyzing it using SPSS – 11.5 version. Analysis of data was done as per the objectives. In order to analyze teachers' level of support in the use of teaching and learning resources required by learners who are physically challenged , frequency tables were used to cross check totals for each variable expressing a particular aspect such as learning materials

and physical facilities. Relationship between independent and dependent variables was found using correlations. To establish teachers' level of support in curriculum adaptation, frequency tables were used. Objective three employed the means, frequency counts and percentages to find out teachers' level of support in teaching and learning strategies. For objective four, frequency tables were used to determined teachers' level of support in creation of awareness. Key findings were explained, summarized and conclusions made. A narrative report was written and enriched with verbatim from respondents and included in the report. Qualitative data collected from interview schedules and observation checklist were organized, put in various categories and reported in an ongoing process as themes and sub-themes emerged. In coding and interpretation of the questionnaires from head teachers, teachers and learners, the positively stated items on the five point likert scales were coded with each of the five points rating scale being given: Strongly Agree (SA) - 5 points, Agree (A)- 4 points, Fair Agree( FA)- 3 points, Disagree (D) - 2 points, Strongly Disagree (SD) - 1 point.

For those statements that were negative, the scoring procedure was reversed. Mean score for each item were then worked out. In the interpretation of scores, a mean score of above 5.0 - 3.01 indicated most respondent agreed with teachers level of support to retain learners; a mean score of 3.0 indicated that respondents were neutral while a mean score of blow 2.99 -1 implied negative impact on improving retention of learners who are physically challenged in regular primary schools (Kothari, 2008; Best and Kahn, 2006).

### 3.9 Ethical Considerations

The researcher sought clearance from Maseno University School of Graduate Studies (SGS). She then obtained a permit from Maseno University Ethics and Research Committee (MUERC) to be able to collect data in the targeted regular primary schools in Kisumu West Sub-County. The researcher ensured and assured the respondents that their responses would be treated in strict confidentiality (Kombo and Tromp, 2009). Confidentiality is a key ethical

issue in research, the research ensured utmost confidentiality of the respondents and school names by using codes instead of the real names, the data collected was used for research only, the researcher obtained consent from the parents of pupils using consent letter. This was because most learners in primary schools were below eighteen years (minors). Thus, it was important for the researcher to seek permission from the parents. See Appendix G

# CHAPTER FOUR

# RESULTS AND DISCUSSION

## 4.1 Teachers' level of Support in Teaching and Learning Resources

The first objective of this study was to establish teachers' level of support in the use of teaching and learning resources of learners who are physically challenged in regular primary schools in Kisumu West Sub-county. The data was collected using a questionnaire for respondents which addressed the following; Teaching and learning resources required, resources available and used in class by the teacher, physical facilities available and modified. They were expected to select from a rating scale ranging from "Strongly Disagree" (1) to "Strongly agree" (5). It was coded and analyzed using frequency, percentages and means. The results were presented in tables starting with table 4.1.

**Table 4.1: Teaching and Learning Resources Required for Learners Who are Physically Challenged in Regular schools    Teachers=27**

| Resources required | SA<br>f (%) | A<br>f(%) | FA<br>f (%) | D<br>f()% | SD<br>f(%) | Mean |
|---|---|---|---|---|---|---|
| Blackboard | 22 (81.5) | 2 (7.4) | 1 (3.7) | 2 (7.4) | 0 (00) | **4.62** |
| Text and Exercise bks | 14 (51.9) | 2 (7.4) | 3 (11.1) | 5 (18.5) | 3 (11.1) | **3.70** |
| Charts | 11 (40.7) | 3 (11.1) | 1(3.7) | 8 (29.6) | 4 (14.8) | **3.33** |
| Modified pencils/pens | 0 (00) | 2 (7.4) | 0 (00) | 0 (00) | 25(92.5) | **1.22** |
| Book hold | 0 (00) | 1 (3.7) | 0 (00) | 0 (00) | 26 (96.2) | **1.11** |
| Head pointer | 0 (00) | 1 (3.7) | 0 (00) | 0 (00) | 26 (96.2) | **1.11** |

**Key: of Strongly Agree (SA)-5, Agree (A)-4, Fairly Agree (FA)-3, Disagree (D)-2, Strongly Disagree (SD)-1, f- Frequency count, %- Percentage**

Table 4.1 shows some of the teaching and learning resources required for learners who are physically challenged. According to the respondents. The teachers responses were as follows; out of the number of teachers sampled 22 ( 81.5%) strongly agreed that blackboards were in regular schools, 2 (7.4%) agreed that they were available, 1(3.7%) fairly agreed and 2 (7.4%) disagreed. This had a mean score of 4.62 which meant that blackboards were the most required among the resources. As for the text and exercise books, 14 (51.9%) of teachers strongly agreed that they were there, 2(7.4%) agreed that they were available, 3 (11.1%) fairly agreed and 5 (18.5%) disagreed while 3(11.1%) strongly disagreed. It had a mean score of 3.70 thus making it the second most required resource. The charts were rated as follows 11 (40.7%) of teachers strongly agreed, 3 (11.1%) agreed and 1 (3.7%) fairly agreed that they were available, while 8 (29.6%) of teachers disagreed, 4 (14.8%) strongly disagreed that they were available. It was rated third with a mean score of 3.33. As for modified pencils/pens 2(7.4%) agreed that they were available, 25(92.5%) strongly disagreed that they were available with a mean score of 1.22. Book holder and head pointer 1(3.7%) agreed they were available, while 26(96.2%) with a mean of 1.11 strongly disagreed that they were available. According to this study, the most available resources were blackboard 22 (81.5%), text and exercise books 14 (51.9%) and charts 11(40.7%), the least available resources were modified pens 2(7.4%), head pointer 1(3.7%), book hold 1(3.7%). The findings revealed that regular primary schools did not have the most resources required by learners who are physically challenged. This differed with Moodley (2002) who noted that institutions must ensure that teaching and learning resources are made available and used by all the learners with special needs.

**Table 4.2: Resources Available and Used in Class by the Teacher**

   **(Learners, n= 81)**

| Resources | SA<br>f (%) | A<br>f (%) | FA<br>f (%) | D<br>f (%) | AD<br>f (%) | Mean Score |
|---|---|---|---|---|---|---|
| Blackboard | 70 (86.4) | 0 (00) | 0 (00) | 11 (13.6) | 0(00) | **4.59** |
| Text and Exercise books | 46 (37.0) | 2(2.5) | 3(3.7) | 30 (37.0) | 0(00) | **3.74** |
| Charts | 25 (30.9) | 2(2.5) | 1(1.2) | 48 (59.3) | 5 (6.2) | **2.92** |
| Modified pencils/pens | 0(00) | 0 (00) | 0 (00) | 3 (3.7) | 78 (96.3) | **1.04** |
| Head pointer | 0(00) | 0 (00) | 0 (00) | 0(00) | 81 (100) | **1.00** |
| Book hold | 0(00) | 0 (00) | 0 (00) | 5 (6.2) | 76 (93.8) | **1.06** |

**Key: SA- Strongly Agree, A- Agree, FA- Fairly Agree, D- Disagree, SD- Strongly Disagree, f- Frequency count, %- Percentage**

Learners' response on resources available and used in class was analyzed using a five Likert scale: Strongly Agree 5, Agree -4, Fairly Agree - 3, Disagree - 2, Strongly Disagree – 1. The results were presented in Table 6.

The findings in table 4.2 indicates that 70(86.4%) of learners agreed that blackboard was available resource and used in class by the teachers and 11(13.6%) of learners disagreed with a mean of 4.59. As for text and exercise books, 46 (37.0%) learners strongly agreed, 2 (2.5%) of learners agreed, 3 (3.7%) of learners fairly agreed and 30 (37.0%) of learners disagreed. This make it second resource available and used by teachers with mean of 3.74. Twenty five 25(37.0%) of learners strongly agreed that charts were available and used in class, 2(2.5%) agreed, 1(1.2%) fairly agreed, 48 (59.3%) of learners disagreed and 5 (6.2%) of learners strongly disagreed. It was rated third with a mean of 2.92. Book hold 5 (6.2%) of learners disagreed and 76(93.8%) strongly disagreed with a mean of 1.06. Modified pencils/pens 3(3.7%) of learners disagreed and 78(96.3%) strongly disagreed with a mean of 1.04 while 81(100%) of learners strongly disagreed that head pointer was available with a mean of 1.00. The findings revealed that the least available resources in class included head pointer

(M=1.00), modified pencils/pens (M= 1.04) and book hold (M=1.06). The findings do not concur with the findings of Moodley (2002) who noted that institutions must ensure that teaching and learning resources are used as well as made available to all the learners with special needs according to their needs.

**4.1.4:  Physical facilities Modified to Accommodate Learners**

**Table 4.3: Physical facilities Modified to Accommodate Learners who are Physically Challenged in your Schools    (Teachers = 27)**

| Category | SA | A | FA | D | SD | Mean |
|---|---|---|---|---|---|---|
| | f (%) | F (%) | f (%) | f (%) | f (%) | |
| Ramps | 10  (37.0) | 0 (00) | 0 (00) | 12 (44.4) | 5 (18.5) | **2.92** |
| Adapted toilets | 8 (29.6) | 0 (00) | 0 (00) | 0 (00) | 19 7(0.4) | **2.19** |
| Adapted chairs & desks | 8 (29.6) | 0(00) | 0 (00) | 0 (00) | 19 (70.4) | **2.19** |
| Accessible, spacious classroom | 14 (51.9) | 0 (00) | 0 (00) | 13 (48.1) | 0 (00) | **3.55** |
| Level playgrounds | 12 (44.4) | 0 (00) | 0 (00) | 1 2(44.4) | 3(11.1 ) | **3.22** |

**Key f- Frequency count, %- Percentage, M-Mean**

Teacher's response on modified physical facilities to accommodate learners was analyzed using a five Likert scale: Strongly Agree 5, Agree -4, Fairly Agree - 3, Disagree - 2, Strongly Disagree – 1**.** The results were presented in Table 4.3.

According to table 7, 14 (51.9%) of the teachers strongly agreed that accessible, spacious classrooms was modified and 13 (48.1%) of the teachers disagreed with a mean of 3.55. As for leveled playground, 12(44.4%) of teachers strongly agreed, 12 (44.4%) of the teachers disagreed and 3(11.1%) strongly disagreed with a mean of 3.22. This was followed by a total of 10 (37.0%) teachers who indicated that they strongly agree ramps were available, 12 (44.4%) of the teachers disagreed and 5(18.5%) teachers indicated disagree with a mean of 2.92. Eight (29.6%) of the teachers strongly agreed that adapted toilets were available and 19 (70.4%) of the teachers strongly disagreed that adapted toilets were available while 8 (29.6%)

of the teachers strongly agreed that adapted chairs and desks were available and 19 (70.4%) of the teachers strongly disagreed that adapted chairs and desks were available in their schools with a mean of 2.19. The study reported that accessible, spacious classroom14 (51.9%) was available and adapted, followed by level playground 12 (44.4.0%). The least available inadequate adapted physical facilities were adapted toilets and adapted chairs and desks.

To confirm teachers responses, 11 (84.6%) of the head teachers of the regular primary schools sampled interviewed reported that their schools had no adapted resources and only 3 (23.1%) reported they had but inadequate. Therefore, this might have led to a large number of learners who are physically challenged to lose interest and dropout of school. The findings concur with Thuo (2009) who said that majority of schools were in dire need for relevant teaching and learning resources to enhance retention in inclusive education.

The observation made (Table 8.) in the regular primary schools where learners who are physically challenged learn confirmed that some teaching resources were in adequate and not adapted. This is supported by Kochung Report (2003) which found that out most schools were operating with barely basic learning resource.

These study findings noted that the most modified physical facilities available in regular schools were accessible, spacious classrooms (M=3.55), followed by level playgrounds (M=3.22). The least available modified physical facilities were adapted toilets (M=2.19) and adapted chairs and desks (M=2.19) that were most needed by learners who are physically challenged. The fact that the majority schools in Kisumu West Sub-County were poorly equipped was a contributing factor to dropout and poor retention of learners who are physically challenged in regular schools. Teachers could not discharge their duty in supporting learners effectively. The findings concurred with Daveta (2009) finding who stressed that buildings and classroom layout should be structured to accommodate learners

with disabilities. According to UNESCO (2004), the learners must be provided with adapted learning materials in formats that meet their individual needs and reduce the dropout.

**Table 4.4:    Available Teaching and Learning Resources Observed in Schools    (n= 13)**

| Teaching/Learning Resources | Frequency N | Percentage % |
|---|---|---|
| Blackboard | 13 | 100.00 |
| Text and Exercise bks | 13 | 100.00 |
| Charts | 6 | 46.2 |
| Modified pencils/pens | 0 | 00 |
| Head pointer | 0 | 00 |
| Book hold | 0 | 00 |
| **Physical Facilities** | | |
| Ramps | 5 | 39.0 |
| Adapted chairs/desks | 4 | 31.0 |
| Adapted toilets | 3 | 23.1 |
| Lowered door handles | 0 | 00 |
| Spacious Classrooms | 11 | 85.0 |
| Leveled playground | 9 | 69.2 |

**Key: N = Number of schools**

The observation made in the visited schools is summarized in Table 4.4.

The table shows that out of 13 schools visited, 13(100.0%) had blackboard and text /exercise books, 6 (46.2%) had charts. None of the schools visited had modified pencils/pens, head pointer and book holder. The physical facilities observed and the results shows that 11(85%) schools had spacious classroom, 9(692%) had leveled playground, followed by 5(39.0%) schools with ramps. The schools having adapted chairs/desks were only 4(31.1%) while 3(23.1%) schools had adapted toilets. None of the schools had lowered door handles. The result of the study showed that some relevant teaching resources were in adequate and not

adapted in regular primary schools in Kisumu West Sub-County. This is in support of Kuching Report (2003) which found out most schools were operating with barely basic learning aids.

**4.2 Teachers' Level of Support in Curriculum Adaptation**

The second objective of the study was to establish teachers' level of support in curriculum adaptation for Learners who are Physically Challenged. The objective was mainly intended to establish:-, Head teachers, teachers adapt curriculum in the regular primary schools, views on targeted areas for curriculum adaptation and views of learners on curriculum adaptation.

**4.2.1 Curriculum Adaptations for Learners who are Physically Challenged**

The study sought to find out the curriculum adaptation for learners who are physically challenged in regular schools. To respond to this, teachers and head teachers were asked if they were adapting curriculum for learners who are physically challenged in their schools to improve teaching, learning process and retention. In response, 21(77.8%) of the teachers educating learners who are physically challenged reported that curriculum was not adapted while 6(22.2%) of them reported that the curriculum was adapted. These were probably teachers who had not trained in special needs and could adapt curriculum by teaching these learners in their classes. This suggested that there is a problem with adaptation of the curriculum in regular primary schools to enable learners with physical disability to benefit in education by being in school all the time. The extent to which any curriculum can be adapted depends on the ability of the teacher to select resources of high interest to reinforce basic curriculum, use teaching strategies, dedication of their time, reducing amount of task, group work, Learners (2006) also noted that the regular school curriculum is rigid, more of a routine and does not provide space for adaptation. Head teachers 8(61.8%), from the sampled regular primary schools said that curriculum for learners who are physically challenged was not adapted by the teachers and 5(38.5%) of them said that the curriculum was adapted by

teachers in their schools.  When head teachers were interviewed, one of them (HT8) had this to say:

>*It's difficult for us to adapt the curriculum so that it meets the needs of*
>
>*the learners and with full numbers of learners in the classroom. We are*
>
>*having up to fifty-five in a class.*

This confirmed that head teachers and teachers were not adapting the curriculum to accommodate learners who are physically challenged in their schools and to some extent affected the retention of the learners.

**Table 4.5:  Views on Targeted Areas for the Curriculum Adaptation**
**(Head teachers, n = 13)**

| Statement | SA<br>f (%) | A<br>f (%) | FA<br>f (%) | D<br>f (%) | SD<br>f (%) | Mean |
|---|---|---|---|---|---|---|
| Classroom Arrangement | 12  (92.3) | 0 (00) | 1  (7.7) | 0  (00) | 0  (00) | **4.85** |
| Teaching Resources | 10 (76.9) | 3  (23.1) | 0  (00) | 0  (00) | 0  (00) | **4.77** |
| Teaching Methods | 4  (30.8) | 9  (69.2) | 0  (00) | 0  (00) | 0  (00) | **4.08** |
| All the areas of the curriculum | 3 (23.1) | 7  (53.8) | 1 ( 7.7) | 2  (15.4) | 0  (00) | **3.85** |
| Subject Content | 3 (23.1%) | 6 (46.2%) | 0  (00) | 4 (30.8%) | 0(00) | **3.61** |

**Key: f- Frequency count, %- Percentage.**

The response was analyzed using a five point Likert scale**: 5** Strongly Agree, **4** Agree, 3 Fairly Agree, **2** Strongly Disagree, **1** Disagree, as presented in Table 8.

Table 4.5 indicates that out of 13 head teachers, 12 (92.3%) of the head teachers agreed that classroom arrangement should be targeted for adaptation with a mean of 4.85. Ten (76.9%) of the head teachers strongly agreed and 3 (23.1%) agreed with adaptation for teaching resources with a mean of 4.77. Nine (69.2%) and 4 (30.8%) of the head teachers

recommended teaching method to be adapted with a mean of 4.08. 7 (53.8%)of the head teachers strongly agreed, 3 (23.1%) agreed with adaptation for all areas of the curriculum with a mean of 3.85, while 3 (23.1%) of the head teachers strongly agreed with adaptation of subjects content, 6 (46.2%) of the head teachers agreed and 4(30.8%) disagreed with a mean of 3.61.

Majority of the head teachers were for classroom arrangement because learners with physical disability are said to have difficulties in accessing curriculum activities in a non- spacious environment. In support of this, Daveta (2009) also stressed that buildings and classroom layout should be structured to accommodate learners with disability. Ten (76.9%) of head teachers indicated that teaching resources should be targeted for adaptation. Learners who are physically challenged main problem is mobility otherwise they can learn well with their peers. The respondents indicated that other areas that should be targeted for adaptation include; teaching methods 9(69.2%), all the areas of the curriculum 7 (53.8% and 6 (46.2%) subject content. EARCs coordinators were interviewed on what they say about modifying curriculum and teaching methods for learners with physical disability.

EARCs 1 reported that;

*Pupils learn well with non-disabled except in cases* of *motor problem, curriculum also need to be flexible by varying the methods that suit all the learners.*

EARCs 2 & 3 said that;

*A child with wheelchair cannot participate well. She/ he requires adaptations in   the classroom arrangement and time to move from the seating area to the learning centers.*

EARCs *4/5* reported that.

*Our schools need to have conducive environment that encourage learners with disabilities to be in school all the time.*

From the interview, the respondents revealed that most schools lack adaptation in major areas of the curriculum causing difficulties in accessing curriculum activities. The findings of this study is supported by Ellis (1986), who talks about a functional curriculum as an approach that takes into account the pupils current and future needs.

**4.2.2: Curriculum Adaptation for Learners**

**Table 4.6: Response of Teachers on How they Adapt Curriculum for Learners who are Physically Challenged in their Schools.     (Teacher, n=27)**

| Teachers | SA<br>f (%) | A<br>f (%) | FA<br>f (%) | D<br>f (%) | SD<br>f (%) | Mean |
|---|---|---|---|---|---|---|
| Adjust the amount of learning task according to learners needs | 5 (18.5) | 4 (14.8) | 0 (00) | 16(59.3) | 2 (7.4) | **2.78** |
| Adapt varied methods of teaching | 2 (7.4) | 1 (3.7) | 2 (7.4) | 19(70.4) | 3 (11.1) | **2.26** |
| Allow learners extended time for task completion | 4 (14.8) | 2 (7.4) | 1 (3.7) | 20(74.0) | 0 (00) | **2.63** |
| Simplify text material by reducing the length of units | 2 (7.4) | 0 (00) | 2(7.4) | 19(70.4) | 4 (14.8) | **2.15** |
| Covering syllabus on time | 0 (00) | 5(18.5) | 0 (00) | 18(66.7) | 4 (14.8) | **2.22** |
| **Statements** | | | | | | |
| Regular school teachers who are trained in special needs education have more confidence in handling learners with disabilities in regular classes than the untrained ones | 12(44.5) | 9 (33.3) | 2 (7.4) | 3 (11.1) | 1 (3.7) | **4.03** |
| Lack of flexible curriculum in regular primary schools limits the retention of learners who are physically challenged  in regular primary schools | 19(70.4) | 6 (22.2) | 0 (00) | 1  (3.7) | 1  (3.7) | **4.59** |
| Inclusion of children  with physical disability in regular primary schools can  hardly be successful without high level of teachers support | 10(37.0) | 12(44.5) | 0 (00) | 2 (7.4) | 3 (11.1) | **3.96** |

**Key: f-Frequency, %- Percentage, M-Mean**

The response of teachers on how they adapt curriculum for learners who are physically challenged was analyzed using a five y Likert scale**:** Strongly Agree **5**, Agree **-4**, Fairly Agree - **3**, Disagree - **2**, Strongly Disagree - **1**, as presented in Table10.

Table 4.6 shows how teachers adapt curriculum for learners who are physically challenged. The teachers responses were as follows: that 5 (18.5%) of teachers strongly agreed, that they adjusted the amount of learning task according to learners needs, 4 (14.8%) of the teachers agreed, 16 (59.3%) of teachers disagreed and 4 (7.4%) strongly agreed with a mean of **2.78**. Followed by 4 (14.8%) of teachers strongly agreed that there was provision of enough time for task completion, 2 (7.4 %) of teachers agreed, 1 (3.7%) fairly agreed and 20 (74.0%) of the teachers disagreed with a mean of **2.63**. From the findings, it is clear that majority of teachers had not allowed learners with physical disabilities enough time to complete the task. The study further established that 2 (7.4%) of the teachers strongly agreed that they adapted varied methods of teaching, 1 (3.7%) of teachers agreed, 19 (70.4%) of teachers disagreed and 3 (11.1%) of the teachers strongly disagreed with a mean of **2.26.** The results of the study revealed that teachers did not do much on curriculum adaptation to allow for retention improvement in regular schools. The findings are in agreement with Eshiwani (2001), who noted that poor performance in schools in Kenya was mostly due to poor teaching methods applied in teaching thus lead to learners' dropout.

Minority of teachers 2 (7.4%) agreed that they simplified text material by reducing the length of units for learners who are physically challenged, 2(7.4%) of the teachers fairly agreed, 19 (70.4%) of teachers disagreed and 4 (14.8%) of the teachers strongly agreed with a mean of 2.15**.** While 5 (18.5%) of teachers indicated that they covered the syllabus on time, 18 (66.7%) of teachers disagreed that the syllabus was covered on time and 4(14.8%) of the teachers strongly disagreed with a mean of **2.22**. According to findings of this study, many teachers in sampled schools never covered the syllabus as stipulated. The findings deferred with Comber and Keeves (2003) who stated that good time management by the teachers would ensure effective syllabus coverage.

The teachers rated lack of flexible curriculum in regular primary schools limits the retention of learners who are physically challenged in regular primary schools was strongly agree 19 (70.4%) with a mean of 4.59, followed by regular school teachers who are trained in special education have more confidence in handling learners with disabilities in regular classes than the untrained one 12 (44.5%) with a mean of 4.03, while 10 (37.0%) of the teachers strongly agreed with the opinion that inclusion of children with physical disability in regular primary schools can hardly be successful without high level of teachers' support with a mean of 3.96. This finding supports Lerner (2006) who stated that ability of the teachers to adapt curriculum is a strong indicator to the success of a learner with physical disabilities. Florian, & Kershner (2009) also noted that teachers' cooperation with colleagues and students helped learners to be successful, because knowledge develops through shared activity in social contexts which echoes socio- cultural theory. This would promote learners interest and reduce dropout.

### 4.2.3 Response of Learners on Curriculum Adaptation

**Table 4.7:   Response of Learners on Curriculum Adaptation   (Learners, n= 81)**

| Statement | SA F(%) | A F(%) | FA F(%) | D F(%) | SD F(%) | Mean |
|---|---|---|---|---|---|---|
| I am always given enough time to complete a task | 7 (8.6) | 12(14.8) | 0(00) | 62(76.5) | 0(00) | **2.56** |
| I feel comfortable when doing activities in group | 25(30.9) | 50(61.7) | 4(4.9) | 2 (2.5) | 0(00) | **3.90** |
| Are you being involved in outdoor activities by your teachers? | 17(21.0) | 5(6.2) | 10(12.3) | 30(37.0) | 19(23.5) | **2.64** |

**Key: f-Frequency, %- Percentage**

Learners' response on statements most represent their views was analyzed using a five point Likert scale of **5** Strongly Agree, **4** Agree, **3**Fairly Agree, **2** Disagree, **1** Strongly Agree. The responses were shown in Table 11.

Table 4.7 shows that 25(30.9%) of learners who are physically challenged strongly agreed that they were comfortable when doing activities with group work in their schools, 50 (61.7%) of learners agreed, 4 (4.9%) of learners fairly agreed and 2 (2.5%) of learners disagreed with a mean of **3.90.** From the findings, it is clear that majority of learners who are physically challenged were happy to work in groups during activities. Seventeen (21.0%) of learners who are physically challenged, strongly agreed that they were being involved in outdoor activities, 5(6.2%) of learners agreed 10 (12.3%) of learners fairly agreed, 30 37.0% of learners disagreed and 19 23.5% of learners strongly disagreed with a mean of **2.64**. The findings reveal that some of the learners were not discriminated against due to their physical disabilities when the others were moving out but 30 (37.0%) plus 19 23.5% of learners with physical disability might have been discriminated because they disagreed. It could have led to dropout of learners. The findings concur with the study of Rustermier (2002) who stated that in an inclusive setting, the learners benefit socially, academically and they grow up having a sense of belonging. The study further established that 7(8.6%) of learners who are physically challenged strongly agreed that they were always given enough time to complete a task, 12 (14.8%) of learners agreed and 62 (76.5%) disagreed with a mean of **2.56**. The study found that learners who are physically challenged were not allowed enough time to complete their class work. The findings concur with Cooper and Patal, (2006) that stated extra time spent on completion of assignment increases the level of performance among learners who are physically challenged causing improvement in retention of learners in regular primary schools.

**4.3 Teachers` Level of Support in Teaching and Learning Strategies used in Teaching Learners who are Physically Challenged in regular primary schools**

The third objective of the study was to find out teachers level of' support in teaching and learning Strategies used in Teaching Learners who are Physically Challenged. The objective

was mainly intended to establish Methods used by teachers in teaching learners who are physically challenged, Methods of teaching used in class by the teacher and Views of teachers on educating learners who are physically challenged.

**4.3.1: Methods Used in Teaching**

**Table 4.8:   Methods Used in Teaching Learners who are Physically Challenged in Regular Primary Schools          (Teachers n=27)**

| Teaching method | SA f(%) | A f (%) | FA f (%) | D f (%) | SD f (%) | Mean |
|---|---|---|---|---|---|---|
| Questions       and Answer | 27 (100) | 0 (00) | 0 (00) | 0   (00) | 0 (00) | **5.00** |
| Group work | 21 (77.8) | 0(0.00) | 1 (3.7) | 5 (18.5) | 0 (00) | **4.37** |
| Task Analysis | 16 (59.3) | 0 (00) | 0 (00) | 11 (40.7) | 0 (00) | **3.77** |
| Individualized Educational Plan(IEP) | 6(22.2) | 0(00) | 1(3.70) | 17(63.0) | 3(11.1) | **2.59** |
| Peer Tutoring | 8 (29.6) | 1(3.70) | 0 (00) | 18 (66.7) | 0 (00) | **2.96** |
| Differentiation | 0 (00) | 5 (18.5) | 0 (00) | 22 (81.5) | 0 (00) | **2.37** |

**Key: f= Frequency, %= Percentage, M=Mean**

Teacher**s** response on teaching methods used in teaching learners who are physically challenged, was analyzed using a five point Likert scale; Strongly Agree - **5**, Agree - **4**, Fairly Agree - **3**, Disagree - **2**, Strongly Disagree - **1**.The results were shown in Table 12.

The table 4.8 shows that 27 (100%) of teachers applied questions and answer teaching method with (M=5.00) followed by 21 (77.8%) of teachers indicated group work (M=4.37), 16 (59.3%) of teachers applied task analysis (M=3.77). Followed by 8 (29.6%) of teachers applied peer tutoring (M=2.96) while 6 (22.2%) of teachers used individualized education plan with (M=2.59) and 5 (18.5%) of teachers used differentiation method of teaching (M=2.37). The findings reveal that teachers did not apply differentiation, individualized educational plan and peer tutoring methods of teaching.

This suggested that teachers probably did not understand these methods due to lack of skills. As a result learners who are physically challenged get discouraged and dropout of schools. The finding of this study is in support of Agbenyega & Deku (2011) who noted the unwillingness of teachers to include students with disabilities as a factor of insufficient knowledge of inclusion and the inability to manage diverse needs. Meyer and Hammil (2002) also pointed out inability by the teachers to use special methods recommended for teaching learners who are physically challenged in regular classroom as a major reason for school dropout for learners who are physically challenged.

**4.3.2 Methods of Teaching**

**Table 4.9: Methods of Teaching Used in Class by the Teacher (Learners, n=81)**

| Teaching Methods | SA | A | FA | D | SD | Mean |
| --- | --- | --- | --- | --- | --- | --- |
| | f (%) | f (%) | f(%) | f (%) | F (%) | |
| Questions and Answer | 12(14.8) | 68(84.0) | 1 (0.1) | 0(00) | 0(00) | **4.14** |
| Group work | 10(12.3) | 65(80.2) | 4 (4.9) | 2 (2.5) | 0(00) | **4.02** |
| Peer teaching | 3 (3.7) | 17(21.0) | 0(00) | 61(75.3) | 0 (00) | **2.53** |
| Task Analysis | 2 (2.5) | 5 (6.2) | 18(22.2) | 56(69.1) | 0 (00) | **2.42** |
| Differentiation | 0 (00) | 0 (00) | 0 (00) | 81 (100) | 0 (00) | **2.02** |
| IEP | 0(00) | 0 (00) | 0 (00) | 81 (100) | 0 (00) | **2.02** |

**Key: f-Frequency, %- Percentage**

Learners response on teaching methods used in class by teacher was analyzed using a five point Likert scale; Strongly Agree 5, Agree 4, Fairly Agree 3, Disagree 2, Strongly Agree 1. The results were shown in Table 13.

Table 4.9 indicated that only 12(14.8%) of learners strongly agreed that question and answer was used, 68(84.0%) of learners agreed, 1(0.1%) fairly agreed, 0(00) disagreed and 0(00) strongly disagreed. This translated to a mean of 4.14. On group work 10(12.3%) of learners strongly agreed, 65(80.2%) of learners agreed, 4(4.9) of learners fairly agreed, 2(2.5%)

disagreed. This translated to a mean of 4.02. Peer tutoring 39(3.7%) of learners strongly agreed, 17(21.0%) of learners agreed and 61(75.3%) of learners disagreed with a mean of 2.53. Task analysis 2(2.3%) of learners strongly agreed,5(6.2%) of learners agreed, 18(22.2%) fairly agreed and 56(69.1%) of learners disagreed. This translate to a mean of 2.42. Differentiation 0(00%) strongly agreed, 0(00%) agreed, 0(00%) fairly agreed, 81(100%) disagreed and 0(00%) strongly agreed with a mean of 2.02. IEP 0(00%) strongly agreed, 0(00%) agreed,0(00%)fairly agreed, 81(100%) disagreed and 0(00%) strongly agreed. This translate to a mean of 2.02.

This implies that teachers did not use the recommended teaching methods for learners with physical disability in regular primary schools. Findings of this study differed with NCSE (2010) findings which noted that the way instruction is delivered in the mainstream classroom need to be flexible enough to meet the diverse requirements of all students and realization of teacher's goals to reduce dropout of learners.

**Table 4.10:  Teaching and Learning Methods as Observed     (n=15)**

| Teaching method | Appropriate N | | Inappropriate N | |
|---|---|---|---|---|
| Question and Answer | 15 | (100%) | 0 | (00%) |
| Group work | 11 | (73.3%) | 4 | (27%) |
| Peer teaching | 5 | (33.3%) | 10 | (67%) |
| Task Analysis | 8 | (53.3%) | 7 | (47%) |
| Differentiation | 0 | (100%) | 15 | (100%) |
| I.E.P | 3 | (20%) | 12 | (80%) |

Key: N-Number of lessons observed.

Table 4.10 shows the distribution of methods of teaching used in teaching learners who are physically challenged as observed. A total of 15 lessons were observed.  Fifteen (100%) of

the lesson observed the use of question and answer method was appropriate. In 11(73.3%) Group work method was appropriately used and in 4(275) lessons it was inappropriately applied In 8 (53.3%) of the lessons, Task Analysis method was appropriately used while in 7(47%) lessons it was inappropriately used by the teachers. Other special teaching methods had higher percentage of in appropriate use for instance in 15 (100%), 12(80%) and 10(67%) of the lessons, the teachers used Differentiation, Individualized Education Programme and Peer teaching Methods inappropriately. These findings suggest that most required methods for teaching learners who are physically challenged were inappropriately applied. As result learners get discouraged and dropout of schools. Teachers teaching in regular classrooms should have a variety of special teaching methods at their disposal to motivate learners and reduce dropout (Swanson, 2001).

**4.3.3 Views of Teachers on Educating Learners who are Physically Challenged**

**Table 4.11: Views of Teachers on Educating Learners who are Physically Challenged in an Inclusive Setting (Teachers n= 27)**

| Statement | | | Response | | | Mean |
|---|---|---|---|---|---|---|
| | SA | A | U | D | SD | |
| | f (%) | f (%) | f (%) | f (%) | f (%) | |
| Lack of special teaching methods lead to dropout of learners with physical disability | 24(88.9) | 1(3.7) | 0(00) | 2(7.4) | 0(00) | **4.96** |
| Teachers do not adequately support learners with physical disability in an inclusive setting | 4(14.8) | 14(51.9) | 0 (00) | 6(22.2) | 3 (11.1) | **3.37** |
| Teachers vary teaching/learning strategies to cater for the learners with physical disability | 7 (26.0) | 6 (22.2) | 0 (00) | 12(44.4) | 2 (7.4) | **3.59** |
| Learners with physical disability receive support services to improve school retention | 2 (7.4) | 5 (18.6) | 1(3.7) | 10(37.0) | 9 (33.3) | **2.29** |

**Key: f-Frequency, %- Percentage**

Teachers response on their views on educating learners with physical disability was coded, analyzed using a five point Likert scale; Strongly Agree- 5, Agree- 4, Fairly Agree -3, Disagree -2, Strongly Agree -1. The results were shown in Table 15.

According to table 4.11, 24(88.9%) of teachers indicated that they strongly agreed with the opinion that inability to use special teaching methods can cause dropout of learners with physical disability. This is a clear indication that lack of use of special teaching methods contribute to dropout of learners with physical challenges with a Mean of 4.96. 14(51.9%) of teachers agreed that they did not adequately support learners who are physically challenged in an inclusive setting (M=3.37). These study findings concurred with Meyer and Hammil (2002) finding that pointed out inability by the teachers to use special method recommended for teaching learners who are physically challenged in regular classroom is a major reason for school dropout for learners who are physically challenged.

The study further established that teachers did not vary teaching and learning strategies to cater for the learners who are physically challenged, as was indicated by the majority 12 (44.4%) of the teachers who disagreed (M=3.59). However, 10 (37.0%) of the teacher responded disagreed that learners who are physically challenged receive support services to improve in school retention (M=2.29). EARCs coordinators were interviewed and the response was as follows:-

 EARCs 1said that;

> *Learners with physical disability to be admitted in regular schools.*

 EARC*s 2* reported that;

> *We do make a follow up to encourage teachers to support learners in making the learning environment friendly.*

 EARCs *3. Said that;*

*Teachers are advised and encouraged to use suitable teaching methods in classes with learners with physical disability.*

*EARCs 4/5. Organizing workshops for teachers to be able to handle all children with special needs using varying methods.*

The above response confirmed the issue of inability by the teachers to use special method recommended for teaching learners who are physically challenged in regular schools. This was not in agreement with the findings of DES (2007) which stated that head teachers have overall responsibility for ensuring that special educational needs of learners are met. The researcher established that teachers are allocated to the schools to enable them to educate all enrolled learners yet inadequate support services provided in their schools.

## 4.4 Creation of Awareness on Learners who are Physically Challenged to Members of the School

In this objective, study determined teachers' level of support in creation of awareness on learners who are physically challenged in regular primary schools. The areas addressed in the objective include: Head teachers, teachers' suggestion on ways and activities use to create awareness on learners who are physically challenged to members of the school, and Level of agreement on teachers' creation of awareness on learners who are physically challenged in regular primary schools. Teachers' response on ways they use to create awareness on learners who are physically challenged to members of the school were analyzed using a five point Likert scale: Strongly Agree (SA) - 5, Agree (A)- 4, Fairly Agree (FA) -3, Disagree (D) -2, Strongly Agree (SD) - 1. The response was as shown in table 16.

**4.4.1 Ways Teachers use to Create Awareness on Learners who are Physically Challenged to Members of the School**

**Table 4.12: Ways Teachers use to Create Awareness on Learners who are Physically Challenged to Members of the School          (Teachers n = 27)**

| Activities | SA f (%) | A f(%) | FA f (%) | D f (%) | SD f(%) | Mean |
|---|---|---|---|---|---|---|
| School meetings | 25 (92.6) | 0 (00) | 0 (00) | 2 (7.4) | 0 (00) | **4.77** |
| Organizing Seminars/Workshops | 20 (74.1) | 0 (00) | 2 (7.4) | 3 (11.1) | 2 (7.4) | **4.22** |
| Use of Media | 19 (70.4) | 0 (00) | 2 (7.4) | 6 (22.2) | 0 (00) | **4.18** |
| Resource Person | 16 (59.3) | 0 (00) | 4(14.8) | 7 (25.9) | 0 (00) | **3.92** |
| Public meetings (Chiefs' barazas) | 10 (37.0) | 0 (00) | 3(11.1) | 14(51.9) | 0 (00) | **3.22** |

**Key: f- Frequency, %= Percentages**

Table 4.12 shows ways teachers used to create awareness on learners who are physically challenged to members of school. 25 (92.6%) of teachers strongly agreed that awareness could best be created through school meetings, followed by 20 (74.1%) of teachers indicated organizing seminars and workshops, 19 (70.4%) teachers suggested the use of media, 16 (59.3%) of teachers indicated resource person and only 10(37.0%) suggested public meetings (chiefs` baraza). The most suggested ways to create awareness were school meetings 25 (92.6%) and seminars/workshops 20 (74.1%). The least way to create awareness suggested was public meetings (chief's baraza). During the interview, EARCs coordinators were ask what role they played and these were the response:-

EARCs 1/2. *Creating awareness through home visit program me to motivate parents, to internalize the importance of education and the policy requirement of getting education.*

EARCs 3. *Providing information about the learner's progress, offering guidance and counseling service to the child and family.*

EARCs 4/5. *Mobilizing parents and member of two communities then sensitizing the chief's baraza and even churches about children with physical disability.*

According to findings of this study, there are more ways teachers can use to create awareness on learners with physical disability to all school community members and even reaching outside the school environment as confirmed, school meetings (M=4.77), organizing seminars/workshops (M=4.22) and use of media (M=4.18). The findings of this study agreed with Lindsay and McPherson (2011) who stated that awareness programs are ways of promoting acceptance, understanding and increase knowledge about different disabilities.

**4.4.2 The Activities Teachers use to Create Awareness to Members of the School Community in their schools.**

**Table 4.13: Activities Teachers use to Create Awareness to Members of the School Community in their schools     (Teachers, n=27)**

| Activities used to create awareness | SA f (%) | A f(%) | FA f (%) | D f (%) | SD f (%) | Mean |
|---|---|---|---|---|---|---|
| Sensitize teachers on identification and assessments of learners with physical disabilities | 1(3.7) | 6(22.2) | 3(11.1) | 16(59.3) | 0(00) | **2.59** |
| Organize straight talk programs to Sensitize head teachers on characteristics of inclusive schools | 0(00) | 2(7.4) | 1(3.7) | 19(70.4) | 5(18.5) | **2.00** |
| Organize straight talk programs to Sensitize pupils to accept and interact with their peers with disabilities | 4(14.8) | 3(11.1) | 1(3.7) | 17(63.0) | 2(7.4) | **2.63** |
| Use child to child activities in school e.g drama, songs, group discussion | 0(00) | 4(14.8) | 0(00) | 22(81.5) | 1(3.7) | **2.26** |
| Sensitize parents on the need to educate their children with physical disabilities in regular schools | 4(14.8) | 0(00) | 3(11.1) | 15(55.6) | 5(18.5) | **2.37** |
| Arrange with EARS to assess learners to find out the nature of their special needs | 2(7.4) | 5(18.5) | 0(00) | 16(70.4) | 4(14.8) | **2.44** |
| Organize a meeting with administration for sensitization on the importance to adapt school's physical environment | 0(00) | 4(14.8) | 5(18.5) | 16(70.4) | 2(7.4) | **2.41** |

**Key: SA= Strongly Agree, A=Agree, FA=Fairly Agree, D=Disagree,    SD=Strongly Disagree, f- Frequency, %= Percentages**

From Table4.13, it is evident that many teachers did not use various activities to create awareness on learners who are physically challenged to members of school community. Teachers indicated that organized straight talk programs to sensitize pupils to accept and

interact with their peers with disabilities (M=2.63), sensitized teachers on identification and assessments of learners who are physically challenged (M=2.59), arranged with EARS to assess learners to find out the nature of their special needs (M=2.44), organized a meeting with administration for sensitization on the importance to adapt school physical environment (M=2.41), Sensitized parents on the need to educate their children who are physically challenged in regular schools (M=2.37), used child to child activities in school e.g. drama, songs, group discussion (M=2.26) and organized straight talk programs to sensitize head teachers on characteristics of inclusive schools (2.00). The low mean scores indicated implied that not many teachers created awareness on learners who are physically challenged to the school members. The school members include learners, teachers, administration, parents and opinion leaders in the community. Findings of this study concur with findings by Charles (2011) who stated that a lack of awareness and skill to include and support students with disabilities along with other children in a regular classroom however can prove to be a major barrier in teachers support to learners who are physically challenged thus lead to learners' dropout.

**4.4.3 Head teachers Response on Activities Teachers use to Create Awareness to Members of the School**

**Table 4.14: Head teachers Response on Activities Teachers use to Create Awareness to Members of the School Community in their schools        (Head teachers, n=13)**

| Activities | SA f (%) | A f (%) | FA f (%) | D f (%) | SD f (%) | Mean |
|---|---|---|---|---|---|---|
| Sensitize teachers on identification and assessments of learners with physical disabilities | 1(7.7) | 1(7.7) | 0 (00) | 11(84.6) | 0 (00) | **2.38** |
| Organize straight talk programs to Sensitize head teachers on characteristics of inclusive schools | 1(7.7) | 0(00) | 0(00) | 10(76.9) | 2 (15.4) | **2.08** |
| Organize straight talk programs to Sensitize pupils to accept and interact with their peers with disabilities | 2(15.4) | 0 (00) | 1 (7.7) | 9(69.2) | 1 (7.7) | **2.46** |
| Use child to child activities in school e.g. drama, songs, group discussion | 0(00) | 3(23.1) | 0 (00) | 8(61.5) | 2(15.4) | **2.31** |
| Sensitize parents on the need to educate their children with physical disabilities in regular schools | 0 (00) | 0 (00) | 4(30.8) | 7 (53.8) | 2(15.4) | **2.15** |
| Arrange with EARS to assess learners to find out the nature of their special needs | 1(7.7) | 3(23.1) | 0(00) | 5(38.5) | 4(14.8) | **2.38** |
| Organize a meeting with administration for sensitization on the importance to adapt school's physical environment | 2(15.4) | | 0(00) | 8(61.5) | 3(23.1) | **2.23** |

**Key: f- Frequency, %= Percentages, M=Mean**

Head teachers' response on activities teachers use to create awareness on learners who are physically challenged to members of the school community in their schools were analyzed using a five point Likert scale: Strongly Agree- **5**, Agree- **4**, Fairly Agree **-3**, Disagree -**2**, Strongly Agree - **1**. The response was as shown in table 18.

Table 4.14 shows the response of head teachers on activities teachers used to create awareness on learners who are physically challenged to school members. The respondents disagreed that teachers organized straight talk programs to Sensitize pupils to accept and interact with their peers with disabilities (M=2.46), sensitized teachers on identification and assessments of learners with physical disability and arranged with EARS to assess learners to find out the nature of their special needs (M=2.38), used child to child activities in school e.g drama, songs, group discussion (M=2.31), organized a meeting with administration for sensitization on the importance to adapt school's physical environment (M=2.23), sensitized parents on the need to educate their children with physical disability in regular schools (M=2.15) and organized straight talk programs to Sensitize head teachers on characteristics of inclusive schools (M=2.08). The findings indicated that many teachers did not use activities to create awareness on learners who are physically challenged to members of the school.

The findings revealed that both head teachers and teachers disagreed that awareness creation on learners who are physically challenged was done to school members. Findings of this study concurred with Ogot (2005) who encouraged the schools to sensitize the communities to help eliminate negative attitudes by creating awareness about the nature, causes, prevention and intervention of condition that create special needs. Odeny (2017) also noted that teachers create awareness on inclusive education to a very small extent.

**4.4.4: Level of Agreement on Awareness towards Learners who are Physically Challenged**

Table 4.15: Head teachers Awareness towards Learners who are Physically Challenged (Head teachers, n=13)

| STATEMENT | SA f (%) | A f (%) | FA f (%) | D f (%) | SD f (%) | MEAN |
|---|---|---|---|---|---|---|
| Children who are physically challenged have a right to be in a regular primary school | 12(92.3) | 0 (00) | 0 (00) | 1 (7.7) | 0 (00) | **4.77** |
| Teachers work as a team in implementing inclusive education practices in regular schools | 5 (38.5) | 0 (00) | 0 (00) | 8 (61.5) | 0 (00) | **2.92** |
| Inclusive education is beneficial to both disabled and non-disabled children with educational needs | 9 (69.2) | 0 (00) | 1 (7.7) | 3 (23.1) | 0 (00) | **4.15** |
| Most of learners who are physically challenged enroll in regular primary schools and dropout later on | 0 (00) | 7 (53.8) | 1 (7.7) | 5 (38.5) | 0 (00) | **3.15** |

**Key: f- Frequency, %= Percentages, M=Mean**

Head teachers response on awareness towards learners who are physically challenged was analyzed using a five point Likert scale: Strongly Agree- 5, Agree- 4, Fairly Agree -3, Disagree -2, Strongly Agree - 1. The results were shown in Table 19.

Table 4.15 above shows that 12 (92.3%) of head teachers strongly agreed that children who are physically challenged have a right to be in a regular school, while 1 (7.7%) disagreed. This implies that they had awareness towards learners who are physically challenged. The success of an inclusion depends on the attitude teachers hold. Code and Baker-Krozynski (2002) established that negative teachers attitude impeded effective inclusion of learners who are physically challenged in public primary schools in China (M=4.77). Inclusive education is beneficial to both disabled and non-disabled children with educational needs, was indicated

strongly agreed by 9 (69.2%.) of head teachers, disagreed by 3 (23.1%) of head teachers and fairly agree was indicated by 1 (7.7%) with a mean of 4.15.The finding is supported by Ross-Hill (2009) who shared the same view after examining the different attitudes of elementary and secondary school teachers towards inclusion, and how best to develop an inclusive environment based on these attitudes.

Other variables such as that most learners who are physically challenged enroll in regular primary schools and dropout later on was indicated agreed by 7(53.8%) of head teachers, disagreed by 5 (38.5%) of head teachers and 1 (7.7%) of them fairly agreed (M=**3.15**). ). Majority of the head teachers 8 (61.5%) disagreed with the opinion that teachers work as a team in implementing inclusive education practices in regular schools while 5 (38.5%) of head teachers strongly agreed with the opinion with a mean of **2.92**. The findings of this study concur with Opuku (2015) who noted that issues of disability have not been taken serious in some communities. Charles, S. (2011) also stated that a lack of awareness and skill to include and support students who are physically challenged along with other children in a regular classroom however can prove to be a major barrier in teachers support to learners who are physically challenged.

**4.4.5 Suggestion on ways to Improve Retention and Performance of Learners**

**Table 4.16: Head Teachers' Suggestion on Ways to Improve Retention and Performance of Learners who are Physically Challenged (Head teachers, n = 13)**

| Suggestion | SA f (%) | A f (%) | FA f (%) | D f (%) | SD f (%) | Mean |
|---|---|---|---|---|---|---|
| Provision of adequate teaching and learning resources | 13 (100) | 0 (00) | 0 (00) | 0 (00) | 0 (00) | **5.00** |
| Training teachers on variety and instructional methods | 12(92.3) | 0 (00) | 0 (00) | 1 (7.7) | 0 (00) | **4.77** |
| Curriculum should be made functional | 11(84.6) | 0 (00) | 2(15.4) | 0 (00) | 0 (00) | **4.69** |
| Introduction of feeding program | 10(76.9) | 0 (00) | 0 (00) | 3(23.1) | 0 (00) | **4.31** |
| Creating awareness on physical disabilities | 10(76.9) | 0 (00) | 1 (7.7) | 2(15.4) | 0 (00) | **4.38** |

**Key: f- Frequency, %- Percentage, M-Mean**

Head teachers response on ways to improve retention and performance of learners with physical disability was analyzed using a five point Likert scale: Strongly Agree- **5**, Agree- **4**, Fairly Agree **-3**, Disagree -**2**, and Strongly Agree - **1**. The results were shown in Table 20.

As shown in Table 4.16 above, all head teachers 13 (100%) suggested that teachers should be provided with adequate teaching /learning resources. Followed by twelve of the thirteen head teachers 12 (92.3%) indicated that teachers should be offered training on variety of disabling conditions and instructional methods, 11 (84.6%) of the head teachers suggested that curriculum should be made functional. Ten of the head teachers 10 (76.9%) suggested that there should be introduction of feeding program to cater for learners from poor families and creation of awareness on physical disability. The findings are in support of Kluth *et al* (2003) study, who pointed out that inclusion requires education system to meet the needs of learners who are physically challenged as normally and inclusively possible.

### 4.4.6 Suggestion on ways to Improve Retention and Performance of Learners

**Table 4.17: Teachers' Suggestion on Ways to Improve Retention and Performance of Learners who are Physically Challenged     (Teachers n = 27)**

| Suggestion | SA f (%) | A f(%) | FA F (%) | D F(%) | SD f(%) | Mean |
|---|---|---|---|---|---|---|
| Provision of adequate teaching and learning materials and equipment | 25(92.6) | 0 (00) | 0 (00) | 2 (7.4) | 0 (00) | **4.77** |
| Teachers/learners friendly atmosphere | 20(74.1) | 0 (00) | 5(18.5) | 0 (00) | 2 (7.4) | **4.33** |
| Train teachers on handling diverse disabilities | 19(70.4) | 6 (22.2) | 2 (7.4) | 0 (00) | 0 (00) | **4.62** |
| Creating awareness | 14(51.9) | 7 (25.9) | 6(22.2) | 0 (00) | 0 (00) | **4.29** |
| Feeding program | 13(48.1) | 7 (25.9) | 4(14.8) | 3(11.1) | 0 (00) | **4.11** |
| Overall Mean | | | | | | **3.69** |

**Key: SA= Strongly Agree, A=Agree, FA=Fairly Agree, D=Disagree,     SD=Strongly Disagree**

Table 4.17 shows that 25 (92.6%) of teachers suggested provision of adequate teaching and learning materials and equipment with a mean of 4.77, followed by 20 (74.1%) teachers and learners friendly atmosphere with a mean of 4.33, 19 (70.4%) of teachers suggested training teachers on handling diverse disabilities (M=4.62), 14 (51.9%) teachers indicated creating awareness (M=4.29) and 13(48.1%) suggested feeding program (M=4.11). The overall mean of 3.69 showed that teachers handling learners with special needs in regular primary schools work under difficult situations. .The most suggested ways to improve retention and performance of learners who are physically challenged were provision of adequate teaching and learning materials and equipment (M=4.77), training teachers on handling diverse disabilities (M=4.62) and creating teachers and pupils friendly atmosphere (M=4.33). The study further indicated that creating awareness (M=4.29) and introducing feeding program (M=4.11) were also important for the improvement. The findings of this study revealed that teachers were willing to see all learners retained in schools to improve their academic

performance. During the interview, the EARCs coordinators were asked what measures minimize the dropout. These were the reply:

EARCS1 said,

*Leaners with physical disability should be escorted to schools due to   long distance, be provided with wheelchairs, have feeding programme and finally the need for trained teacher support.*

EARCs 2 reported,

*Introduced feeding programme in school, construction of classroom, toilets  and provide learning materials.*

EARCs 3 said,

*Motivating learners with physical disability by paying school fees for them.*

EARCs 4 said,

*Teachers who have trained in special needs education be used as a role model or guest speakers*

EARC 5 reported,

*Provision of food and learning materials; build ramps, show love, provision of device for learners with disability.*

The findings of the study concurred with Booth (2006) who stated that inclusion is about increasing participation in, and reducing exclusion from the curricula, cultures and communities of local education settings. The head teachers and teachers need to work together to ensure that creation of awareness is practiced in regular primary schools. This will enhance teachers' level of support in reducing dropout rate of learners who are physically challenged in regular schools in Kisumu West Sub- County.

# CHAPTER FIVE

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 5.1 Summary of the Findings

The findings of this study are summarized in relation to the research objectives.

### 5.1.1 Teaching and Learning Resources for Learners who are Physically Challenged

This research objective was to establish teachers level of support in the use of teaching/learning resources for learners who are physically challenged. The study found out that majority of the teachers responded on teaching learning resources required; blackboard very adequate in regular schools (M= 4.62), text and exercise books (M= 3.70), Charts (3.33), book holder, head pointer and modified pencils/pens not available at all (1.11). The learners indicated in Table **6**, that the most required adapted learning resources were not available.

Both the respondents revealed that the most modified physical facilities available in regular schools were accessible, spacious classrooms 14 (51.9%), followed by level playgrounds 12 (44.4%) and least modified physical facilities available were adapted toilets 8 (29.6%), adapted chairs and desks 8 (29.6 %) and ramps 10 (37.0%).

The study found that blackboard, text/exercise books, charts, spacious classroom, level playground, were adequate and available in the schools. It was also that book holder, head pointer, modified pencils, adapted chairs, adapted toilets and rumps were inadequate in their schools**.** Observation by the researcher confirmed the unavailability of the adapted resources and also EARCs coordinators. In this regard, lack of adapted teaching and learning resources was found to lower teachers level of support in retaining learners who are physically challenged in regular schools.

### 5.1.2 Curriculum Adaptation for Learners who are Physically Challenged

According to the respondents, the areas that needed to be targeted for curriculum adaptation in their schools included; classroom arrangement 12(92.3%), because learners who are

physically challenged are said to have difficulties in accessing curriculum activities in a non-spacious environment. Followed by teaching resources 10 (76.9%), teaching methods 9 (69.2%) and seven (53.8%) recommended all the areas of the curriculum. Adaptation of the curriculum could help improve retention of learners who are physically challenged.

, The study revealed that teachers did not Adjust the amount of learning task according to learners needs (M= 2.78), provide enough time for task completion (M= 2.63), adapt varied methods of teaching in their schools (M= 2.26), cover syllabus on time (M= 2.22), Simplify text material by reducing the length of units (M=2.15). The results showed that teachers did not do much on curriculum adaptation.

The study further established that lack of flexible curriculum in regular primary schools limits retention of learners with physical disability (M= 4.59), teachers trained in special education have more confidence in handling learners with disabilities (M= 4.03) and the opinion that inclusion of learners with physical disability in regular primary schools can hardly be successful without high level of teachers support (M= 3.96). EARC coordinators also said *that Curriculum need to be made a reality for learners with physical disabilities. For example, a child with wheelchair requires adaptations in the classroom arrangement and time to move from the seating area to the learning centers.* Now that the KICD (2018) has adapted regular curriculum to cater for all categories of learners with disabilities, teachers in regular schools are in a better position to execute high level of support to improve the retention of learners in regular primary schools.

### 5.1.3 Teaching and Learning Strategies in Teaching Learners Who are Physically Challenged

The findings of this study found out that teachers level of support in teaching and learning strategies used in teaching learners who are physically challenged in regular primary schools in Kisumu West Sub-County. The respondents reported that the most used teaching strategies

were question and answer 27(100%), group work 21(77.8%) and task analysis 16(59.3%). Majority of the respondents did not apply differentiation 0(0%), individualized educational plan 6(22.2%) and peer tutoring 8(29.6%) methods, probably they did not understand due to lack of skills. This too contributed to learners dropout. This study further established that head teachers have overall responsibility for ensuring that special educational needs of learners are met, teachers are allocated to the schools to enable them to educate all enrolled learners yet inadequate support services provided in their schools.

The study found out that teachers were not using special methods recommended to teach learners with disability. As result, learners who are physically challenged get discouraged and dropout of school. Therefore, with the use of appropriate teaching strategies, teacher's level of support could improve the retention of learners who are physically challenged.

**5.1.4 Creation of Awareness on Learners Who are Physically Challenged to Members of the School**

The study aimed at determining teachers level of support in creation of awareness on learners who are physically challenged in regular primary school in Kisumu West Sub-County. The study found out that there were more ways teachers can use to create awareness on learners who are physically challenged as confirmed with a mean of 4.77. The study further established that not many teachers created awareness on learners who are physically challenged to the school members with a mean of 2.63, head teachers also confirmed it (M= 2.46).

Concerning head teachers awareness towards learners with physical disabilities, the study found out that majority of head teachers 12 (92.3%) strongly agreed that children with physical disabilities have a right to be in a regular school. 9 (69.2%) strongly agreed that inclusive education is beneficial to both disabled and non-disabled children with educational needs, Seven (53.8%) of head teachers agreed that learners with physical disability enroll in

regular primary schools and dropout later on, 8 (61.5%) disagreed that teachers work as a team in implementing inclusive education practices in regular school.. This implies that there is urgent need to create awareness and support students with disabilities along with other children in a regular classrooms to reduce dropout.

Concerning ways to improve retention and performance of learners with physical disability, the study established that majority of head teachers and teachers recommended that teachers should be provided with adequate teaching /learning resources (M= 5.00), (M=4.77), teachers should be offered training on variety of disabling conditions and instructional methods (M= 4.77), (M=4.62), curriculum should be made functional (M=4.69). Results showed that the respondents were ready to support inclusion of learners who are physically challenged if the necessary provisions are made. This would promote high level of teachers support in retaining learners who are physically challenged in regular schools.

## 5.2 Conclusion
### 5.2.1 Teaching and Learning Resources for Learners With Physical Disability
The study concluded that majority of regular primary schools did not have adapted teaching learning resources such as book holder, modified pens required for learners who are physically challenged but those who had, none had enough for all learners as indicated by the respondents and EARC coordinators thus causing low level of teachers support to retain learners who are physically challenged.

### 5.2.2 Curriculum Adaptation for learners With Physical Disability
The study established that lack of adaptation of curriculum for learners who are physically challenged in regular primary schools limited retention of learners who are physically challenged, inclusion of learners with physical disability in regular primary schools can hardly be successful without high level of teachers support.

### 5.2.3 Teaching and Learning Strategies in Teaching Learners With Physical Disability

The study found out that there was inability by the teachers to use special teaching methods recommended for teaching learners who are physically challenged in regular primary schools caused low level of teachers support to retain learners who are physically challenged in Kisumu West Sub-County.

### 5.2.4 Creation of Awareness on Learners With Physical Disability to Members of the School

According to findings of this study, there are more ways teachers could use to create awareness on learners with physical disabilities to all school community members and even reaching outside the school environment, it was also evident that both head teachers, teachers did not create enough awareness on learners who are physically challenged as the teachers were not working as a team in implementing inclusive education practices in regular schools leading to low level of teachers support to retain learners who are physically challenged.

It could be concluded that placement of learners who are physically challenged in regular primary schools with ordinary learners is not enough with no proper support. It is important to make sure that learners who are physically challenged receive all the necessary support and services for accessing the curriculum facilities.

### 5.3 Recommendations

i) Based on the findings that teaching and learning resources required for learners who are physically challenged were not available in most inclusive schools and those who had, did not have enough for all learners, this study recommended that the government through ministry of education should ensure adequate supply of teaching and learning resources, this will encourage teachers in providing support to retain learners with disabilities in regular primary schools.

ii) All teachers in regular primary schools should be specially trained to be able to adapt a functional school curriculum, to be successful in supporting and enhancing retention of learners with physical disability.

iii) In view of the finding that differentiation, individualized educational plan and peer tutoring were the least used teaching strategies used, it was recommended that teachers teaching in regular primary schools should take in-service training to be able to use special teaching methods required to support and retain learners who are physically challenged.

iv) The study findings indicated that not enough awareness creation on learners with physical disability was done to members of the school. Creation of awareness and sensitization should further be carried out by the stakeholders in the education sector to help eradicate the problem of stigma and negative attitude associated with disability for successful inclusion of learners with physical disability in regular primary schools.

## 5.4 Suggestions for further Research

1. Further study may be carried out in relation to the dropout of learners with special needs education in regular primary schools.

2. There is need for a study to find out the challenges facing teachers in curriculum adaptation.

3. This study was done in rural public primary schools. Further research can be carried out in urban public primary schools to discern the status of inclusive education.

4. The study established that teachers did very little awareness creation on learners with disability to school members. There is need to find out the effect of inclusive education awareness programme on teachers and education administrators.

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## APPENDIX A:  Head teachers` Questionnaire (HTQ)

The purpose of the study for which the questionnaire is designed is to collect information on the teachers` support level to retain Physically Challenged learners in regular Primary Schools in Kisumu West Sub-County, Kenya. Please fill in the spaces provided below with relevant responses, rate or tick (√) where appropriate. The information given will be strictly confidential and used for research purposes only.

### Section A: Demographic Information
1. What is your gender?        Male [  ]        Female [  ]
2. What is your highest professional qualification?
       MED [   ]      BED [  ]         Diploma [  ]              P1 [  ]
3. What is your teaching experience?
    1- 5 years [  ]      6-10 years [  ]     11-15 years [   ]     Over 15 years [ ]


4. Have you ever been trained to teach learners with special education needs?

| Strongly Agree | Agree | Disagree | Strongly Agree |
|---|---|---|---|
| | | | |

5. Indicate in the following table the qualification of special needs education teachers in your school:

| Qualification | P1 | Diploma | B.Ed | M.Ed |
|---|---|---|---|---|
| Number | | | | |

6.

| Statement | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| Are there learners with physical disabilities in your school? | | | | | |
| Should they be educated in regular schools? | | | | | |

**Section B: Teaching and Learning Resources of Learners who are Physically Challenged**

7. The table below shows some of the teaching and learning resources required for learners who are physically challenged in regular schools. Tick the resources that are needed in your school based on rating scales; Strongly Agree (SA), Agree (A), Fairly Agree (FA), Disagree (D), and Strongly Disagree (SD).

| Resources | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| Book holder | | | | | |
| Head pointer | | | | | |
| Maps | | | | | |
| Charts | | | | | |
| Text and exercise books | | | | | |
| Modified pencils / pens | | | | | |
| Blackboard | | | | | |

8. What adapted physical facilities are available to accommodate learners who are physically challenged in your school? Indicate by tick (√) against the ones adapted. Key; Strongly Agree (SA), Agree (A), Fairly Agree (FA), Disagree (D), Strongly Disagree (SD).

| Category | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| Ramps | | | | | |
| Adapted toilets | | | | | |
| Adapted chairs & desks | | | | | |
| Staircase rails | | | | | |
| Lower door handles | | | | | |
| Accessible, spacious classrooms | | | | | |
| Level playgrounds | | | | | |

**Section C:  Curriculum Adaptation for Learners who are Physically Challenged.**

9. In your opinion, do teachers adapt the curriculum for learners with physical disabilities in your school?

10. Please put a tick (√) in the relevant box to indicate the targeted areas for the curriculum adaptation according to your view.

| STATEMENT | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| Subject content | | | | | |
| Teaching Method | | | | | |
| Teaching Resources | | | | | |
| Classroom Arrangement | | | | | |
| All the areas of the curriculum | | | | | |

**Section E: Creation of awareness on Learners who are Physically Challenged**

11. Which activities have you used to create awareness to members of the school community in your school?

For each of the following activities used, respond by ticking (√) in the appropriate box using the following keys: Strongly Agree (SA), Agree (A), Fairly Agree (FA), Disagree (D), Strongly Disagree (SD)

| Activities | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| 1.Sensitize teachers on identification    and assessments of learners with physical disabilities | | | | | |
| 2.Organize straight talk programs to sensitize head teachers on characteristics of inclusive schools | | | | | |
| 3.Organize straight talk programs to sensitize pupils to accept and interact with their peers with disabilities | | | | | |
| 4.Use child to child activities in school e.g drama, songs, group discussion | | | | | |
| 5.Organize for parents meeting to sensitize them on the need to educate their children with physical disabilities in regular schools | | | | | |
| 6.Arrange with EARS to assess learners to find out the nature of their special needs | | | | | |
| 7.Organize a meeting with administration for sensitization on the importance to adapt school's physical environment | | | | | |

12. Please indicate your level of agreement on the following statements on teachers' creation of awareness on learners with physical disabilities. Indicate with (√) where**, Strongly Agree (SA), Agree (A), Fairly Agree (FA), Disagree (D), Strongly Disagree (SD).**

| STATEMENT | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| Children with physical disabilities have right to be in a regular primary school | | | | | |
| Teachers rarely appreciate the presence of learners who are physically challenged in regular primary schools | | | | | |
| Teachers work as a team in implementing inclusive education practices in regular primary schools | | | | | |
| Inclusive education is beneficial to both disabled and non-disabled learners with educational needs | | | | | |
| Most of learners with physical disabilities enroll in regular primary schools and dropout later on | | | | | |

13. What can be done to improve retention and performance of physically challenged learners in your school? ……………………………………………...
**Thank you for your participation.**

**Questionnaire for the Teachers (TQ)**

The purpose of the study for which the questionnaire is designed is to collect information on the teachers` support level to retain learners who are physically challenged in regular primary schools in Kisumu West Sub-County, Kenya. Please fill in the blanks spaces provided with relevant responses, use rating scale where appropriate. The information given will be strictly confidential and used for research purposes only.

### Section A: Demographic Information

Please tick or fill in as required:
1. Your gender          Male  [  ]       Female [   ]
2. Your highest professional qualification:
            P1  [  ]    Diploma [  ]    BED  [  ]        M.E.D  [  ]
3. Your teaching experience is:
            1-5 years [  ]    6-10 years [  ]      11-15 [  ] over 15 years [  ]
4. Have you been trained in special needs education?
            Yes [  ]          No [  ]        currently being trained [  ]
5. If trained, what is your teaching experience in years as a special education trained teacher?
            1- 5 years [  ]    6 -10 years [  ]   10 -15 years [  ]   Over 15 years [  ]

### Section B:  Teaching and Learning Resources for Learners who are Physically Challenged

6. The table below shows some of the teaching and learning resources required for physically challenged learners in regular schools. Tick the resources that are used by you, in your school based on rating scales; Strongly Agree (SA) 5, Agree (A) 4, Fairly Agree (FA) 3, Disagree (D) 2, Strongly Disagree (SD) 1.

| Resources | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| Book holder |  |  |  |  |  |
| Head pointer |  |  |  |  |  |
| Maps |  |  |  |  |  |
| Charts |  |  |  |  |  |
| Text and exercise books |  |  |  |  |  |
| Modified pencils / pens |  |  |  |  |  |
| Blackboard |  |  |  |  |  |

7. Are the following physical facilities well modified to accommodate learners with physical disabilities in your school? Tick (√) where appropriate:- Strongly Agree (SA)-5, Agree (A)-4, Fairly Agree (FA)-3, Disagree (D)-2, Strongly Disagree (SD)-1.

| Physical facilities | SA | A | FA | D | SD | Mean |
|---|---|---|---|---|---|---|
| Ramps |  |  |  |  |  |  |
| Adapted toilets |  |  |  |  |  |  |
| Adapted chairs & desks |  |  |  |  |  |  |

| | | | | | |
|---|---|---|---|---|---|
| Accessible, spacious classroom | | | | | |
| Level playgrounds | | | | | |
| Staircase rails | | | | | |
| Lower door handles | | | | | |

**Section C: Curriculum Adaptation for Learners Who are Physically Challenged**

8. Please put a tick (√) in the relevant box to indicate how you adapt curriculum for learners with physical disabilities in your school. Key:  SA-Strongly Agree, A-Agree, FA- Fairly Agree, D-Disagree, SD- Strongly Disagree

| How you adapt curriculum for learners with physical disabilities | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| I allow learners extend time for task completion | | | | | |
| I adapt varied methods of teaching | | | | | |
| I adjust the amount of learning task according to learners' needs | | | | | |
| I simplify text material by reducing the length of units | | | | | |
| I cover syllabus on time | | | | | |

9. Please rate the following curriculum adaptation statements, which most represent your views.

Key:  SA-Strongly Agree, A-Agree, FA- Fairly Agree, D-Disagree, SD- Strongly Disagree

| STATEMENT | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| 1. Regular school teachers who are trained in special education have more confidence in handling learners with disabilities in regular classes than the untrained ones | | | | | |
| 2. Lack of flexible curriculum in regular primary schools limits the retention of the physically challenged children in regular primary schools. | | | | | |
| 3. Inclusion of physically challenged children in regular primary schools can hardly be successful without high level of teachers` support. | | | | | |

**Section D:  Teaching and Learning Strategies in Teaching Learners who are Physically Challenged**

10.The following is the list of teaching strategies employed in teaching learners who are physically challenged: tick (√) against the ones you employ in your class based on rating scales; Strongly Agree (SA) 5, Agree (A) 4, Fairly Agree (FA) 3, Disagree (D) 2, Strongly Disagree (SD) 1.

| Teaching Strategy | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| Use Individualized Educational Plan | | | | | |
| Task Analysis | | | | | |
| Peer Tutoring | | | | | |
| Differentiation | | | | | |
| Group work | | | | | |
| Questions and answers | | | | | |

11. The following is a list of statements on educating learners who are physically challenged in an inclusive setting. Kindly mark (√) in the box against the words that best describes your views after every statement.
Strongly Agree (SA), Agree (A), Fairly Agree (FA), Disagree (D), Strongly Disagree (SD).

| Statement | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| Lack of using special teaching methods lead to dropout of learners with physical disabilities | | | | | |
| Teachers do not adequately support physically challenged learners in an Inclusive Setting | | | | | |
| Teachers vary teaching / learning strategies to cater for the physically challenged learners. | | | | | |
| Physically challenged learners receive support services to improve school retention. | | | | | |

**Section E: Creation of Awareness on Learners who are Physically Challenged**

12. Please put a tick(√) in the table below to indicate ways you have used to create awareness on learners with physical disabilities to Members of the School.

| Ways teachers used to create awareness on learners with physical disabilities | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| School meetings | | | | | |
| Organizing Seminars/Workshops | | | | | |
| Use of Media | | | | | |
| Resource Person | | | | | |
| Public meetings (Chiefs barazas) | | | | | |
| | | | | | |

13. Which activities have you used to create awareness to members of the school community in your school?
For each of the following activities used, respond by ticking (√) in the appropriate box using the following keys: Strongly Agree (SA), Agree (A), Fairly Agree (FA), Disagree (D), Strongly Disagree (SD)

| Activities | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| 1.Sensitize teachers on identification       and assessments of | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| learners with physical disabilities | | | | | |
| 2.Organize straight talk programs to sensitize head teachers on characteristics of inclusive schools | | | | | |
| 3.Organize straight talk programs to sensitize pupils to accept and interact with their peers with disabilities | | | | | |
| 4.Use child to child activities in school e.g drama, songs, group discussion | | | | | |
| 5.Organize for parents meeting to sensitize them on the need to educate their children with physical disabilities in regular schools | | | | | |
| 6.Arrange with EARS to assess learners to find out the nature of their special needs | | | | | |
| 7.Organize a meeting with administration for sensitization on the importance to adapt school's physical environment | | | | | |

14. Please rate your level of agreement on the following statements on teachers' creation of awareness on learners who are physically challenged. The opinions are;  **5= Strongly Agree (SA), 4= Agree (A), 3= Fairly Agree (FA), 2= Disagree (D), 1= Strongly Disagree (SD).**

| STATEMENT | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| Children with physical disabilities have right to be in a regular primary school | | | | | |
| Teachers practice inclusive education need to show positive attitude towards physically challenged children | | | | | |
| Inclusive education is beneficial to both normal and children with physical disabilities | | | | | |
| Most of learners with physical disabilities enroll in regular primary schools  and dropout later on | | | | | |

15. What can be done to improve retention of physically challenged learners in your school?
…………………………………………………………………………………………………

## APPENDIX C

## QUESTIONNAIRE FOR PUPILS

Please respond to the following questions by either ticking (√) or filling the spaces provided where applicable.

## SECTION I:

**Demographic Information**

1. In which class are you? ......................

2. Your gender?  Male (  )      Female (  )

3...How old are you?   8-12 years (  )   13-15 years (  )   above 15 years (  )

## SECTION II:

4. Which of the following resources are available and used in class by your teacher?

| Resources | Adequate | Inadequate | Not Available |
|---|---|---|---|
| Blackboard | | | |
| Text and Exercise books | | | |
| Charts | | | |
| Modified pencils/pens | | | |
| Head pointer | | | |
| Book hold | | | |

5. Please rate the following statements which most represent your views by putting a tick (√) against your choice

| STATEMENT | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| I am always given enough time to complete a task | | | | | |
| I feel comfortable when doing activities in group | | | | | |
| Are you being involved in every day outdoor activities by your teachers? | | | | | |

6. Which of the following teaching methods are used by your teachers in your class? Please tick (√) against an opinion selected: SA- Strongly Agree, A- Agree, FA- Fairly Agree, D- Disagree, SD- Strongly Disagree

| TEACHING METHODS | SA | A | FA | D | SD |
|---|---|---|---|---|---|
| Questions and Answer | | | | | |
| Groups work | | | | | |
| Peer teaching | | | | | |
| Task Analysis | | | | | |

7. Are there some of your classmates who have stopped coming to school?

| Strongly Agree | Agree | Fairly Agree | Disagree | Strongly Agree |
|---|---|---|---|---|

8. Do you enjoy learning together with learners without disability?


**Thank you for your participation.**

**INTERVIEWS**

**Interview guide for the head teachers teaching in Regular Primary schools with Learners who are Physically Challenged**

The interview is part of an education study that is being conducted by the researcher. The information will be treated with a lot of confidentiality during and after the study. The researcher is therefore asking for your assistance. The information you give will be very important for this study.

1. Are all the teachers in your school trained to handle leaners who are physically challenged?

2a.) What teaching resources are required for learners who are physically challenged? Are they available and enough to cater for all learners?

b) What adapted physical facilities are in your school for learners who are physically challenged?

3. Do you think the curriculum being used is designed to cater for teachers who are physically challenged? If not what are the adaptation needed?

4. What have the teachers done to create awareness on learners who are physically challenged to members of your school? (Activities)

5. What do you think can be done to minimize the dropout of learners who are physically challenged in your school?

**The Education Assessment and Resource Coordinator Interviews Schedule (EARC IS)**

1. What support do you provide to teachers to assist learners who are physically challenged?

2. What do you say about modifying curriculum and teaching methods for learners who are physically challenged?

3. What role do you play in the community to enroll physically challenged children in the school?

4. What sort of program do you organize to help teachers and retain learners with disabilities?

5. Are you aware about dropout problem of physically challenged learners?
6. What are the existing measures to minimize the dropout of the physically challenged learners?

**Thank you for your participation.**

# APPENDIX F

## Observation Checklist (OC)

### I. Availability and Adequacy of Teaching/Learning Resources

**The following is a table containing resources in regular primary schools. The availability and adequacy of such facilities should be confirmed by filling the table.**

| Available resources | Availability | | Adequate | |
|---|---|---|---|---|
| Blackboard | **Yes** | **No** | **Yes** | **No** |
| Text/Exercise books | | | | |
| Charts | | | | |
| Modified pencils/pens | | | | |
| Head pointer | | | | |
| Bookhold | | | | |
| **Physical Facilities** | | | | |
| Ramps | | | | |
| Adapted chairs/desks | | | | |
| Adapted Toilets | | | | |
| Specious Classroom | | | | |
| Well Level Playground | | | | |

**ii. Teaching and learning methods used in teaching learners who are physically challenged**

| Teaching method | Appropriate | Inappropriate |
|---|---|---|
| Question and Answer | | |
| Group work | | |
| Peer teaching | | |
| Task Analysis | | |
| Differentiation | | |
| IEP | | |

## CONSENT FORM

Carefully study the following information before consenting to take part in this study

### STUDY TITLE
TEACHERS SUPPORT LEVEL TO RETAIN LEARNERS WHO ARE PHYSICALLY CHALLENGED IN REGULAR PRIMARY SCHOOLS IN KISUMU WEST SUB-COUNTY, KENYA.

**UNIVERSITY:** MASENO UNIVERSITY
**RESEARCHER:** DORINE A. OBARA

**INVITATION**

 You are asked to take part in this research study entitled **Teachers Support Level to Retain Learners who are Physically Challenged in Regular Primary Schools in Kisumu West Sub-County, Kenya.** Whether or not you take part is your choice. If you don't want to take part, you don't have to give a reason. If you do want to take part now, but change your mind later, you can pull out of the study at any time.

This sheet will help you decide if you would like to take part. It sets out why this study is being conducted, what your participation would involve, what the benefits and risks to you might be and what may happen after the study ends. We will go through this information with you and answer any question you may have.

If you agree to take part in the study, you will be asked to sign the contest form at the end of this document. You will be given a copy of both the participant information sheet and consent form to keep.

**WHAT IS THE PURPOSE OF THE STUDY?**

Learners who are physically challenged in regular primary schools have a major problem of dropping out of school and therefore do not get their right to education like learners who do not have physical disabilities .This study therefore seeks to find how learners who are physically challenged are supported in regular primary schools to acquire the right education and be retained in the schools most of the school days.

**WHAT WILL HAPPEN**

In this study, you will be asked to fill the three questionnaires that will be given to you by circling the number that corresponds to your level of agreement as will be directed.

**TIME COMMITMENT**

The completion of the 3 questionnaires will take approximately take 40 minutes.

**PARTICIPANTS' RIGHTS**

You may decide to stop being a part of the research study at any time without explanation. You have the right to ask that any data you have supplied be withdrawn/destroyed without any penalty whatsoever.

You have the right to omit or refuse to answer or respond to any question that is asked of you *(as appropriate, "and without penalty")*.

You have the right to have your questions about the procedures answered (unless answering these questions would interfere with the study's outcome).If you have any questions as a result of reading this information sheet, you should ask the researcher before the study begins.

**BENEFITS AND RISKS**

There are no specific benefits to you. Your participation may benefit future generations by accepting an inclusion of learners with physical disabilities. There are no risks for you in this study.

**COST, REIMBURSEMENT AND COMPENSATION**

Your participation in this study is voluntary and will not be paid or compensated.

**CONFIDENTIALITY/ANONYMITY**

The data we collect do not contain any personal information about you. No one will link the data you provided to the identifying information you supplied.

By signing below, you are agreeing that: (1) you have read and understood all the information above, (2) questions about your participation in this study have been answered satisfactorily,(3) you are aware of the potential risks (if any), and (4) you are taking part in this research study voluntarily (without being forced).

**Declaration by the Participant:**

I do hereby consent to take part in this study.

_____

Participants Name

_____                    _____

Signature                                           Date

**Declaration by member research team:**

I have given a verbal explanation of the research study to the participant, and have answered the participant's questions about it. I believe that the participant understands the study and has given informed consent to participate.

_____

Researcher's Name

_____                    _____

Signature                                           Date

**Sketch map of   Kisumu West Sub – County**