

**DETERMINANTS OF THE IMPLEMENTATION OF INCLUSIVE EDUCATION  
IN PUBLIC SECONDARY SCHOOLS IN BUNGOMA COUNTY, KENYA**

**BY**

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**A THESIS SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS FOR  
THE DEGREE OF DOCTOR OF PHILOSOPHY IN SPECIAL NEEDS  
EDUCATION**

**DEPARTMENT OF SPECIAL NEEDS EDUCATION**

**MASENO UNIVERSITY**

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## **DECLARATION**

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## **DEDICATION**

This project is dedicated to my late brother Fred Khaemba Wamala. Who made me develop interest in Special Needs Education and furthered professional education in the area. He posted to me a cutout of an advertisement of vacancies in the print media for qualified candidates to apply for training for Diploma in Special Education to me. I successfully applied and joined Kenya Institute of Special Education (KISE) Nairobi, in May, 1989, that was the time my journey in search for the knowledge in Special Needs Education begun.

## ABSTRACT

Education empowers citizens and hence reduces poverty by enhancing livelihood. Globally, 77 million children are out of education and 25.7 million (33.4%) are those with disabilities. In Kenya 1,504 (0.48 %) Students with Disabilities of 315,000 in public secondary schools are in Inclusive Education programme. Baseline survey in Bungoma County between 2013 and 2016 indicated that only 107(0.07%) Students with Visual impairments and physical challenges are in Inclusive Education programmes compared with total of 39,122 students with disabilities who are out of school. Therefore, this means that very few Students with Disabilities (SWDs) are admitted in public secondary schools in Bungoma County implying that 39,015 (99.93%) may not have been accessing public secondary school education. The purpose of the study was to establish the influence of extra funding, human resource, physical resources, students with disabilities and regular students as determinants of implementation of Inclusive Education in public secondary schools in Bungoma County, Kenya. The study objectives were; to determine the influence of finance on implementation of Inclusive Education (IE); to determine the influence of the human resources on implementation of IE; to establish the influence of physical resources available for the implementation of IE, and to establish the influence of SWD and RS in the implementation of IE. This study was based on Social Model of Disability, as discussed by Rieser (2002) and the conceptual framework that showed the relationships between independent variables namely finance, human resources, and physical resources, influences of SWDs and Regular Students towards the implementation of IE as dependent variable. The study adopted descriptive survey research design. The study population included 1 Senior Assistant Director of Education, 1 County Director of Education (CDE), 1 County Education Officer in charge of Special Needs Education (CEOCSNE), 3 Principals of Public Secondary Schools (PPSS), 10 Special Education Teachers (SET), 130 Regular Teachers (RT), 107 SWDs, and 2,348 Regular Students (RS). Sample size through simple random sampling comprised 122 RT, 54 SWDs and 350 RS. Saturated sampling technique selected 1 SADE, 1 CED, 1 CEOCSNE, 3 PPSS, and 10 SETs. Research Instruments included Questionnaires, observation guide, interview schedule and document analysis guide. To ensure face and content validity of research instruments, advice from experts in the department of Special Needs Education and Rehabilitation (SNER) was used. Reliability of instruments was established through Pearson correlation. Reliability coefficient for Regular Teachers was  $r = 0.78$ , Special Education Teachers  $r = 0.84$ , Students with Disabilities  $r = 0.89$ , and Regular Students  $r = 0.85$ . These were high enough to meet conditions of reliability because they are above the recommended value of  $r = 0.7$ . The study established that extra funding by MOEST accounted for 60.8% of the variance in implementation of Inclusive Education, Human Resource accounted for 18.9%, and Physical Resources also accounted for 18.9%, Students with Disabilities 37.4% and regular students 30.7%. This means that the main determinants of implementation of Inclusive Education were extra funding by Ministry of Education Science and Technology, Students with Disabilities and Regular Students. This study therefore concluded that extra funding, Students with Disabilities, Regular Students, physical resources and Human Resources were determinants of implementation of inclusive education in public secondary schools in Bungoma County. The study recommended that extra funding be increased and the necessary physical resources be made available for effective implementation of Inclusive Education.

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

<b>ACRWC</b>	-	African Charter on the Rights and Welfare of the Child
<b>AFUB</b>	-	African Union of the Blind
<b>APDK</b>	-	Association for Persons with Physical Disabilities in Kenya
<b>CAK</b>	-	Communications Authority of Kenya
<b>CBM</b>	-	Christoffel Blinded Mission
<b>CBO</b>	-	Community Based Organizations
<b>CCS</b>	-	Child Centered School
<b>CDE</b>	-	County Director Education
<b>CEOSNE</b>	-	County Education Officer in-Charge-Of Special Needs Education
<b>CFS</b>	-	Child Friendly School
<b>CKRC</b>	-	Constitution of Kenya Review Commission
<b>CWD</b>	-	Children with Disabilities
<b>CWVI</b>	-	Children with Visual Impairments
<b>EARC</b>	-	Educational Assessment and Resource Centre
<b>EFA</b>	-	Education for All
<b>DANIDA</b>	-	Danish International Assistance
<b>DET</b>	-	Disability Equality Training
<b>EOCSNE</b>	-	Education Officer in- Charge of Special Needs Education
<b>FDSE</b>	-	Free Day Secondary Education
<b>FPE</b>	-	Free Primary Education
<b>HPS</b>	-	Hill Preparatory School
<b>ICT</b>	-	Information and Communication Technology
<b>IE</b>	-	Inclusive Education

<b>IEP</b>	-	Individualized Education Programme
<b>IIP</b>	-	Individual Inclusion Plan
<b>KESSP</b>	-	Kenya Education Sector Support Programme
<b>KICD</b>	-	Kenya Institute of Curriculum Development
<b>KISE</b>	-	Kenya Institute of Special Education
<b>KPHS</b>	-	Kenya Population and Housing Census
<b>KSB</b>	-	Kenya Society of the Blind
<b>KUB</b>	-	Kenya Union for the Blind
<b>LWD</b>	-	Life with Disability
<b>MCA</b>	-	Member of County Assembly
<b>MDG</b>	-	Millennium Development Goals
<b>MOE</b>	-	Ministry of Education
<b>NCPWD</b>	-	National Council for Persons with Disabilities
<b>NESP</b>	-	National Education Sector Plan
<b>PC</b>	-	Physically Challenged
<b>PPSS</b>	-	Principals of Public Secondary Schools
<b>PWA</b>	-	Persons with Albinism
<b>PWD</b>	-	Persons with Disabilities
<b>RS</b>	-	Regular Students
<b>RT</b>	-	Regular Teachers
<b>SADE</b>	-	Senior Assistant Director of Education
<b>SET</b>	-	Special Education Teacher
<b>SGB</b>	-	School Governing Bodies

<b>SIT</b>	-	School Intervention Teams
<b>SNE</b>	-	Special Needs Education
<b>SNER</b>	-	Special Needs Education and Rehabilitation
<b>SWA</b>	-	Students with Albinism
<b>SWD</b>	-	Students with Disabilities
<b>UDPK</b>	-	United Disabled Persons of Kenya
<b>UN</b>	-	United Nations
<b>UNCRC</b>	-	United Nations Convention on the Rights of the Child
<b>UNCRPD</b>	-	United Nations Convention on the Rights of Persons with Disabilities
<b>UNESCO</b>	-	United Nations Education Scientific and Cultural Organization
<b>UNICEF</b>	-	United Nations Children's Educational Fund.

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the Study**

According to Randiki (2002), historically before the 17<sup>th</sup> Century Persons with Disabilities all over the world were considered socially and physically less capable, hence they were not easily accepted as part and parcel of the family and community. They suffered neglect and rejection due to negative attitudes towards disability. Disability was regarded to have been caused by witchcraft curses, or punishment from God, consequently they were isolated from the rest of the people with the mind that disability is contagious. This is why inclusion and by extension inclusive education becomes an obvious focus for Persons with disabilities in the 21<sup>st</sup> century in public secondary schools.

Poverty is perhaps the greatest challenge facing the African continent and therefore education is an instrument of empowering every citizen and is important for reducing poverty and enhancing livelihood, in addition education plays an important role in human development by empowering people, improving their well being and strengthening their abilities to meet their basic needs and that of their families (Kenya National Bureau of Statistics, 2008). Education inculcates knowledge and empowers a person to participate in the development process. The reduction of poverty in the African continent can only be achieved if students with disabilities are given chance to acquire quality education in an inclusive setting. Employers use educational characteristics as a proxy for suitability and potential productivity of their employees (Oxaal, 1997).



Globally, 77 million children are out of education and about 25.7 million of these children are those with disabilities which are about a third of the total number, while the approximate number of children with disabilities in the general population in the world is about 10% (World Vision, 2007). World Health Organization (2004) points out that 90% of children with disabilities in developing countries are out of school. This implies that developing countries where Kenya belongs are most affected by about 23.1 million children with disabilities who are not getting their basic right, which is formal education, this may result from financial constraints, insufficient manpower, unavailability of the required infrastructure, and cultural beliefs and practices and negative attitudes by the populace towards Persons with Disabilities.

According to United Nations Education Scientific and Cultural Organization (UNESCO, 2005), Inclusion is a dynamic approach of responding positively to pupil diversity and of seeing individual differences not as a problem but opportunity for enriching learning. Inclusive education recognizes that these differences are variable and bring creativity and through them ideas are shared and experienced. In other words, inclusion is about transforming systems to be inclusive of everyone and not about inserting persons with disabilities into existing structures (UNICEF, 2009).

There are a number of international human right agreements that support the view that compulsory segregation in education is against children's and young people's basic human rights. These include the; Universal Declaration of Human Rights (1948) by United Nations Organization, UN Convention on the Rights of the child (1989), World Declaration for education for persons (1990) by UN, The Individuals with Disabilities Education Act (IDEA)

in USA (1990). Standard Rules on the Equalization of opportunities for Persons with Disabilities (1993), UNESCO Salamanca statement and Framework for action (1994), the Dakar Framework for Action (2000) and UN Convention on the Rights of Persons with Disabilities (2006). All these international organizations advocate for Inclusive Education and are explicit on the urgency of implementing education systems that enable all children to access formal education.

In South Africa, after the end of the Apartheid era, the new government that came in power in the Mid 1990s developed a White Paper no.6: entitled *Special Needs Education, building an inclusive education and training system that provides a framework for systematic change for development of inclusive education*” (Engelbrencht, Howell, & Bassett, 2002).

In Botswana, the Ministry of Education has introduced School Intervention Teams (SIT), which is school based resource services for assisting and advising teachers who have children with Special Educational Needs in their classes. Normally the head teachers, senior teachers, a social worker and individual child’s parent form the team. In this study there is need to establish if there is any intervention to help teachers perceive learners with disabilities positively as they teach them in the class room. <http://www.eenet.org.uk/theory-theory-practice/models-cbr.doc>.

In Tanzania, Inclusive Education is perceived to mean essential human right, a force for social change and vital means for combating poverty, empowering the marginalized, safeguarding children from exploitation and promoting democracy, and protecting the environment. Schools are encouraged to accommodate all children regardless of their

physical, intellectual, social or other conditions within their environment. This was presented during the Region Seminar, Sponsored by UNESCO (International Bureau of Education) entitled “*Poverty Alleviation, HIV and AIDS, Education and Inclusive Education: Priority issues for inclusive quality education in Eastern and Western sub-Saharan Africa.*” Nairobi, Kenya, (2007).

According to Mwesigye (2013), Uganda has established a model school, “*Hill Preparatory school (HPS)*” that has been providing Inclusive Education for the last 25 years where each child receives due attention and learners with disabilities share a lot with regular pupils in the mainstream classes. Inclusive Education emphasizes that differences and diversities in children must be respected and that no two children are the same in their learning characteristics. The aspect of learners sharing is what is unknown in the learners in Kenyan public secondary schools because this virtue is likely to promote the positive perception of learners without disabilities towards learners with disabilities.

Every Kenyan has a right to education, a right that is enshrined in the constitution. It is with this in mind that, in 2010, the government committed to providing free primary education, as well as including persons with any sort of disability in education and training. In addition, the objectives of Special Needs Education in Kenya are to: Facilitate the development of all learners with special needs spiritually, mentally, socially and physically; Develop in the learners analytical and productive abilities so that they may excel in learning and in their future careers; Enable learners acquire a suitable basic foundation for the world of work in the context of economic and manpower needs; Enable learners develop positive self-concept

and attitudes towards life, based on moral and religious values; Enable learners develop skills of coping and independent living aimed at habilitation, rehabilitation and adjustment; Identify and assess learners with special needs for early intervention services; Provide inclusion to learners with special needs in regular schools and institutions with appropriate support and related services; Provide learners with special needs in education with appropriate resources for learning in a barrier free environment; Create awareness in the community on the needs and potentials of learners with special needs so as to be more responsive to their diverse needs; Provide educational facilities, materials and equipment for the education of learners with special needs; Provide appropriate human resources for special needs education (MOE, 2007).

The objectives stated above have clear focus on the implementation of IE in our educational system, more so the objective that states about provision of inclusion to learners with special needs in regular schools and institutions with appropriate support and related services.

While reporting about International Day of Persons with Disabilities, Ochina (2015), emphasized the need for the Persons with Disabilities to be included in the society. According to the Kenya National Survey for Persons with Disabilities, there are more than a million persons living with disabilities in Kenya. However, far too many of them face barriers to inclusion in many key aspects of society. This includes education, transportation, and employment, social and political participation. As a result they don't enjoy access to society on an equal basis with the able. This right to participate in public life is essential to create stable democracies, active citizenship, and reduce inequality.

According to Cheptoo (2016), Inclusive Education programme could not be more important given that there are more than 1.3 million people in Kenya living with disability. According to a 2012 Draft Education Policy the enrollment of learners in special institutions represented about one-third of the expected number of learners with special needs. It is such exclusion from education that perpetuates the cycle of disability and poverty. Yet given a chance, PWDs are just as capable as the next person. For instance in the year 2013, one of the students with disability surprised the nation after he emerged the best visually impaired student in Kenya Certificate of Secondary Education (Cheptoo, 2016). The same student with disability emerged with a mean grade of “A” minus and joined the university. The Nakuru Boys’ High school graduate scored a mean grade of “A” minus. In addition the 2016 top KCPE boy overcame hearing disorder a disability of hearing impairment to post sterling results with aggregate of 437 marks out the possible marks of 500 marks and was declared the number one pupil in the country in KCPE in the year 2016 (Shilita, 2016). The Top student in the KCPE of 2017 was also a girl from Kakamega County, a girl with albinism; she scored 457 out the possible 500 marks.

The government of Kenya has made great strides in its attempt to fulfill and meet the goals of the Jomtein Conference, Education for All (UNESCO, 1990), especially starting in the year 2003, through the Free Primary Education (FPE) Policy (MOEST, 2003). The initiative has been instrumental in promoting the access of children with disabilities in primary schools. There may be no guarantee that the same accessibility applies to secondary schools especially in terms of financing, personnel, and infrastructural improvements. This was the information that was being searched for in the investigation.

Today, almost everything is having “electronic” prefix and the way to access information has changed substantially because of the many factors like fast advancements in computer technology and internet which is getting more and more widespread every day. Although some people stick to printed resources, the fact that electronic resources offer innovation and irresistible options in terms of cost and time is obvious. Therefore, learners with disabilities especially those with visual impairment should not be left out.

Reviewing the recent past, it can be seen that sharing method of resources of academic researchers were printed references. However, today lots of resources like; books, journals, encyclopedias, theses, scientific articles and reports are open for access in electronic databases in digital media (Assist & Ongoz, 2010). In recent years, the information superhighway, the Internet, has become a global gateway for information dissemination with the ability to share worldwide collections of information (Ekwelem, 2013).

Considering the growing activity in designing digital information centres, portals, intranets, repositories and databases and information centres promoting the use of web 2.0 technologies, it seems timely to note concerns to ensure that information is available to all. Concerns to design accessible web pages for visually impaired users should especially be headed (Kleynhans & Fourie, 2013).

Kochung, (2011), asserts that although there is no policy document on inclusive education per se, Kenya is a signatory to UNESCO Convention on the rights of the child and UN Convention on the Rights of the Persons with Disabilities (PWD) which are addressing issues of inclusion. The ideas on inclusion are contained in the Special Needs Education Taskforce

Report (2003), the Persons with Disabilities Act (2003) that emphasized the rights of PWDs and inclusion as top of the agenda in provision of education to learners with SNE. Session Paper No. 1 of (2005) recommends that the relevant machineries/systems to be put in place for the implementation of Special Needs Education (SNE) policy (MOEST, 2009). While discussing about easing of mobility, Manyira (2016), said that installing ramps and putting light switches at easily accessible levels are just some of the possible measures in the promotion of IE in public secondary schools. According to the 2009 census, approximately 1.47 million Kenyans live with some forms of public buildings and homes that are built in a way that does not take into consideration their specific needs.

During the National Conference on Inclusive Education (2016), organized by the Kenya Institute of Special Education (KISE), Matiang'i then Cabinet secretary Ministry of Education, Science and Technology (MOEST), emphasized that the conference was taking place at a critical time when the Ministry is reviewing the educational curriculum. According to Cabinet secretary the conference's outcome will greatly inform the policy direction on IE. He further asserted that the conference also coincided with the beginning of the implementation of sustainable Development Goals (SGDs) goals. The message that the CS was sharing with conference presenters and participants indicates the MOEST has also realized that there is need to have an Inclusive Education policy, which is actually overdue.

Total Integrated Quality Education and Training (TIQET, 1999) popularly known as the "Koech Report" called for equal treatment of the unequal. It advocated for flexible education system that could include learners with special needs. Not clear evidence shows that a study has been carried out to prove that there is equal treatment between students with disabilities and those without secondary school level.

At present, the Kenyan education system is experiencing the challenge of providing access to quality education to all children of school-going age on an equitable basis (Republic of Kenya, 2001). Because of the Free Primary Education (FPE) and Free Day Secondary Education (FDSE) initiative, a rapid rise in enrolments at primary and secondary school levels has been realized.

Resources are inadequate; classrooms are overcrowded, and are insufficient or are lacking in some cases, while the number of teachers is not adequate. Heavy workloads demoralize teachers (Mwangi & Kimu, 2003). Parents still have to provide funds for desks, uniforms, books, and building funds. This places a heavy burden on them, resulting in most pupils being taken out of school (Oketch & Rollerston, 2007).

The irregularity of the funds disbursements has been reported to be causing anxiety in the schools (Ogot, 2005). According to Wokabi (2013), implementation of IE at secondary school level in Kenya may not succeed if tax payers' money is not used properly. There was a concern by the Ministry of Education on how funds for Free Primary Education were utilized that should be corrected.

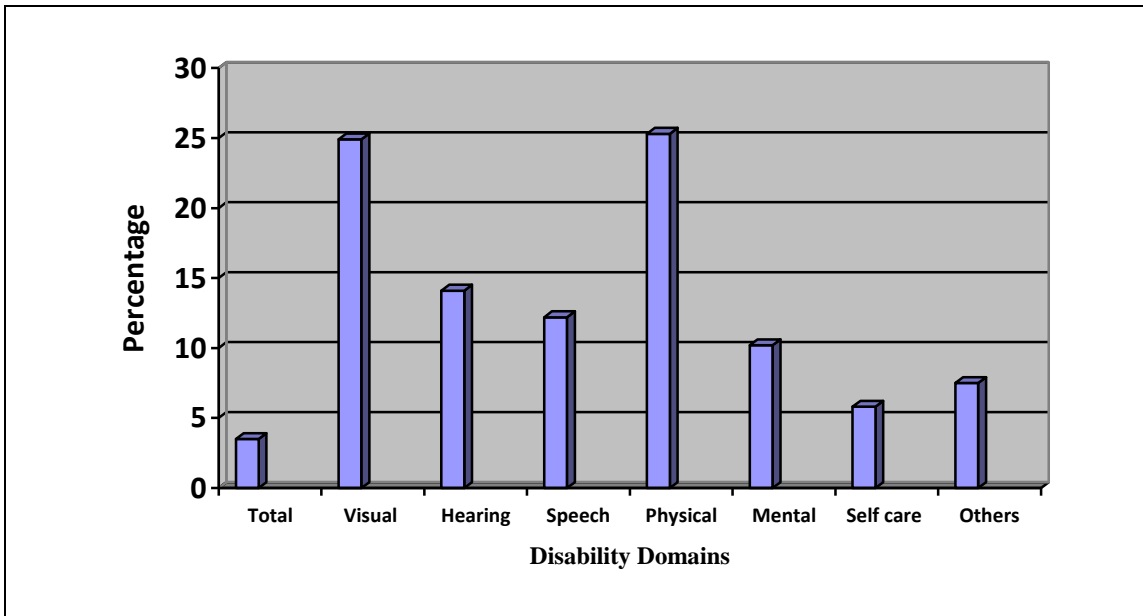
A Forensic audit released by the government in June, 2011 unveiled devious schemes used by a network of civil servants to steal Kshs. 4.2 billion meant to fund the (FPE). The audit, released by President Kenyatta, who was then Finance Minister, noted that infrastructure projects targeting schools are avenues that provide the conduit for tax payers' money to be funneled into the pockets of a few corrupt officials. No research has been carried out to



reveal how funds for learners with disabilities are being utilized for their beneficiaries at secondary school level.

In Kenya, the MOE is under mandate to respond to the constitution 2010 as stated in Article 43 of the constitution on Rights of Education to citizen, Article 53 on the rights to free and compulsory basic education and Article 54 on the Entitlement to access to education institutions and facilities for Persons with Disability (PWDs). The vision of the education sector is to make education in Kenya inclusive, relevant and competitive regionally and internationally (The Standard Newspaper, Thursday, October 2<sup>nd</sup> 2014 p. 26). The progress so made is not clear hence the need for this study.

According to Kenya National Bureau of Statistics (2012), total number of children attending school by Age and Sex were; over 15.6 million children, male were over 7.9 million children, female over 7.6 million children. The total age group 3-5, were over 3.5 million children, age group 6-13, were over 8.5 million children, and age group 14-17, were over 3.5 million children attending school. It also gives the various disability domains by age and sex. The results show that about 3.5% of the Kenyan population has some form of disability and that the number of persons with disabilities increased by age from 1.4% for children aged 0 to 4 years to about 30% for those aged 90 years and above.



**Figure 1.1: Proportion of Persons with Disabilities by Domain in Bungoma County**

**Source: Kenya National Bureau of Statistics, 2012**

From Figure 1.1, the most common form of disability was Physical Disability 25.3%, followed by Visual Impairment 24.9%. The two domains of disabilities are the ones registered for Inclusive Education in the three public secondary schools in Bungoma County. Other forms of disabilities include Albinism, Epilepsy, Cerebral palsy, Autism, learning difficulties and multiple disabilities.

The total number of male children without disability attending school aged 3-5 were over 1.8million, between 6-13 years were over 4.3 million, and those between 14-17 were over 1.7 million children. The female children without disability attending school in the age bracket of 3-5 were over 1.7 million, those aged between 6-13, were over 4.2 million and those between 14-17 were over 1.7 million children (KNBS, 2012).

Children without Disability attending school were as follows: the total numbers of children were 15.2 million; the male children were over 7.7 million, and the female children attending

school were 7.5 million. Age groups of 3-5 attending school were over 3.5 million, between 6-13 years were over 8.3 million children, and between 14-17, were over 3.4 million children. The male children without disability attending school in the age bracket of 3-5 were over 1.78 million children, and the female children were over 7.4 million. Those in the age group of 6-13 male children without disability were over 4.2 million, and the female children without disability were over 4.1 million. In the age group of 14-17, the male children without disabilities were over 1.7 million and the female children were over 1.6 million (KNBS, 2012).

The total number of children with disabilities attending school was 370,131 children, this comprised of 199,058 male children and 171,073 female children with disabilities. In the age group of 3-5 years the total was 62,054, between the age of 6-13 the number was 206,981 and between 14-17 age group we had 101,096 children. The male children with disabilities attending school between the age group of 3-5 were 33,952, between 6-13 age group, was 111,902, and between 14-17 were 53,205. The female children with disabilities attending school in the age group of 3-5 were 28,102, and between, 6-13, were 95,080 while those ones between, 14-17 were 47,891 children (KNBS, 2012).

There are 1,504 (0.48%) Students with Disabilities out of 315,000 Students with Disabilities in the country attending public secondary school where we have Inclusive Education programme. Bungoma County has 107 (0.07%) of Students with Disabilities out of 39,122 Students with Disabilities attending public secondary school with the following domains of disabilities; Visual Impairments (Low vision, Total blindness), and Physical Disability.

Bungoma County has only 3(1.25 %) public secondary schools out 240 that implement IE (Kenya Population Census, 2009). This implies that 237 public secondary schools do not implement IE as stated in objective number 7 of the objectives of special education in our country. The 3 public secondary schools include; public secondary school no. 1, admits students with Low Vision and Total Blindness, while the public secondary school no. 2, admits students with Low Vision, and public secondary school no. 3, enrolls students with physical disabilities.

Kenya National Bureau of Statistics (2012), reveals that about a third (30.3%) of Children with Disabilities were attending school while 21.0% never attended school. One in five children with disabilities attending school had Physical Disability, followed by those with Visual Impairment, 19.4%, and Hearing Impairment, 19.3%. The least proportion of CWDs attending school had Self-Care difficulties, 2.5%. Only a small proportion of PWDs reached secondary school, 2.4%, or tertiary/college, 2.6%. More males than females reached these levels; and more female PWDs than male PWDs never attended school. This is the reason why the wanted to establish the determinants of implementation of Inclusive Education in order to look for long lasting solution for persons with disabilities (KNBS, 2012).

Bungoma County had a total of 240 and public secondary Schools and only 3 inclusive schools in the year 2016 during the survey. The County was in the 7<sup>th</sup> position out of 47 counties in the number of public secondary schools after Kisii county 317, Makueni County 311, Kakamega County 297, Machakos County 269, Kitui County 265, and Murang'a 263 (Ministry of Education, 2014). The figures given for IE are contrary to the National Special

Needs Education Policy Framework (2009) that emphasized Inclusive Education (IE) in all public secondary schools hence the need to establish the determinants of implementation of Inclusive Education as shown in Table 1.1.

**Table 1.1: The Population of Public Secondary Schools in the Top Seven Counties**

<b>County</b>	<b>Number of Public Secondary Schools</b>	<b>Number of Inclusive Schools</b>	<b>Rank</b>
Kisii	317	0	1
Makueni	311	0	2
Kakamega	297	0	3
Machakos	269	1	4
Kitui	265	5	5
Murang'a	263	3	6
Bungoma	240	3	7

**Source: Ministry of Education, 2014**

Ministry of Education (2018) came up with Sector Policy for Learners and Trainees with Disabilities. The National Education Sector Plan-NESP (2013-2018), highlights the need for review of the Special Needs Education Policy (2009) (MOE, 2018) so as to align the sector policy to the Kenyan Vision 2030, the Constitution of Kenya, the Sustainable Development Goals as well as the National Curriculum Reform. The SNE Policy Review Data Collection Report (2016) pointed out that, the (2009) Special Needs Education Policy framework was not effectively implemented due to lack of implementation guidelines, poor dissemination and lack of an implementation and coordination framework.

The policy has been developed with an overall goal of promoting the provision of education and training for learners and trainees with disabilities. The pursuit of this goal has necessitated several critical shifts from the 2009 Special Needs Education Policy. Inclusive Education is now the over arching principle of the entire policy.

Policy implementation guidelines cover the 15 policy areas namely:

Inclusive Education, Assessment and early intervention, Access to quality and relevant education and training, Quality learning environment, health and safety, Specialized learning resources, assistive devices and technology, Capacity building and human resource development, Public participation and engagement, Advocacy and awareness creation, Equity and gender mainstreaming, Curriculum, Financing and Sustainability, Partnership, collaboration and coordination, Research, data management and innovation, Inclusive Disaster Risk Reduction, Mentorship, moulding and nurturing of national values (MoE, 2014).

Initially, due to lack of policy guidelines to implementation the 2009 SNE Policy, Other Special Needs and Disabilities like Hearing Impairment, Emotional Behavioral Difficulties, Intellectual Challenges, Gifted and talented learners, learning disabilities, and Children living under especially difficult circumstances namely those with their mothers in prison, those ones from pastoral communities, the abused students, those affected and or infected by HIV and AIDS, those from very poor families, the children from streets (street children), and the orphans are not catered for in the inclusive programme in public secondary schools. Only SWDs and particularly those with Visual Impairments, Total Blindness, and physical challenges are considered for IE, but still the SWDs mentioned above in the inclusive

programme experience a number of challenges among them, insufficient finance, few human resources to handle them, overcrowded classrooms, inaccessibility to various structures, such as classrooms, toilets, laboratories, dormitories and school transport, Braille transcribers, and large print, touch reading, human reader support and Pictograms, flat grounds for easy mobility, community involvement, and lack of commitments to support students among others. There is no study so far that has empirically and elaborately looked at the determinants of implementation of IE in public secondary schools hence the need to have this study in Bungoma County to serve a Model in our country. Perhaps other SWDs are in private secondary schools in the County, but the situation in public secondary schools is not promising, unless the 15 Policy guidelines stated above are fully implemented.

## **1.2 Statement of the Problem**

The Sector Policy for Learners and Trainees with Disabilities reviewed the weaknesses of the Special Needs Education Policy Framework, which included lack of implementation guidelines, poor dissemination and lack of an implementation and coordination framework.

Extra funding disbursements cause anxiety in public secondary schools because of its delay in being released and reported mismanagement and embezzlement in addition to being insufficient to implement IE in public secondary schools. Human resources take central role in influencing implementation of IE. Teachers trained in Special Needs Education, Physiotherapists, Occupational Therapists, Teacher Aids, Matrons, Patrons, Nurses, Social Workers, Psychologists, Counselors, and Paraprofessionals among others are key determinants in effecting IE in public secondary schools. But the major challenge is, do

public secondary schools have enough and efficient human resources to implement IE in public secondary schools?

The implementation of IE require the availability of physical resources such as spacious classrooms, Braille machines, typewriters, photocopiers, projected resources, computers, tape recorders, embossers, Closed Circuit Television (CCTV), wheelchairs, eye glasses, artificial limbs, boots and calipers, crutches, walkers, climbing bars, scooter boards, braces, trolleys, rocking chairs, mobility chairs, bolsters, bumpers, prone boards, ramps, adapted toilets, games and sports facilities for learners with disabilities especially those with Visual Impairments and Physical Challenges that are in Inclusive Education, lack or insufficient resources mentioned about may pose a challenge in the implementation of IE.

The influence of both Students with Disabilities and Regular students in the implementation of IE in public secondary schools is important. The students are supposed to interact academically and socially to make the school environment welcoming for all students. When students work cooperatively, play together, do assignments jointly, walk home hand in hand whether with disabilities or not, the school quality of education provided will benefit all.

It is against this backdrops that the study was conceived to establish determinants of the implementation of IE in public secondary schools in Bungoma County, Kenya.

### **1.3 Purpose of the Study**

The purpose of this study was to establish the determinants of the implementation of Inclusive Education in public secondary schools, Bungoma County, Kenya.



#### **1.4 Objectives of the Study**

The objectives to this study were as follows:

- i. To establish the extent to which extra funding by MOE influences the implementation of inclusive education in public secondary schools.
- ii. To determine the extent to which human resources influence the implementation of inclusive education in public secondary schools.
- iii. To determine the extent to which physical resources available influence the implementation of inclusive education in public secondary schools.
- iv. To establish the extent to which students with disabilities influence implementation of inclusive education in public secondary schools.
- v. To establish the extent to which regular students influence implementation of inclusive education in public secondary schools.

#### **1.5 Research Questions**

This study was guided by the following research questions:

- i. To what extent does extra funding by MOEST influence the implementation of inclusive education in public secondary schools adequate?
- ii. To what extent do human resources influence the implementation of Inclusive Education in public secondary schools?
- iii. To what extent do physical resources influence the implementation of inclusive education in public secondary schools?
- iv. To what extent do Students with Disabilities influence the implementation of Inclusive Education in public secondary schools?

- v. To what extent do regular students influence the implementation of Inclusive Education in public secondary schools?

### **1.6 Scope of the Study**

The study was carried out in Bungoma County among the following respondents: County Director of Education (CDE), County Education Officer in charge of SNE, Principals of public secondary schools that have registered programmes for the implementation of Inclusive Education in public secondary schools namely; public secondary school No. 1, public secondary school No. 2, Misikhu, and public secondary school No.3, and students that are in the three public secondary schools that are implementing Inclusive Education in the County. The study focused on the determinants of the implementation of Inclusive Education specifically the financing implementation inclusive education in public secondary schools, human resources implementing inclusive education in public secondary schools, physical resources available in the implementation of inclusive education in public secondary schools, and the influences of students towards the implementation of inclusive education in public secondary schools.

### **1.7 Assumption of the Study**

The study assumed that;

- i) Schools had qualified teachers to implement Inclusive Education in public secondary schools.
- ii) Implementation of Inclusive Education was being done according to the Special Needs Education Policies of 2009 and 2018.

iii) Public secondary Schools are equipped enough to manage implementation of inclusive education at secondary school level.

### **1.8 Limitation of the Study**

The study used questionnaire for data collection, the study may be limited by the way the respondents gave their answers; some may not have concentrate or had no time to respond or focus on the questions and ended up imagining answers to please the researcher. This was cushioned and minimized by use of interview schedules and observation guideline.

### **1.9 Theoretical Framework**

This study is based on the Social Model of Disability, as discussed by Rieser (2002). The model encourages the society to view the issue of including the Persons with Disabilities from a human right and equality perspective rather than focusing them as being faulty. The model views the barriers that prevent PWDs from participating in any situation as what handicaps them. The disability movement comprising of the PWDs and their supporters are of the views that the position of the PWDs and the discrimination against them are socially created. Through fear, ignorance and prejudice, barriers and discriminatory practices develop which disable and handicap them. The PWDs are often made to feel that it is their fault that they are different. Impairment does not make them less human beings, which is emphasized by social model of disability. The PWDs and supporters movement believe that the cure of the problem of disabilities lie in the restructuring of the society, and not focusing on the individual's impairment (Rieser, 2005).

In an inclusive setting, it is the school's responsibility to re-adjust to meet the learner's needs but not the learner to adjust to meet the school's requirements. It is well understood that Students with Disabilities could experience difficulties in the education system due extensive, demanding, rigid and inflexible curriculum, inaccessible school environment, lack of adequate resources and materials, negative attitudes among others. However, the inclusive education approach suggests that, those difficulties should not be explained simply in terms of children's impairments. It is discouraging for the learner to face problems due to his/her impairment. Under such circumstances, the option is not to establish a separate special school, which would further separate these children from their peers and families, neither is it cost-effective. Instead, the school should not be seen as creating barriers to learning for the students with disabilities by failing to create an enabling and supportive environment for them. A more appropriate response is to understand the barriers to learning and work out systematically to alleviate them. This model sees the strength of the student, rather than the disability.

The Social model of disability as applied in this study, views many students with disabilities as being locked out of educational opportunities due to barriers related to school, resources, teacher and other socio-cultural factors. To work towards inclusion is to work towards the removal of such barriers. That could be done by trying certain intervention measures which could lead to removal of the barriers. When this is done, it is expected that the handicapping conditions would be limited even though the impairment would still be there. The study therefore used the social model of disability for this is the one that favors the idea of

inclusive education and encourages the removal of barriers that hinder the students with disabilities from accessing quality education.

### **1.10 Conceptual Framework**

Mugenda and Mugenda (2003) and Orodho, (2005) define conceptual framework as model of representation where a researcher represents the relationships between variables in the study and depicts them diagrammatically. For the implementation of Inclusive Education to succeed, various inputs must be put in place. The extra funds for Students with Disabilities to enhance implementation of Inclusive Education, the human resources to run the programme, the physical resources should be made available and the influences of students both those with disabilities and those without disabilities.

## INDEPENDENT VARIABLES

### Determinants of Implementation of Inclusive Education

#### Extra Funding

- Additional capitation for Students with Disabilities

#### Human resource

- Various Professionals trained personnel

#### Physical Resources

- Classrooms, toilets, ramps on buildings, libraries, Adapted playgrounds, tables, desks, equipment, white/blackboards, apparatus, pavements, etc

#### Students with Disabilities

- Physical Disabilities
- Visual Impairments
- Total blindness

#### Regular Students

- Students without disabilities

## DEPENDENT VARIABLES

### Implementation of Inclusive Education

- Extra funds well utilized for the benefit of SWDs
- Committed trained personnel in helping SWDs
- Regular teachers having positive attitudes towards SWDs
- Well designed infrastructure that caters for SWDs
- SWDs attending classes in PSS
- SWDs participating in co-curricular activities alongside RS
- RS interacting with SWDs socially
- SWDs interacting with RS academically

### INTERVENING VARIABLES

- Insufficient extra funding
- problem of teachers trained not employed by TSC
- Socio-economic status of parents of SWDs
- Cultural beliefs and practices towards SWDs
- Age of students
- Gender of the students
- Self-stigma SWDs

**Figure 1.2: A Conceptual Framework showing the determinants of the Implementation of Inclusive Education**

### **1.10.1 Application of the Conceptual Framework**

The study was based on a conceptual framework that shows the relationships between various factors that influence implementation of inclusive education in public secondary schools. The independent variables were the influences of extra funding by MOEST towards inclusive education, the influence of human resources, who included Principals of public secondary schools, Special Education teachers and Regular teachers of public secondary schools, and other personnel in the school like social workers, nurses, teacher aid among others was one of independent variable, the influences of the Physical resources that included, spacious classrooms, adequate and relevant textbooks, teaching aids, learning aids, proper chalkboards, ramps for accessing stairs for the physically and visually challenged, flat grounds, well ventilated and lighted classrooms, wide doors for accessing rooms for those ones using wheelchairs were also among independent variables, in addition the influences of students with disabilities and those without disabilities towards implementation of inclusive education were also independent variables. Dependent variable was the implemented inclusive education programme in public secondary schools. The intervening variables included proper teaching using relevant teaching and learning aids, good Schemes of work and lesson plans, records of work, proper purchase of quality items, durable tools, purchasing the right items, and assistance from quality assurance officers.

### **1.11 Significance of the Study**

The findings adduced from this study are valuable in widening the existing knowledge base on determinants of implementation of inclusive education especially as it regards its implementation. This study thus provided an impetus for further research into Special Needs Education in Kenya, building on the existing research base in the implementation of inclusive education. The findings deduced from this study was significant in shedding light on the financing, human resources available, physical resources in public secondary schools, and the influence of both students with disabilities and those without in the determination of the implementation of inclusive education in public secondary schools.

The study avails functional information for the government, school communities, school administrators, and educational policy makers to refocus on the determinants of the implementation of inclusive education and develop a more ideal progression towards inclusion, including massive capital outlay, deployment of qualified and sufficient personnel, construction of enough physical resources that are well equipped, and social mobilization of students for attitudinal change to encourage acceptance of persons with disabilities into main stream schools and society. The Ministry of Education, Science and Technology (MOEST) may consequently find the results adduced from this study helpful in the management of inclusive education in public secondary schools a dream come true.



## **1.12 Operational Definition of Terms**

**Affirmative Action:** Action or policy favoring those who tend to suffer from discrimination especially in relation to education or employment.

**Assistive Devise:** Any item, piece of equipment, or product system that is used to increase, maintain, or improve independent functioning capabilities of students with disabilities by replacing or modifying a body part or body function

**Determinants of Inclusive Education:** These are factors which influence the implementation of IE in public secondary schools such as; extra funding, human resource, physical resources, students with disabilities and regular students.

**Disability:** Lack or restriction of ability to perform an activity in the manner within the range considered normal within the cultural context of the human being.

**Domains of disability:** These include; Visual Impairments, Hearing Impairments, Speech Impairments, Physical Disabilities, Mental Disabilities, Self-Care Difficulties.

**Environmental design:** Preparing and modifying the environment to suit persons with special needs and disabilities to access learning, mobility and manipulation of the environment.

**Handicap:** A problem that a person with a disability or impairment encounters in interacting with the environment or from society's attitude towards a disability.

**Human Resources:** Professionals who offer support services in the education of learners with special needs such as teachers, teacher aides, Physiotherapists, Occupational therapists, Nurses, Counselors, Educational psychologists, Mobility instructors, Life guards, Peers, and House mothers/fathers.

**Impairment:** It is an injury, deficiency or lessening of function in a student.

**Implementation of IE:** The activities that is on- going in public secondary schools that provide proof that IE has been embraced.

**Inclusion:** Philosophy which focuses on the process of adjusting home, school, and society so that all the individuals, regardless of their differences, can have the opportunity to interact, play, learn, work and experience the feeling of belonging, and experiment to develop in accordance with their potential and difficulties.

**Inclusive Education:** An approach where students with disabilities are provided with appropriate educational interventions with regular institutions of learning with reasonable accommodations and support.

**Integration:** A process through which students with and without disabilities are taught together to the maximum extent possible in a least restrictive environment. The student is expected to adapt to the environment.

**Mainstreaming:** Placing Students with Disabilities in the regular classroom of the regular students where they enjoy or share same classroom environment using same instructional procedure.

**Material resources:** Non-human resources which are designed or adapted to assist learners/persons with physical disabilities, chronic health impairments and multiple disabilities to be able to cope with the challenges they encounter in the environment.

**Other Forms of Disabilities:** This is any other disability not mentioned or covered within the above domain. These include albinism, epilepsy, cerebral palsy, autism, learning difficulties and multiple disabilities.

**Physical Education:** Promotion of students' social, physical, mental, and emotional development through movement activities.

**Physical resources:** These are Classrooms, Libraries, Dormitories, staffrooms, offices, chairs, tables, white/blackboards, equipment, desks, apparatus etc in public secondary schools.

**Regular students:** Students in public secondary schools without disabilities.

**Regular teachers:** Teachers in the regular schools who are not trained in Special Needs Education.

**Remedial Physical Education:** It is a modification of physical education programmes to meet the diverse needs of individual learners.

**School administrators:** Principals, deputy Principals, senior teachers, and head of departments of public secondary schools in Bungoma County.

**Special Needs Education:** Education which provides appropriate modification in curriculum delivery methods, educational resources, medium of communication or learning environment to cater for individual differences in learning.

**Special Needs Education Teacher:** A teacher who is trained to teach and support students with disabilities in education.

**Special Units/Special classes:** Units/classes established in either regular or special institutions of learning to cater for the needs of students with disabilities.

**Students with Disabilities:** These are students in public secondary schools with impairments/handicaps/disabilities/challenges learning in regular schools along side with regular students.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter focuses on literature review from books, journals, periodicals, magazines, newspapers and internet based on the objectives of the study which were to: establish the extent funding MOE influences implementation of Inclusive Education, determine the influence of Human Resources in the implementation of Inclusive Education, determine the extent to which Physical Resources influence implementation of Inclusive Education, establish the Influence of students with disabilities in the implementation of inclusive education, and also establish the Influence of Regular students in the implementation of inclusive education.

#### **2.2 Extent to which extra Funding influences Implementation of Inclusive Education.**

As Heward (2006) reveals that the 1974 Legislation Amendments (Public Law, 93-380), had the implications of the extension of the previous legislations of providing money to state and local districts for programmes for the gifted and talented students for the first time. One wonders if there has ever been any legislation of this kind in our country, and even proper assessment of learners who are gifted and talented and worse off, it is not surprising for one to refuse the assertion that the Gifted Talented students are not students with disabilities. If the Gifted and Talented students were allocated adequate funding, these brainy Kenyans could obviously influence the country's economic growth positively. In Bungoma County, there was no documented evidence that indicates any plan by public secondary for funding the programme for the gifted and talented students.

UNESCO (1993) asserts that inclusive programmes are desirable in developing countries in that, it is estimated that about 80% of the world's population of people with disabilities live in developing countries of Asia, Africa, the Caribbean, Latin America, and the Middle East, with 150 million of them being children and only 2% are receiving special needs services. Carrington and Robinson, (2004) opined that a well-structured funding arrangement is enviable for meeting the cost of providing adequate educational services for children with disabilities in inclusive schools. In many developing countries, special education services are not being adequately funded to their prevailing economic and political turbulence (Carrington & Robinson, 2004). The implementation of Inclusive Education in South Africa has been boosted through the funding by DANIDA in collaboration with the National Department of Education (NDE). The funding by DANIDA has enhanced the chances of learners with disabilities and special needs of accessing formal education in the country and promoted diversity and acceptability of students with disability by their peers who have no disabilities (Engelbrencht, Howell, & Bassett, 2002).

According to Mukhopadhyay, (2003), international, national and local NGO's provide charity and welfare approach to persons with disabilities. There are at least 1,000 NGOs and voluntary organizations actively engaged in education and are perceived as widening the implementation network that brings flexibility and innovation. It is not clearly stated in our country the role the NGOs play in the implementation of Inclusive Education especially as it pertains to financing the programme and construction of physical resources and/or installing necessary equipment.

While reporting about International Day of persons with Disabilities, Ochina (2015) emphasized the need for the people with disabilities to be included in the society. One billion people around the world are living with disabilities. According to the Kenya National Survey for Persons with Disabilities, there are more than a million disabled people in Kenya. Far too many of them face barriers to inclusion in many key aspects of society. As a result they don't enjoy access to society on an equal basis with the able. This includes transportation, employment, education, and social and political participation. This right to participate in public life is essential to create stable democracies, active citizenship, and reduce inequality. The main issue has been insufficient funds to enforce the implementation of IE especially in developing countries. It is a fact that developing nations are constantly struggling to meet their national budgets. Most of them only manage through borrowing and getting grants from other countries. The role of the civil sector in resource mobilization and support to different countries cannot be overemphasized. With increasing population and high numbers of children with disabilities, IE will be very expensive in comparison with the current SNE education in the country (Ochina, 2015).

Ngugi and Kabuchora (2010) observe that it is mistakenly assumed that learners with special needs demand extra resources and funding. Most countries that have decided to embrace inclusive education like; The USA, Germany, Israel, Ghana, Taiwan, and the Philippines have realized that this approach is more cost effective than regular and special education. This is because same resources, especially the physical infrastructure are utilized to teach more learners with diversity in ability if well planned. The information that is lacking is how this cost effectiveness is being utilized or viewed in Kenya and more so in Bungoma County in public secondary schools.

The authors further emphasize that funds can be used more effectively to cater for inclusive education, training non-material resources such as teachers, regular learners, management teams and community to enhance the capacity of the school to respond to learners diversity, establishing resource partnership between the national and local government with other potential resource providers such as international donors, non-governmental organizations, local business and industries of goodwill for financial and technical aid, merging funding system for mainstreaming and special education and allocating funds to schools in relation to the number of learners with and without special needs appropriately, funding simple and cost effective ways of overcoming barriers in the physical environment (ibid, 2010).

There are many international, national and local NGOs involved with disability Issues in India. Many local NGOs, while are diverse and widespread, tend to be based on charity and welfare approach (Thomas, 2004). Although the exact number is unknown, there are at least 1,000 NGOs and voluntary organizations actively engaged in education. NGOs are perceived by the government as widening the implementation network that brings flexibility and innovation into education programmes (Mukhopadhyay, 2003). There is no evidence to point to the fact that in our country we have such assistance by any organization in our public secondary schools, in addition if such network and assistance do exist, then it is opaque in terms of how the financial outlay is utilized for the benefit of students with disabilities in public secondary schools.

The government of Kenya's further attempt to fund SNE specifically targeted special schools, special units/integrated programmes and inclusive schools. The 151,000 Kenya shillings received by five project schools for assistive aids and environmental management in



2003 and 2004 were well utilized due to inclusive education knowledge and better monitoring strategies in the project. The irregularity of funds disbursements has been reported to be causing anxiety in the schools. In addition, the report by the Auditor General of alleged massive embezzlement of project funds in national and provincial school as revealed by Mbaka and Oduor has made parents, leaders more worried than ever before. The report raised audit queries on alleged misuse of Ksh 5.5 billion for free primary and day secondary education in the 2010/2011 financial year (Mbaka & Oduor, 2013).

But it is the lost millions meant for elevation of national schools that has raised serious concerns among stakeholders. Among the schools audited by the Auditor General for alleged embezzlement or misappropriation of the money are Kenya high, Lenana School, Nairobi school, Friends School Kamusinga, Starehe Girls School, Kenyatta high school Mwatate, Malindi high school and Jamhuri high school. Such reports call for establishment of status of financing inclusive education in public secondary school level, and how the funds are used in support of the inclusive education for students with special needs education and disabilities (Mbaka & Oduor, 2013).

While talking about establishment of a university for deaf and dumb, the then Education Cabinet Secretary, Jacob Kaimenyi revealed that deaf students face challenges of transition to universities due to their unique needs which are difficult to handle in normal institutions that require more funding which cannot be detected when they are learning with regular students, therefore this study was to analyze the nature and extent of the financing the implementation of inclusive education to approve or disapprove the same given that the senior most officer in the Ministry of Education, Science and Technology (MOEST), accepts

that the learners with disabilities face challenges in the regular system of education because of inadequate funding. The argument by the CS of advocating for the University for the Deaf And dumb was against the philosophy of inclusion of students with disabilities and those without disability. The terms Deaf and Dumb are demeaning and abusive; instead the right phrase should be students with hearing disabilities (Daily Nation's correspondents, 2014).

The Cabinet Secretary told needy students with Special Needs and disabilities to apply for students' loans set aside by the ministry. He stated that the government set aside Kshs 390 million in the year (2013) for students with special needs and disabilities. It set aside a similar amount in the year 2014. The CS further revealed that while a regular student receives Kshs 1,200 per pupil in primary schools, those with disabilities were awarded Kshs 2,000 per pupil. Given the diversity of disabilities, one will easily notice that the amount mentioned above may be just a drop in the ocean for the public primary schools. Therefore, what about public secondary schools that have to cover a deep rooted content and require more infrastructural outlay and expensive equipment in their regular schools where they are included. There is no clear information about funding by government in public secondary schools, therefore, this is the knowledge that the study intends to fill, (Daily Nation's Correspondents, 2014).

According to Sector Policy for Learners and Trainees with Disabilities (2018), the policy statement was that, the MoE shall continuously review and increase budgery allocation to institutions and programmes that provide education and training and trainees with disabilities.

The MOE shall strategize by; determining the unit cost of education for each Student with disability, implement affirmative action in provision of health and social services, bursaries, education loans and scholarships to students with disabilities, and establish and promote public-private partnerships in funding education for students with disabilities (MoE, 2018)

### **2.3 Determine the extent to which Human Resources influence Implementation of Inclusive Education**

Bowman (2002), in her 14-nation UNESCO study, reported a wide difference in education administrators and teachers' opinions regarding inclusion. The countries surveyed were; Egypt, Jordan, Columbia, Mexico, Venezuela, Botswana, Senegal, Zambia, Australia, Thailand, Czechoslovakia, Italy, Norway and Portugal. The educators were found to favour different types of children for inclusion into ordinary classes. Although teacher responses varied in terms of the development of their educational systems in general and of special education in particular, there was a general hierarchy of conditions that were more or less of inclusion.

Severe Mental handicap and multiple handicaps were all considered least favorably considered for inclusion, while Medical and Physical conditions were seen as most easy to manage. the above sentence points to the discussions and arguments that arise from the medical model of disability and social model of disability where the former advocates for medical fixing or curing of disability and the later suggesting that the society should adjust environmental infrastructure and varied cultural practices to accommodate persons with disabilities. Overall, about 25% of teachers felt that children with sensory impairments could be taught in mainstream classrooms, while less than 10% held this view for children with

severe intellectual impairment and multiple handicaps. This already suggests that inclusive education in itself is exclusive according to the teachers who are key implementers of inclusive education in public secondary schools in our country.

In Botswana, the Ministry of Education has introduced School Intervention Teams (SIT), which is school based resource services for assisting and advising teachers who have children with Special Educational Needs in their classes. Normally the head teachers, senior teachers, a social worker and individual child's parent form the team. In this study there is need to establish if there is any intervention to help teachers perceive learners with disabilities positively as they teach them in the class room. What is strongly emerging from the discussion is that is that involvement of stakeholders especially parents and guardians may improve efforts in the implementation of inclusive education.

<http://www.eenet.org.uk/theory-theory-practice/models-cbr.doc>

It is well known that, over the last three decades, school populations have become increasingly diverse, with students coming from a broad range of culture, socioeconomic backgrounds, language environments and family structures, as well as having a wide range of abilities (Meadan & Konda, Amaya, 2008). Providing a quality education for all students in an inclusive setting is therefore acknowledged as the most challenging issue in education today. This is especially so if the human resources to manage inclusive setting are not qualified in special needs education. It is important therefore, to know if the public secondary schools do have enough qualified human resources for the purpose of sound implementation of inclusive education in public secondary schools.

According to Agbenyega (2006), many regular education teachers who feel unprepared and fearful to work with students with disabilities in regular classes display frustration, anger and negative attitude towards inclusive education because they believe it could lead to lower academic standards (Gary, 1997; Tiegerman Farber, 1998).

Additionally, access to resources and specialist support affects confidence and attitudes towards inclusive education (Bennett, 1997; Katzenmeyer, 1997). The teachers' beliefs about inclusion suggest that they do not regard students with disabilities, particularly those with sensory impairments and multiple disabilities as belonging in the regular classes and would rather prefer them being educated in existing special schools, teachers also believed that including students with disabilities limits the amount of teaching work they do thereby resulting in incompleteness of the syllabuses, teachers also believed that if students with disabilities were included in regular classes, it would affect the academic performance of their peers without disabilities. Teachers perceived that their professional knowledge and skills were inadequate to effectively teach students with disabilities in regular schools. Further, the teachers expressed fear and concern, that because they do not have the required knowledge and expertise to teach students with disabilities who are included in their regular classes, it is contributing to a reduction in the academic success of their schools.

Hiuhu and Nabea (2009), strongly advocate human resource with a Will to offer support services in the education of learners with special needs and disabilities. They mention the following as necessary human resources and their important roles: teachers as very important human resources as far as learners with special needs and disabilities are concerned. teachers

plan for teaching, they conduct lessons, prepare teaching materials, make adaptations of educational resources for learners with special needs and disabilities, provide guidance and counseling for learners with special needs and disabilities, collaborate with other professionals, parents and members of the community on issues that affect learners with special needs and disabilities, and make adaptations for physical activities and co-curricular activities for learners with special needs and disabilities especially those with physical challenges and health impairments. For such activities to be undertaken more effectively and successfully the human resource aspect must take the central place in the implementation of inclusive education, this information is not known in our public secondary schools in our country.

Another important human resource is the teacher aid who is a helper of the teacher in the classroom, whose main responsibility is to settle the learners in the classroom and in the process assists the teacher in the management of learners with special needs and disabilities. specifically the teacher aid assists learners in maintaining self-hygiene, learners with poor grip and amputees in feeding and other related activities, assist the teacher in displaying learning and teaching materials, and also assists learners during the lessons for example in sharpening pencils, turning pages and in movements.

Occupational therapists are also important human resource because they are health trained professionals who assist learners with special needs and disabilities to master or acquire skills in occupational activities. They provide exercises that aim at making affected parts of the body become functional for activities of daily living. The exercises are important especial

for learners with physical challenges because these learners learn to take part in useful activities and skills of life and adult individuals with physical disabilities learn occupational skills and capacities which enable them to become independent.

Physiotherapists are professionals whose role is to manage motor difficulties by the use of physical exercises. They assess motor difficulties in individuals and develop programmes of exercises for them. The exercises help the individuals in the following areas: Improvement of joint mobility (joint range of motion), Strengthening of weak muscles, improvement of body balance, correcting the body posture, improvement of body coordination, improvement of muscle tone and, prevention of joint contractures.

A school nurse who is medically trained is a very essential human resource in dealing with taking care of the sick, the injured and ailing learners with special needs and disabilities. The nurse performs the following functions specifically: Attending to those who fall sick., Referring learners for further treatment when need be, Providing teachers with health status of learners who may require special attention, Checking on administration of drugs for learners with chronic ailments, Giving instructions on how to work with learners who suffer from epileptic seizures in school, Providing teachers with information about learners whose sensory motor or other health problems could affect classroom performance.

Counselors who are professionals with skills and knowledge on how to advice other persons understand and solve their problems play very important role in helping learners with special needs and disabilities in making these learners accept their conditions, cope with challenges that they face as a result of their disabilities, identify, explore and examine alternative

courses of action in relation to their problems, learn more about themselves in order to be effective members of the society, and realize that they have the ability to control their own destiny and to be fully responsible for their actions.

Hiuhu and Nabea (2009) also point out that Lifeguards who sometimes are called life savers are essential human resources. They are equipped with lifesaving skills during difficult situation in and outside the school. Some of the difficult situations include drowning in: swimming pools, Beaches, Seas and rivers. In a learning situation, for children with special needs and disabilities, a life guard's role is to: train them on safety precautions to observe when swimming, teach them how to swim, always be there anytime that children are swimming, administering first aid in case of an accident in the swimming pool, and training learners how to use floaters. It is essential that public secondary schools have Lifeguards that are handy in assisting students with special needs and disabilities, hence the need for this study.

Educational Psychologists are professionals who train in the field of study which deals with principles of learning, cognition, and approaches that apply to improve education. The profession endeavors to understand teaching and learning in an educational setting like a school. It is noted that some of the role of an educational psychologist in a school include: to consult with teachers about students who are experiencing learning or behavior problems, to assess children to find out if they could benefit from special education programmes, and to advise on how to work with learners with psychological and behavioral problems. This means that education psychology is very useful to the education of learners with special needs and disabilities.



Mobility Instructors who are specially trained to teach learners with poor mobility how to keep balance and movement are highly needed in an institution of learners with special needs and disabilities. They also teach orientation and mobility to those who have a combination of physical and visual impairment. These personnel missing in a school with students with physical challenges and health impairments will cause a lot of inconvenience to such students. There was need for this study to establish the influence of human resources as one of the determinants of implementation of inclusive education policy, the information that is currently scanty in our country and more so in Bungoma County.

According to MoE (2018), Sector Policy for Learners and Trainees with Disabilities: there is need to mobilize and allocate resources for provision of education and training for learners and trainees with disabilities, conduct stakeholder mapping for coordinated responses and interventions, identify resource gaps in the provision of education of learners and trainees with disabilities, allocate adequate human resource, and review budget allocation to factor in elements of natural attrition and cost of living for human resource.

#### **2.4 Extent to which Physical Resources available influence implementation of IE**

According to Smith (2007), since the initial passage in 1990 of Americans with Disability Act (ADA), physical barriers (e. g., curbs and stairs) and discrimination have reduced but certainly not eliminated. Unfortunately, physical barriers such as doors too heavy to open, school entrances too steep to negotiate, and unsuitable bathrooms still exist in many schools and public buildings. Even though not all problems are yet resolved, important changes

signal a better future of access and inclusion in mainstream society. The changing times have witnessed the following improvements:

The U.S. National Parks Service maintains accessible trails for outdoor adventures, Car rental agencies now have specially adapted vehicles for drivers with disabilities, allowing travellers with special needs to rent cars just like everyone else, Special cruise ships now offer passengers health services, such as dialysis for kidney patients, Special programmes for children and youth offer skiing, boating, sailing, and camping adventures. Children who use wheelchairs grow up today playing wheelchair basketball, cheered on by cheerleaders who also use wheelchairs, Marathon races have special events for those who use wheelchairs as well as those who run using bionic limbs, Resorts and vacation planners and city tourism offices seek out travelers with disabilities by offering free rides in boats that have special seats or advertising accessible monorails. Such infrastructural improvements are known to be considered in the developed countries like the USA but the information in our country is still very scanty in our public secondary schools.

According to Republic of Kenya (2005), the quality and adequacy of resources such as physical facilities have a direct bearing on quality of education, as they determine how effective the curriculum is implemented. Kochung' Report (2003), cited in Ministry of Education, (2009) noted that learners with special needs and disabilities require free environment to maximize their functional potentials. The planning of new buildings and the security of school facilities and equipment, has been having the tendency of making only minor changes from the arrangements of the past, on assumption that the same equipment

and instructional material could serve equally well for the nurturance of all forms of abilities in all children which has not been the case (Barbara & William, 1998).

Loss of vision seriously inhibits persons with visual impairment from accessing very useful information especially those available in print (Wusasa, 2013). As more people with disabilities attend higher institutions, it is incumbent upon information centre management to provide the same level of service to them as is provided to users without disabilities (Ekwelem, 2013). This is important because persons with visual impairment have the same need to have access to all kinds of information as everyone else (Javier & Calvo, 2014).

There have been some concerns about persons with disabilities; the UN Convention on the rights of persons with disabilities, Article 21 asserts that “State Parties shall take all appropriate measures to ensure that persons with disabilities can exercise the right to freedom of expression and opinion, including the freedom to seek, receive and impart information and ideas on an equal basis with others and through all forms of communication of their choice (Javier & Calvo, 2014).

Information centres are service organizations which give services without discrimination to their numerous users, including persons with disabilities. Digital information centres should be especially well-suited for the disadvantaged (Higgins, 2013). Persons with Disability are found aware of latest technologies and rely on training to utilize its benefits (Kumar & Sanaman, 2013). The development of assistive technologies have provided great opportunities for people with disabilities to transform their way of life in a productive way, efficient and result oriented way (Butucea, 2013).

While analyzing the assistive technology for visually impaired students; Cheptoo (2016) points out that there are advancements in assistive technology that have made it possible for the blind to keep up with emerging trends in ICT. Training in use of these tools is readily available at Nairobi's Kenya Society for the Blind. Laurence Momanyi although visually impaired, knows his way around a computer and after switching on the machine, he calmly explains how he is able to operate it. He explains that whatever he does on the computer is spoken back to him by accessibility software. Most computers and Smart phones have them. What is not known is if the same happens in the public secondary schools that have inclusive education and with disabilities especially visual impairment use e-learning or computers.

Quality education is associated with better health outcomes, better employment opportunities, higher socioeconomic status and improved general well-being (Ministry of Education, 2009). Education is a composite of many factors including teachers, learning materials, curriculum, learners and physical infrastructure. Since the introduction of free and compulsory primary education (FPE) in Kenya at the turn of the century, school enrolment has gone up remarkably but this has not been matched by a proportionate increase in school infrastructure (Ministry of Education, 2013; Kubania, 2014; Ministry of Education Science and Technology, 2005; Ministry of Public Health and Sanitation; Ministry of Education, 2010). The Kenya Education Sector Support Programme (KESSP) lists the priority areas for school infrastructure as “classrooms, toilets, storage facilities, fences, water supply infrastructure, furniture and cooking facilities” (MOE, 2005). Making buildings accessible to students with disabilities is one of the corner-stone of the implementation of inclusive education in public government secondary schools. Unfortunately, public school

infrastructure development has for a long time been used as a political tool and as such projects that have the highest visibility such as classrooms are preferred while others such as toilets are given lower priority leading to an overstretching of the available facilities.

Education is a right for all and children with special needs are not an exception; in Kenya, legislation is in place to push for a barrier-free environment that ensures integration and that all have equitable access to different social amenities and facilities including schools (Ministry of Education, 2012; Government of Kenya, 2010; United Nations, 2006; Ministry of Education, 2009). While special needs education in Kenya dates back to the colonial era, equitable access for children with special needs is yet to be achieved with this group of learners being the unfortunate victims of a non-enabling, largely inadequate and unresponsive system.

Children with disabilities have various special needs that we may broadly categorize as physical or social. Physical needs include ramps for ease of entry and exit into buildings for those with mobility impairments, Braille reading materials for those with visual impairments, lowered sink/wash basins, toilets with rails among many others. Such facilities, when integrated into our schools, make for a more inclusive learning environment. The presence and/or absence of these may be used as indicators to evaluate the disability-friendly status of a school.

The KESSP is a blueprint for improving equitable access to education and lists toilets as one of the key priority areas for school infrastructure development (Ministry of Education Science and Technology, 2005). The student explosion that was experienced in public primary

schools in the Post-FPE introduction was not matched by an equal increase in schools and associated infrastructure, toilets included. The availability of toilets has been grossly overstretched with several public primary schools having extremely high pupil toilet ratios (Kubania, 2014).

Toilets provide a critical component in a school's health and hygiene infrastructure so much that they have been shown to have a bearing on school absenteeism, retention/drop-out, completion and learning outcomes (Birdthistle, Dickson, Freeman, & Javidi, 2011). Moreover, toilets as a potential source of indignity when poorly planned come out strongly in the findings of Birdthistle *et al.* (2011). Toilets need to be constructed in a way that ensures the privacy of users and upholds their dignity. Whilst the findings of Bird thistle were based on a sex-based review, these can likely be extrapolated to learners with disability.

Construction of disability-friendly toilets requires thoughtful consideration of several aspects including: i) distance from classrooms and/or hostels, (ii) height positioning of door locks/handles, (iii) water availability, (iv) adequate space for ease of movement in the toilet, (v) ramps to aid entry and exit, (vi) nonslip floor surfaces, (vii) hygiene considerations and, (viii) rails or handles to aid balance (Jones, Parker, & Reed, 2002). These are some of the aspects that allow learners to use toilet facilities in a manner that upholds their dignity and allows them to use these facilities without third party help.

Specialized instructions and equipment enable learners with special needs and disabilities realize their optimal potential. Various specialized instructions such as Braille and sign language facilitate acquisition of communication skills of these learners. Diagrams and maps in tactile forms are essential in teaching a subject like geography. Communication boards are

tools that enhance language development. They are prepared to aid learners with disabilities in recognition, discrimination and memory. Sign language is an alternative communication mode for those persons who cannot respond to communication through the auditory sense (Ndani & Murugani, (2010). The Specialized instructions and equipment are vital in enhancing inclusive education.

As Barozi avers, there are a few examples of the many challenges people with disabilities in Tanzania face in their daily life. Accessibility is a still a very big problem in the country. There are many environmental barriers in the country such as buildings, public transportation, lack of level grounds in the institutions of learning, and narrow entries to various rooms which are largely inaccessible to learners with disabilities.

Manyuira, (2016) while making contributions on the “*making buildings accessible to people with disability*” strongly recommended several ways of making life better for persons with disabilities especially those ones with physical challenges. Installing ramps and putting light switches at easily accessible levels are some of the possible measures. Ramps are more critical in storey building. It is recommended that any smallest inclination possible as well as sufficient width to accommodate a person in a wheelchair is important.

On the staircase, in the case of a blind person, hand rails are necessary to add stability, and they should also extend a little beyond the staircase to ensure a smooth break of momentum, Mr. Ileri of Fusion Designs company that remodels houses says that, adding the edges of stairs should be rounded to avoid injuries to the legs in case one trips (Birdthistle, Dickson, Freeman, & Javidi, 2011). Mr. Ileri also considers electrical switches and sockets essential in

that with little tweaking, switches and sockets can give people with disabilities more independence which is vital to their comfort. Power outlets can be placed just above the floor while the light switches can be put at the eye-level of a seated person for ease of reach

Bathrooms are important areas for consideration. Replacing bathtubs with showers is one of the most common changes one can make to ease access for person with disability. This is because getting out of a wheelchair into a bathtub necessitates the presence of another person when the disabled person is bathing. That is why showers are preferred since they are more versatile. He adds that for people with communicable diseases and asthma, which he explains commonly, afflict persons with disabilities, air conditioners are vital because, apart from cleaning the air, they get rid of dust, which makes life extremely uncomfortable for asthmatics.

Students with physical disabilities may only succeed in the inclusive education if they have spacious rooms for free movement, provided with page turners for students with weak hands to be able to turn pages of books, avail book holders, use of adapted chairs to correct body posture, use of pencil grips, provide mobility devices such as wheelchairs, walking frames and crutches for movement, use communication boards and bliss symbols for those with speech problems and ensure that they wear the corrective appliances all the time( Ibid, 2010).

Kakui (2008), emphasizes that for Physical Education to succeed in an Inclusive Setting, the following requirements should be taken into consideration; the adapted physical education, corrective physical education, remedial physical education, adapted sports and adapted games. The modifications of physical education programmes come along with physical resources and equipment. Adaptation of Netball game will necessitate the height of goals to



be lowered for ease of access to wheelchair users, seated players, dwarfs and those with visual impairments, the circumference of the ring can be increased to enhance success in scoring by players without proper coordination and visual problems, adapt ball in terms of size, weight or inclusion of an audio device as signals to the goal rings for blind players, reduce or increase size of the ball for players with fine motor problems. The sound netball may also be required to help learners with visual impairments.

The Football game will also require modifications like reducing the size of the field, adapt ball with bell for the visually impaired may be used (sound ball), a lighter ball suitable for those with weak limbs can be used.

Volleyball game may require the following adaptations; lowering heights of nets, using light balls, increasing the grip (rough balls), using balls with sound for players with visual impairments. Hand ball game which is also common in secondary schools will require using a smaller and/or lighter ball and reducing the area of play. The adaptations of Hockey game will require the Institution to reduce the area of play to check on player's fatigue, provide a lighter ball, using a lighter hockey stick, which may be adapted further for ease of grasp by players with poor grasp, have a bell for learners with visual impairments, players using a widen hook of the stick (ball containing part of the stick) to increase the chances of contacting with the ball.

Basketball game's adaptations will require lowering the height of the ring; increasing the circumference of the ring, use of mobility aids like wheelchairs, use of lighter ball, and having a bell in the ball used by players with visual impairments.

Kakui further recommends several adaptations in sports for learners with disabilities in an inclusive setting such as reducing distance to be covered, participants to be allowed to use

their mobility aids; use of sighted guides, and using signals to start the race for learners with hearing impairment.

For the wheelchair racing the following adaptations may be required; using specially designed wheelchairs for speed, classification of the wheelchair participants to avoid advantage over them, having all competitors including those without difficulties in the wheelchair for a fair competition, and by the use of the same make of wheelchair.

Adaptations for Shot Put include using a lighter weight, accepting a shorter distance, use of wheelchairs to sit on when throwing, and enlarging the landing area. In the sport of hammer the following adaptations may be essential; reducing the weight, adapting the hammer by using a lighter material, enlarging the area of throw, allowing using one hand for amputees, and making a wider area for landing. Javelin sporting event can also be adapted by making it from light stick of wood, throwing from a sitting position, using mobility devices for support when throwing, accepting any distance attempted, and enlarging the landing area. The adaptations of discus for learners with disabilities include; reducing the weight by making implements from a lighter material, all throws can be done from a wheelchair or from a seated position, distance may be reduced, the landing area can be enlarged, and throwing circle can be enlarged.

Sports involving jumps may be adapted as follows: distance from the takeoff board to the landing area can be reduced, varying rules for takeoff and reduced for landing, and take off standing to landing area. Specifically vertical jumps will require adaptations to be done to suit the particular learner with disabilities for instance; lowering the barrier to be jumped over, using adapted pole, and using mattresses for landing according to Kakui (2008). The

same case applies to hurdles in adaptation that include lowering the height of the hurdles, reducing the number of hurdles to be cleared to increase spacing for running, and ramps can be used instead of hurdles for learners with mobility devices.

According to Kakui and Muga (2008), Indoor games that can be played in a small enclosed space such as Darts, Drafts, Chess, Cards, Scrabble, Rope Skipping, Table tennis, Badminton, Jig-Saw, Birigori, Ajua, and Wrestling are very important. In adapting Indoor games some principles need to be considered such as designing instructional environment to accommodate individual needs, introduction of special devices, aids and equipment to assist the individual learners, utilize special instruction techniques, providing special feedback for tasks to facilitate learning, using peer assistance, provide mobility and orientation training. There is no research done in public secondary schools to confirm that adaptations of physical education are done for the benefit of learners with disabilities and physical facilities and equipment are made available for the adapted physical education.

The use of the internet is becoming an essential part of day-to-day living. This has two implications for people who are visually impaired or blind. First, access to the internet using contemporary technology may present barriers, thus excluding them from fully contributing in society. Second, once accessibility barriers have been overcome, the internet offers a quick access to information that was not readily accessible before (e.g. electronic versions of newspapers, job applications). For these reasons, there has been a great deal of research into how people with visual impairment access the internet, what they use the internet for and the barriers that they face (Hewett, Torgerson, & Douglas, 2014).

Sector Policy for Learners and Trainees with Disabilities, suggested that adequate resources for infrastructure and learning and training materials should be mobilized for implementation of Inclusive Education. In addition, Policy also intend to ensure that entrances put in place the following: design primary entrances to buildings so that they are accessible, construct a ramp in the approach to the entrance that is free of stairs and steps, provide an accessible route in multi-storey buildings, so that the accessible entrance can permit access to a conveniently located elevator, add the international symbol of accessibility and paint the entrance door with a colour that will contrast with the surrounding surface to make it clearly identifiable, enlarge the landing area (space between stair cases) to ensure that the entrances landing dimensions are able to accommodate a wheel chair, add a slip-resistant finish so that the landing surface is level and non-slippery, and the door width should be at least 0.90m. Automatic sliding doors can also be installed or the use of swing clear hinge doors be adopted (MoE, 2018).

For Pathways, NESP recommended the following; removal or relocation of obstructions to clear pathways of any hurdles, provide an alternative accessible pathways that ensures the path of travel is free of stairs and steps, and in this case a ramp can be constructed to address this situation, widen the pathway to at least 0.90m wide and remove obstructions and landscape features that limit the pathway width, repair all holes and uneven paving, modify existing constructions, replace gravel paths with a surface of uniform texture but use different colouring and texture than the adjacent surfaces, construct guards with a minimum height of 0.15m to ensure edges of raised pathways are protected, provide passing space for

wheelchairs at least 1800mm wide in every 25m, and provide a passing and turning space of at least 1800mm wide- 2000mm for every 25m (Ibid, 2018).

Ramps also featured in the Sector Policy for Learners and Trainees with Disabilities and made the following suggestions: to construct a ramp to provide a complementary route next to stairs or steps, the ramp slope should not be greater than 1:20. Ramps with a gradient greater than 1:12 (83mm/m) may not be used in existing buildings, add railings to ensure ramps with a rise of 0.45m or more are protected on both sides, add intermediate hand rails to wide ramps (more than 3.00m), the width of the ramp should be at least 0.90m, the surface of ramps should be of non-slip material, remove all obstructions from the ramp surface, construct coloured tactile marking strips at least 0.60m wide at the top and bottom of the landing and at every change of direction to clearly identify the location of the ramp.

The Policy, suggests that the corridors should be wide enough to make sure that the minimum unobstructed width of low traffic corridors is no less than 0.90m, it adds that passing areas to be located at a frequency intervals to ensure that the unobstructed width of a public corridor is no less than 1.50m, the it also recommended the installation of lifts or construction of ramps to bridge differences in levels (Ibid, 2018).

Further recommendations of the Policy also touches on the stairs, it suggests that stairs should be widened to the minimum of 0.90m, and installation of intermediate handrail for stairs to be at 3.00m wide or more. The enlargement of the landing space at the top and bottom of the stairs should not be less than 1.20m (MOE, 2018).

Railings and handrails should be installed around all hazardous areas and raised platform needs to be more than 0.40m high, changing the spacing between the vertical and horizontal elements of railing around dangerous areas to make the narrow should be considered in addition to mounting handrails at a height between 0.85m and 0.90m.

The Policy also argues that, obstructions should be removed or blocked out in case of protruding parts on travel paths so that a sightless person can use the White cane safely and place tactile markings in an area extending at least 0.60m beyond projection area of the obstruction, mark obstructions at eye level with contrasting colour marking strips at least 0.30m long so that it is easily detectable by a person with partial sight. The minimum unobstructed maneuvering space should be 1600mm x 2150mm.

On the part of Signage, the Policy suggests that provision of well illuminated, clear and legible signs should be put in place so that they are readable and legible for all people. Signage should be at a consistent height of 1600mm where they are easy to approach, touch and read. Provision of the direction signage, a plan layout of the facility, signs indicating the locations of accessible facilities are important. The Policy also suggests that signs should be clear, simple and easy to read through colour engraved texts, use contrasting colours to ensure signs are clearly distinguishable, add sign supplement by text in embossed letters or in Braille next to information signs, it is also essential that lettering size is proportional to the reading distance (MoE, 2018)

Sector Policy also recommended that; Resting facilities should be provided to students with disabilities in regular institutions, the provision of resting and seating facilities suggested at regular interval between 100.00m and 200.00m, the layout of seats should be rearranged to

allow an adjoining space of at least 1.20m for a wheelchair next to benches and public seats. Ensure public seats are between 0.45m and 0.50m high, and table tops to be between 0.75m and 0.90m high. Importantly, it is recommended that, there should be at least one wheelchair accessible toilet room on each floor for both genders and be located in the same vicinity and the PWD toilet should be the first in the line of proximity to the door. The above suggestions and recommendations will highly enhance implementation of inclusive education in public institutions.

## **2.5 Extent to which Students with Disabilities influence implementation of IE**

Historically before the 17<sup>th</sup> century persons with disabilities all over the world were considered socially and physically less capable, hence they were not easily accepted as part and parcel of the family and community. They suffered neglect and rejection due to negative attitudes towards disability. Disability was regarded to have been caused by witchcraft, curses, or punishment from God; consequently they were isolated with the mind that disability is contagious. The treatment of people with disability has essentially been one of cruelty and misunderstanding (Casey, 2005), and although people with disability have always been present in our society, for various reasons they have only become more visible in the 21<sup>st</sup> century (DePauw & Gavron, 2005). The term disability covers a wide range of different physical, psycho-social, sensory or intellectual impairments which may or may not affect a person's ability to carry out their day to day activities, including their jobs (ILO, 2015).

In the medical model Persons with Disabilities are seen as the 'the problem' (Barnes, 1992). People are disabled by their impairments or difference, looking at what is 'wrong' with the person and not what they need. Disability or impairments should be 'fixed' with treatment,

even when the impairment or difference does not cause pain or illness (Barnes and Mercer, 2010). By contrast, in the social model disability is viewed as “the disadvantage or restriction of activity caused by a contemporary social organization which takes no or little account of people who have impairments and thus excludes them from the mainstream of social activities” (UPIAS as cited in Barnes, 2002, p.39). This model rejects the notion of impairment as problematic, focusing instead on discrimination as the key obstacle to a disabled person’s quality of living (Crow, 1996). It focuses on exclusion by the way society is organized rather than by an individual’s impairment or difference. The main focus of the social model is on encouraging and forcing society to change (Barnes *et al.*, 1999).

Many discussions of inclusion lose track of important consideration; what the students need is to be taught. If, for any reason, the individual curricular needs of a student are not being met, the educational placement must be, re-examined. A student’s learning and life needs should drive programmatic efforts and decisions (smith & Hilton, 1994). Fortunately, curricular needs can usually be addressed within the context of the general educational classroom with commitments that are not divided. The status of PWDs in Kenya was as shown in Tables 2.1 to 2.5.



**Table 2.1: Children with Disability attending school by Age and Sex**

<b>Age Group</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>
<b>Total</b>	<b>370, 131</b>	<b>199, 058</b>	<b>171, 073</b>
3 to 5	63, 054	33, 952	28, 102
6 to 13	206, 981	111, 901	95, 080
14 to 17	101, 096	53, 205	47, 891

**Source:**

**Kenya National Bureau of Statistics: Kenya 2009 Population and Housing Census**

Table 2.1 shows that there were over 370,131 thousands children with disabilities attending school. The children attending school in the age bracket of 3 to 5 had a total of 63,054 and males were 33,952, while the females were 28,102. Between the age group of 6 to 13, the total was, 206,981, the males were 111,901 and the females were, 95,080. The age group of 14 to 17; the total was 101, 096 the males were 53,205 while the females were 47,891.

**Table 2.2: Distribution of Person with Disabilities by Age 10-19**

Age	TNo PWDs	Domain (per cent)							
		Total	VI	HI	SCI	PD	IC	SC	Others
<b>Total</b>	<b>1,330,366</b>	3.5	24.9	14.1	12.2	25.3	10.2	5.8	7.5
10-14	<b>71,875</b>	2.3	16.4	20.3	21.9	20.0	9.9	2.5	8.1
15-19	<b>118,647</b>	2.7	23.9	16.6	15.4	20.3	13.6	2.3	8.1

**Source: Kenya National Bureau of Statistics: Kenya 2009 Population and Housing Census.**

**Key:**

**TNoPWDS** - Total Number of Persons with Disabilities,

**VI**- Visual Impairments,

**HI**- Hearing Impairments,

**SCD**- Speech and Communication Difficulties,

**PD**- Physical Disabilities,

**IC**- Intellectual Challenges,

**SC**- Self-Care

Table 2.2 shows the distribution of Persons with Disability by age of 10-19 years old and domain of disability. According to this age bracket, majority of them are children in school. About 3.5% of the Kenyan population had some form of disability. The most common form of disability was physical disability at 25.3%, followed by visual impairment at 24.9%. It was also established that the disability domains are the ones undergoing implementation of Inclusive Education in the three public secondary schools in Bungoma County.

**Table 2.3: Males with Disability Ages 10-14 and 15-19**

Age	Total	PWDs	VI	HI	SCI	PD	IC	SC	Others	None
10-14	<b>71,875</b>	2.8	19.7	20.2	17.6	19.9	12.5	2.4	7.6	2,491,046
15-19	<b>62,566</b>	3.0	21.5	16.9	16.1	21.3	14.2	2.3	7.7	2,053,947

**Source: Kenya National Bureau of Statistics: Kenya 2009 Population and Housing Census.**

**Key:**

**TNoPWDS**- Total Number of Persons with Disabilities,

**VI**- Visual Impairments,

**HI**- Hearing Impairments,

**SCD**- Speech and Communication Difficulties,

**PD**- Physical Disabilities,

**IC**- Intellectual Challenges,

**SC**- Self-Care

From Table 2.3 it can be revealed that males with Disability by age and Domain shows that between the ages of 10-14 the average is 2.8%, while between, 15-19 is 3.0%. The most common male Disability between the ages of 10-14 is Hearing Impairment at 20.2% followed by Physical Disabilities at 19.9% and the least is Self-Care at 2.4%. The most common among the age bracket of 15-19 is Visual Impairments at 21.5% followed by Physical Disabilities at 21.3% and the least in this age group is also Self-Care at 2.3%.

**Table 2.4: Females with Disability ages 10-14 and 15-19**

Age	TNo PWDs	VI	HI	SCI	PD	IC	SC	Others	NONE	
10-14	62,520	2.5	21.2	20.5	16.4	18.9	11.9	2.7	8.5	2,406,251
15-19	56,081	2.7	26.7	15.7	14.6	19.2	12.8	2.3	8.6	1,988,126

**Source: Kenya National Bureau of Statistics: Kenya 2009 Population and Housing Census.**

**Key:**

**TNoPWDS-** Total Number of Persons with Disabilities,

**VI-** Visual Impairments,

**HI-** Hearing Impairments,

**SCD-** Speech and Communication Difficulties,

**PD-** Physical Disabilities,

**IC-** Intellectual Challenges, **SC-** Self-Care.

From Table 2.4 females with Disability by age and Domain show that between the ages of 10-14 the average is 2.5%, while between, 15-19 is 2.7%. The most common Female Disability between the ages of 10-14 is Hearing Impairment at 21.2% followed by Physical Disabilities at 18.9% and the least is Self-Care at 2.7%. The most common among the age bracket of 15-19 is Visual Impairments at 26.7% followed by Physical Disabilities at 19.2% and the least in this age group is also Self-Care at 2.3%.

The above information indicates that the most common disabilities among the males and female of the age of 10-19 years are Visual Impairments followed by Physical Impairments and the Hearing Impairments. The age bracket is the school going age with majority being secondary school students.

**Table 2.5: Children with disability attending school by Age and Domain**

<b>Age Group</b>	<b>VI</b>	<b>HI</b>	<b>SCD</b>	<b>PD</b>	<b>IC</b>	<b>SC</b>	<b>Others</b>
<b>Total</b>	<b>19.2</b>	<b>19.3</b>	<b>19.4</b>	<b>20.0</b>	<b>11.3</b>	<b>2.5</b>	<b>8.3</b>
3 to 5	15.3	16.2	27.1	22.1	8.4	1.5	9.4
6 to 13	18.2	21.2	19.1	19.3	11.2	2.8	8.1
14 to 17	23.5	17.5	15.2	20.2	13.2	2.3	8.1

**Source: Kenya National Bureau of Statistics: Kenya 2009 Population and Housing Census**

**Key:**

**VI**= Visual Impairment

**HI**= Hearing Impairment

**SCD**= Speech and Communication Difficulties

**PD**= Physical Disabilities

**IC** =Intellectual Challenges

**SC**= Self-Care

Table 2.5 presents data on Children with Disabilities attending school by age and domain. Twenty percent of CWDs enrolled had physical disability, followed by speech and communication difficulties, 19.4%, and hearing impairment, 19.3%, visual.

People with disability make up approximately 1 billion, or 15%, of the global population (WHO, WB 2011). In Kenya, 3.5% of the population is reported to have a disability (Ministry of Medical Services, 2010). Although PWD constitute a significant population, they are often subject to discrimination or exclusion from basic services such as health, education, training and work opportunities. As a result, people with disability experience poorer health, lower educational achievements, and have fewer economic opportunities and

higher rates of poverty than people without disability. In many countries, especially in the Global South, PWD lack access to information about policies, laws and improvements in programs and services that directly affect them. This knowledge gap perpetuates their exclusion from mainstream social services such as education.

People with disability are frequently excluded from education and vocational training. It is noted that 51% of young boys with disability completed primary school, compared with 61% of young boys without disability, based on World Health Organization (WHO) surveys in more than fifty countries. In the same survey, girls with disability reported 42% primary school completion compared with 53% of girls without disability (WHO, WB, 2011).

The Tanzanian Ministry of Education and Vocational Training emphasizes implementation of the 2010 Act of Parliament so that people with disabilities enjoy the right to education. In the education sector, the government has introduced collective education to enable people with disability to study in normal schools and colleges (Daily News Thursday, November 7, 2013 p. 2). The efforts being taken by the Tanzanian government give hope to persons with disabilities especially in changing the negative attitudes of normal people towards persons with disabilities. The study avers to find out if the Kenyan government is doing the same especially coming up with Parliament Act that can protect persons with disabilities in the education sector so that perception by learners with disabilities and those without disabilities don't become hindrance to implementation of inclusive education.

Odhiambo (2016) points out the importance of a curriculum that emphasis skills and talents that is currently being the talk of the new system of education of 2.6.3. 3.3. It is encouraging

to hear that the review of the education system has begun. The current system of education the 8.4.4., only celebrates academic excellence. Research has shown that this produces “learners” unable to fully engage their intellect beyond what has been handed down to them, Employer and parents can attest to this. Despite rapid global changes, the 8.4.4 education system is still anchored on pre-independent milieu. This has defeated the objective of basic education for it does not provide the necessary skills geared towards improving the society. The system has been a stress to learners with special needs and disabilities hence the learners are likely to develop negative attitudes that may influence implementation of inclusive education negatively.

Skills play a crucial role in forming creative minds; the basis of entrepreneurship. When the system starts producing individuals who excel academically and have relevant contemporary skills, we will have done justice to the younger generation. The learners with disabilities can be able to find space and comfort, especially those ones with intellectual challenge that does not dwell on the cognitive (academic) aspect of learning, with emphasis on the science, mathematics and languages but also considers affective and psychomotor domains. The perceptions of students with disabilities will greatly be boosted if the later domains are given enough emphasis. This is why this research endeavors’ to find out about this system and the views of students with disabilities have about inclusive education since not all students can excel academically. Time has come for us to emulate countries like US, which invest heavily in talents and sports. Talents pay handsomely, allow our boys and girls to pursue what they love and do best which can benefit learners with disabilities hence their attitude will easily change hence influence inclusive education positively (Ibid, 2016)..

The mainstream media namely television, radio, and newspapers can play an important role in bridging the knowledge gap about Children with Disabilities (CWD) by crafting programmes that address issues of inclusive education. Media representation of CWD can determine perceptions, attitudes and behavior towards them. How children with disability are portrayed and the frequency with which they appear in the media has an enormous impact on how they are regarded in society. ILO (2015) argues that portraying people with disability with dignity and respect in the media can help promote more inclusive and tolerant societies.

Inclusion in education is critical to breaking this vicious cycle of poverty and disability. While much has been accomplished in the 15 years since the launch of the Millennium Development Goals (MDGs), which set out to address extreme poverty in all its dimensions, it did not focus enough on reaching the very poorest and most excluded people. In the implementation of the new UN 2030 Agenda for Sustainable Development (SDGs), it is critical that the voices of people with disability be heard and that action to tackle disability issues be taken (ILO, 2015).

Kipchumba (2018), when giving a detailed analysis of the life of Professor Micheal Ndurumo, started by quoting the inspirational statement “His never-say-die attitude has brought him to the pinnacle of academic success.” This scholar is the third deaf African and the first East African to acquire a doctorate degree. He is currently teaching at the University of Nairobi. Professor contracted meningitis at the age of eight years; this was December, 1960 when he visited his father in Nairobi, where he was working as a cook in Mathare



Mental hospital. Both parents were so much affected by the disability of first born son, especially when the entire family was forced to adjust to the needs of their son.

Despite his conditions and the attendant societal stereotypes, Ndurumo's parents were determined to give him education like all their other children. Since there were no primary schools for the deaf near home, the young Ndurumo was forced to study with normal children at the local primary school in Nyeri. His teachers and classmates made sure that he did not fall behind in his studies. This was a perfect example of the implementation of Inclusive Education. It was unfortunate that the programme could not continue to secondary school level.

In 1968, Ndurumo sat for his Certificate of Primary Education Examination and passed very well. He could not join high school because no one was willing to give him a chance. Lucky enough he was introduced to Dr. Peter Lowry and Ruth Mallory who were a missionary couple in charge of Baptist church in Nyeri County who organized for Ndurumo to go to USA for further studies. This story should encourage students with disabilities and those ones without disabilities to embrace inclusive education by accepting diversity in the learning institutions.

According to Kweyu (2016), Salome Muigai contracted polio when she was six months old. The enabling home and school environment propelled her to acquire quality education she is proud of. This has enabled her to fight for the rights of the downtrodden in the country. If anyone asks Muigai how she coped with polio all these years, her answer will catch one off guard. She says that "disability is the best thing that happened to her" that is what she is

likely to say. If someone had asked her that question when she was young, she would have said it was a very hard life. Not many children survived polio, and the world was not ready for it,” she explains.

The important thing is that Muigai was given chance and eventually worked as a member of the Constitution of Kenya Review Commission, (CKRC) that laid the groundwork for the 2010 Supreme Law. The CKRC experience earned the London school of Economics Masters graduate a commonwealth consultancy in Sierra Leone ahead of its 2007 elections. The study intends to find out how many such students are given chance to excel in their career; this means being admitted in public secondary schools so that such students live their dreams. This is because all that a child with disabilities needs is acceptance and support.

Salome Muigai, does not gloss over the polio she has lived with from six months of age though. She remembers yearning to be like other children around her. However, would be playmates shunned her because she was “different”. That opened her eyes to discrimination early in life and planted in her the seeds of a champion for fairness and inclusion-traits that tend to define those that are driven like her. Muigai views inclusion as tweaking the systems just a little bit to accommodate diversity and enrich the whole. The information that is not clear is whether other children who do not have disabilities are also eager to interact, share, socialize and embrace diversity with children or students with disabilities in the public secondary school.

The special treatment Salome received at school taught her to uphold diversity and inclusion. She says treating people who are not the same in the same way is discrimination. “Many

people think that's equality but that is what institutionalized discrimination is all about. Salome, who scored 33 out of 36 points in her Certificate of Primary Examination (CPE) by then to join Kenya High school, with invitation from three other top schools, including Alliance Girls' credits affirmative action for her score, She repeated class two in Eldoret because the English medium project was starting and the class teacher, Isaiah Omutanyi felt Salome was too smart to miss out on it.

Kenya has international and regional instruments protecting the rights of PWD. Among them are the UN Convention on the Rights of Persons with Disability and the African Charter on Human and Peoples' Rights. The Constitution of Kenya, 2010, includes provisions on PWD. Article 54 of the Constitution is a stand-alone article on disability which states that a person with any disability is entitled access educational institutions and facilities for persons with disability that are integrated into society. National Disability Policy of 2006 takes cognizance of the importance of awareness rising on disability and to this end states that the government shall seek to increase the levels of public awareness on the needs, aspirations and capacities of persons with disability so as to enhance their acceptance, participation and integration in society.

The Communications Authority of Kenya (CAK) in response to having media that is responsive to societal needs issued a programming code in 2015 that demands that every media house should have at least 60 per cent local content in their programming. Indeed, TV channels in Kenya have allocated 52 per cent, 39 per cent and 9 per cent of their time to local, international and African content respectively (Synovate - Audiences cape Kenya

Survey Research, 2012). Despite these developments, PWD in Kenya are rarely taken into consideration.

The *Abled Differently* program features children with disability in different learning environments. It shows children in inclusive education learning environments. In one episode, CWD who are learning at Kilimani Integrated School, which is an inclusive school, are featured. This representation helps to build positive images about CWD in the society. Research shows that young children who are educated in a more inclusive classroom environment are much more accepting of other children with disability (Diamond, 2001; Peck, *et al.*, 1992 Cited in Trepanier-Street., *et al.*, 2011). Successful inclusion requires acceptance of the disability of the individual with a disability by all children both with and without disability. Recent research has found that the acceptance or rejection of an individual with a disability by children depends on the individual's characteristics and type of disability (Odom *et al.*, 2006 Cited in Trepanier-Street., *et al.*, 2011) and how this is presented in the media.

The language used by the *Abled differently* programme focuses on the person and not the impairment in the framing of its narrative on CWD. For example, the story of a pupil at Kilimani Integrated School, who is a child of short stature; the terminology used in naming the pupil focuses on her person and not her disability. She is referred to as a person of short stature and not the traditional term 'dwarf'. Negative terminologies such as "disabled person, blind person, Albino" should not be used instead terminologies like "person with disability, person with visual impairment, person with Albinism" are used respectively. In cases where

phrases cannot adequately describe PWD, the name of the person is given prominence. For example, instead of saying “deaf girl” or “blind person” the interviewee’s particular names are used such as “Jane, who is Deaf” or “John, who is blind”. In addition to using the right label, Indeed, Groce (2005) argues that seeing disability on TV programmes is said to improve self-esteem to CWD.

Another common myth which is of great concern is that children with Albinism have magical powers. Focusing on Children with Albinism, at Little Rock school in Kibera, one of the teachers interviewed explained that children with Albinism are in danger because they are targeted by individuals who believe that their body parts contain some healing power. The teacher emphasizes that children with Albinism do not contain magical powers and that there is need to create more awareness to dispel this myth as a way forward (Barnes & Mercer, 2010).

The media can raise awareness among both persons with disability and the rest of the public about the rights of people with disability, as well as raising awareness on relevant laws and policies on disability. In addition, while there are some disability-specific media programs, like *Abled Differently*, CWD rarely appear as part of mainstream programmes. It is therefore recommended that more programs featuring CWD be created and personnel responsible for program production be encouraged to attend Disability Equality Training (DET) courses.

As William Oluchina (2015) puts it during the international day of people with disability, the society has a duty to increase awareness about challenges that these people face and should serve to remind us to include and support their dignity, rights and wellbeing. This

information is very appropriate to students in public secondary schools who learn with these students on daily basis.

The students with disabilities in the public secondary schools have to cope with the obsession with “mean score” that has killed the purpose of education. As Muthore (2016), clearly points out that it is a pity that values, morals and discipline have taken a back seat in schools to focus on the grades only. The unfortunate thing is the fact that, educators have stripped the means core of all its meaning and function and elevated it to the level of educational philosophy. When students enter form one in many schools it is imprinted in their minds that their mission for the next four years will be to improve on the scores posted by the class ahead of them. Students are made to understand that the only thing that matters in school is the mean score. Students with disabilities are likely not to cope with this situation or may not be included in the education. The situation is so bad that any visit to most schools, the one thing that catches one’s eye is the targeted mean score. The targeted mean score for the particular year is prominently displayed everywhere, even though the learners with problems may not be seeing them. This affects learners with disabilities.

According to Kabendera (2012), Kagera region of Tanzania is considered as ‘Land of the Superstitions’ where individuals with Albinism are given the name “Omwera” which literally means a white person. The name was discriminatory to the Albinos. He continues to narrate the story during his school days as follows: “at school,” I used to be a member of the school drama group and there was an albino character in one of the plays we had to perform on parents’ day. The drama teacher insisted that a classmate who had a strange skin disease play

the role, which depicted a bloodthirsty character that would transform himself into a ghost at night and suck peoples' blood.”

One of the nominated Senator for the period 2017-2022 in the current Kenyan Senate explained in one of the television shows that he was discriminated right from birth. He states that when he was born his father and mother disowned him due to albinism. Therefore, according to him discrimination is common right from birth. He continues to explain that it is also hard to cope in school where ridicule from other children was common. He proceeds to reveal that poor instruction methods by teachers fail to take care of Special Educational and Social needs (Wamuswa, 2017).

In addition, an elected Member of County Assembly (MCA) (2017-2022) in Bungoma County living with albinism and CEO of the Albinism Empowerment Network (AEN) avers that, Persons with Albinism (PWA) call for acceptance and opportunities. He was speaking during the day; the world was marking an historic global commitment to fundamental human rights for PWA. The celebration was a culmination of a long struggle by individuals and movements who believe in the worth; inherent and inalienable rights of PWA in the face of discrimination, bizarre killings and isolation by society (Wamuswa, 2017).

In another case in which persons disabilities are treated by the communities and their family members badly a mother had to put a boy child with disabilities on path leading to the river where thousands of cattle used to pass to and drink water hoping that they would trample him to death. Fortunately, he survived and he is lucky to be alive today. God shielded him from death. His grandmother learned of the incident and picked him. (Wamuswa, 2017)

A Sister from the Catholic diocese of Eldoret took care of the boy, when she met his grandmother in 1989, advanced in age and struggling to feed him. Sister Alice offered to help at a time the community viewed boy as a cursed child, and avoided him like a plague. Alone with a frail grandmother, he learned how to wash, cook and do everything for himself. “I learned the hard way,” he said (Wamuswa, 2017).

The sister and the church offered to pay his school fees marking a long journey filled with challenges in search of education. At Kobil Primary school, the boy sat alone on the desk as other pupils feared him. But the love of the teachers motivated him to stay in school. Being a boarding school, family members never turned up to pick him when they closed for holidays. The nun would come from Eldoret and take him home and accompany him to school on opening day. (Ibid, 2017)

Today, he is the only one who has acquired a degree in their family. He said: “I forgave everyone. “I help them whenever need arises. It is unfortunate my parents died. I would have taken care of them, “He sat for KCPE in 1996 and scored 479 marks out of 700 marks. Luckily the boy, Cheshire Disability services Kenya (CDSK), a non-governmental organization sponsored his secondary and university education. In 1997, he joined St. Patrick’s Iten High school and sat for KCSE in 2000 scoring B (Plain). The boy was admitted to Moi University to do Business Management. At one point he contemplated quitting the university because he had difficulty moving around and using facilities. He recounted, that going to lecture halls was a nightmare and that there was no ample space for him therefore he had to push and struggle with other students to learn. Luckily, he joined the university



alongside seven students from his former school who aided him to move around. The boy however, felt he was a bother to them and sought help from the dean of students who assigned him a caregiver (Ibid, 2017).

The above scenarios tell the challenges students with disabilities go through especially Students with Albinism and those with Physical disabilities. No wonder a Spate of killings of people with albinism have been reported in Tanzania in the last few years where the heartless killers claim that they can make a lot of money by selling private parts of the PWA. No known study in Kenyan public secondary schools has been done to give the picture of how SWDs are treated, hence the need for this study.

On the other hand, a 25 year old student of Karen Technical Training Institute in Nairobi, Kenya who was born normal only to lose hearing at the age of four years, says he had hearing problems in primary school but didn't know he would later become deaf. He says, teachers would beat him up thinking that he was rude. This misconception and negative perceptions by the teachers was likely to be imitated by peers in the class which automatically affected the student with disabilities.

According to Shilitsa (2016), despite negative perceptions towards students with disabilities by some people, it was a surprise to everyone when they wake up to the news of the Top KCPE boy who overcame hearing disorder to post sterling results. The boy who topped the 2016 KCPE exam with 437 marks was learning at Daisy Special School for the Physically Challenged (PC) in Kakamega County.

Although the school was for the Physical Handicapped (PC), the student with hearing impairment (HI) was admitted in the school. This is a very good example of Inclusive Education where diversity is embraced, if other schools can learn from Daisy special school from Kakamega County, then implementation of Inclusive Education will be on the right track in fact if the government of Kenya should change the name to Daisy Inclusive School. Unfortunately, the school is being referred to as special school. Teachers of the school reported that the student could only hear when the speaker is within one metre. This forced the boy to start using hearing aids and would always sit at the front of the class. The boy scored 99 in Kiswahili, 97 in English, 87 in Mathematics, 83 in Social Studies and Religion and 71 in science (ibid, 2016).

**Table 2.6: KCPE 2016 Top Student’s Performance Nationally**

<b>Subject</b>	<b>Marks</b>	<b>Grades</b>
Kiswahili	99	A
English	97	A
Mathematics	87	A
Social Studies & Religion	83	A
Science	71	B +

**Source: Shilitsa (2016)**

The boy’s father said that when they relocated to Kakamega, the boy’s performance was poor and he had to plead with the school head teacher who reluctantly agreed to admit him on condition that he repeats class five. This report clearly points to the fact that students with disabilities are not easily accepted for admission given that the head teacher was reluctant to admit the student in a special school who topped in KCPE, 2016 with 437 marks out of the possible 500 marks; it may be obvious that in regular schools it may not be easy and the

regular students are likely to perceive inclusive education negatively following the beliefs of teachers and more so head teachers who are supposed to be the role models of the student population. The performance of the boy should be a lesson to all stakeholders in public schools that students with disabilities should be given chance and enabling environment to learn.

Another pupil with physical disabilities posted very good results in his 2016 KCPE results despite her disability. She scored 431 out of 500. The student was in Acacia Crest primary school, which is a regular school (Githaiga, 2016). This implies that students with disabilities are capable of doing well academically, and what they require from the society and their peers is to be given chance and enabling environment to achieve their potential (Ibid, 2016).

For the third year running, Kakamega County produced top candidate in the 2017 Kenya Certificate of Primary Education (KCPE) examination results. The girl from St. Anne Junior School, Lubao in Kakamega scored 455 marks out of the possible 500. The student is among those ones living with disabilities (Albinism), but that could not stop her from topping the chart nationally. This is the reason why Inclusive Education should be encouraged by all stakeholders in education (Oduor, 2017).

But, after emerging top during 2017 KCPE Examination, the girl was not prepared for the media attention she received and more so, dealing with criticism. The massive recognition rubbed her the wrong way. She was harshly criticized when she was invited by Masinde Muliro University (MUST) to grace the graduation ceremony. Her simple congratulation message to the graduands was criticized as some people felt it did not befit her. “How can a class eight pupil be invited to speak to graduands?” the critics posed. Public scrutiny on

progress of top KCPE candidates at secondary school level, could be contributing to pressure, creating fear factor and resulting in flip-flop performance in the Kenya Certificate of Secondary Education (Douglas Dindi, 2018).

Another encouraging story about disability concerns a boy 27 years and a girl 31. Though born blind, the boy can feed data into Excel sheets, including daily court returns and the e-dairy, he can retrieve data for court users on the court dates, and other tasks. It is a job he has been doing at the civil registry since July 2016. Then there is the girl, who serves customers that contact the Safaricom service desk despite the fact that she does not have hands, she uses her feet to operate her computer and other gadgets at her safaricom customer care desk. While the boy works at the High Court at Milimani Law Courts, the girl's office is at Safaricom customer care centre on Mombasa Road Nairobi, Kenya (Ondieki & Kakah, 2017).

Nyirenda (2013), points out clearly that an education system should support learning which is acquiring new, or modifying and reinforcing existing knowledge, behaviors, skills, values, or preferences and may involve synthesizing different types of information. It does not happen all at once, but builds upon and is shaped by what we already know. In this case learning is viewed as a process, rather than collection of factual and procedural knowledge, which leads to relatively permanent change. This kind of education will change the set minds of Student with Special Needs and Disabilities who in turn enjoy learning. The research intends to

reveal how learners with Special Needs and disabilities influence in the implementation of IE.

## **2.6 Extent to which Regular Students influence implementation of IE**

In 2006, the United Nations adopted the convention on the Rights of Persons with Disabilities. In 2008, Kenya ratified the convention, essentially making it part of Kenyan Laws. The purpose of this convention is to promote, protect, and ensure the full and equal enjoyment of all rights and fundamental freedoms by all people with disability and to promote respect for their inherent dignity. This is a very important message to regular students (students without disabilities), who have a big role to play and make the implementation of inclusive education successful.

A study by Kavale and Forness (1996) shows that a perception of low academic achievement was directly related to reduced acceptance, less interaction, greater rejection, and low social status among peers. Often positive interactions and exchange of information does not occur between children with learning disabilities and their peers or teachers. Because of behavior and language differences, children with learning disabilities need more guidance and structure. Some students with disabilities will require personnel support to allow them to benefit from placement in inclusive settings, in addition to the instructional supports noted earlier (accommodative practices and assistive technology). This is supposed to come from regular students. There is no known study done to show that students with disabilities are supported by their colleagues who do not have disabilities.

The Tanzanian Ministry of Education and Vocational Training emphasizes implementation of the 2010 Act of Parliament so that people with disabilities enjoy the right to education. In the education sector, the government has introduced collective education to enable people with disability to study in normal schools and colleges (Daily News Thursday, November 7, 2013 p. 2). The efforts being taken by the Tanzanian government give hope to persons with disabilities especially in changing the negative attitudes of normal people towards persons with disabilities. The study avers to find out if the Kenyan government is doing the same especially coming up with Parliament Act that can protect persons with disabilities in the education sector so that perception by learners with disabilities and those without disabilities don't become hindrance to implementation of inclusive education.

According to Mwesigye (2013), Uganda has established a model school, "Hill Preparatory School (HPS)" that has been providing Inclusive Education for the last 30 years where each child receives due attention and student with disabilities share a lot with regular pupils in the mainstream classes. Inclusive Education emphasizes that differences and diversities in children must be respected and that no two children are the same in their learning characteristics. The aspect of learners sharing is what is unknown in the learners in Kenyan secondary schools because this virtue is likely to promote the positive perception of learners without disabilities towards learners with disabilities.

Many laws in Kenya seek to protect the rights of people with disabilities. The constitution not only proscribes disability-based discrimination but also recognizes Braille, Sign

language, and other formats as official languages. The Constitution recognizes the right to be treated with dignity, equal access to educational facilities, and reasonable access to all places.

Furthermore, it entrenches affirmative action on principle to facilitate the progressive realization of at least 5 per cent of people with disabilities in elective and appointive posts.

The Persons with Disabilities Act 2003 provides a framework for access for services and inclusion in all facets of life, as does the Basic Education Act and Election Act.

**Table 2.7: Children attending school by Age and sex**

<b>Age Group</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>
<b>Total</b>	15, 611, 514	7, 927, 421	7, 684, 093
3 to 5	3, 592, 119	1, 819, 087	1, 773,032
6 to 13	8, 516, 886	4, 314, 684	4, 202, 202
14 to 17	3, 502, 509	1, 793, 650	1, 708, 859

**Source: Kenya National Bureau of Statistics: Kenya 2009 Population and Housing**

Table 2.7 shows that the children without disability attending school in the age bracket of 3 to 5 had the total of 3,592,119 and males were 1,819,087 while the females were 1,773.032 between the age group of 6 to 13, the total was, 8,516,886 the males were 4,314,684, and the females were, 4,202,202. The age group of 14 to 17; the total was 3,502,509, the males were 1,793,650, while the females were, 1,708,859. The total number of children is 15,611,514, out of which the males are 7,927,421 and female are 7,684,093.

**Table 2.8: Children without Disability attending school by Age and Sex**

Age Group	Total	Male	Female
Total	15, 241,383	7, 728,363	7, 513,020
3 to 5	3, 592, 119	1, 785,135	1, 744,930
6 to 13	8, 516, 886	4, 202,783	4, 107,930
14 to 17	3, 502, 509	1, 740,445	1, 660,968

**Source: Kenya National Bureau of Statistics: Kenya 2009 Population and Housing**

Table 2.8 shows that the children without disability attending school in the age bracket of 3 to 5 had the total of 3, 530, 065 and males were 1,785,135 while the females were 1,744,930. Between the age group of 6 to 13, the total was, 8,309, 905, the males were 4,202,783, and the females were, 4,107,122. The age group of 14 to 17; the total was 3,401,509, the males were 1,740,444, while the females were, 1,660,968. The total number of children is 15,241, 383 out of which the males are 7,728,363 and female are 7,513.020.

**Table 2.9: Children with and without Disability Attending School by Age and Sex**

Age Group	Children with Disability			Children without Disability		
	Total	Male	Female	Total	Male	Female
Total	2.4	2.5	2.2	97.6	97.5	97.8
3 to 5	1.7	1.9	1.6	98.3	98.1	98.4
6 to 13	2.4	2.6	2.3	97.6	97.4	97.7
14 to 17	2.9	3.0	2.8	97.1	97.0	97.2

**Source:**

**Kenya National Bureau of Statistics: Kenya 2009 Population and Housing Census**



Table 2.9 shows the proportion of Children With Disability (CWDs) against children without disability by age group who are attending school. The proportion of CWDs ranged from 1.7% at 3-5 years, 2.4% at 6-13 years and 2.9% at 14-17 years.

According to Nyongesa (2011), the “MISS” and “MR” DEAF Kenya 2011, Vivian Awour and Aneant Kioli respectively, they narrated the hardships they had gone through because of the beliefs and negative attitudes the general population including teachers and regular students hold towards the persons with hard of hearing. Vivian who was born and raised in Ahero, Kisumu, did not go beyond primary school because of what she terms lack of a conducive environment in the school, she says that; “PWDs are yet to get full support to compete alongside normal persons. All this is as a result of ignorance. “People need to be educated on the challenges we go through,” Vivian told the nation through volunteer sign interpreter, Douglas Okeyo, a university of Nairobi sign language student. The complain indicated in the above paragraph require research to know if students with disabilities at secondary school level get full support to compete favorably with regular students (Nyayiera, 2014). Despite these legal achievements, Persons with disabilities in Kenya continue to face exclusion and discrimination. Women and girls suffer double discrimination i.e. gender and disability. Those with intellectual or psychosocial disabilities continue to be locked away in psychiatric institutions. Attitudinal barriers make it difficult for people with disabilities to gain meaningful employment. Buildings and public transport remain inaccessible.

As Mwaura (2015), reports, it’s important to consider the sensibility of all learners, especially people with disabilities. Riara Law school lecturer Eric Kibet wrote a commentary published

in the Daily Nation of November 6, 2015 under the title “let’s focus on the needs of the disabled”. All references to “persons with disabilities” were replaced with the term “the disabled”. Mr. Kibet complained about the changes, which he said offended readers living with disability because disability does not mean “inability” or that one is “disabled”. He said the term “disabled” is wrong and unacceptable because it stigmatizes. He said editors should be sensitized about these terms and the feelings of persons with disability. “It is important the editors keep abreast with changes in language and contemporary terminologies.” it is important that editors understand and use politically correct terms with regard to disabilities so as to promote tolerance and acceptance of persons with disabilities. According to some opinions, using the term “the disabled” is verbal assault. Such opinions equate the term “disabled” to calling a person “a cripple”, “an imbecile” or “retarded” and think it is thoughtless use of words.

According to this school of thought, the term “the disabled” objectifies a person as if disability is his or her defining characteristic whereas the term “person with disability” calls attention to the person first and the disability becomes secondary. The proponents of this opinion say the term “the disabled” is limiting, humiliating, and offensive. They think it perpetuates stereotypes and draws attention to a person who should be pitied, is helpless, and dependent, but that a person who has a physical, sensory, or mental disability has individuality and some abilities too.

Yes, life can be challenging for many people with disability-but not because they are sick, helpless, or waiting for handouts. Just the opposite-these people want to go to school and

work, to have friends and fall in love, and to live in their own homes and be part of their communities. They are here to stay and growing in numbers. They are not only among us, they are us if not now, then as we grow old. We need to work together to accept and include them in our communities and lives. We need to value them for their individual skills, talents, and contributions. Only then will they feel included and empowered. That is what the international Day of people with Disabilities requires. This study is meant to establish the influence of learners without disabilities towards implementation of Inclusive Education.

Sector Policy for Learners and Trainees with Disabilities recommended that Institutions should establish clubs to nurture and promote national values, promote teaching of peace education and inculcate concern for others and the environment, organize activities that promote respect and tolerance for diversity in culture, faiths, gender, and lifestyles. It also suggested promotion of conflict resolution approaches among students with and without disabilities, inculcate virtues such as honesty, trustworthiness and fairness and service to others among students with and without disabilities, provide time for recreational and sporting activities in learning institutions, facilitate institutions of learning at all levels to avail options of leisure and recreation that suit needs of students with disabilities, encourage regular bonding sessions with parents/guardians and siblings, and promote opportunities for enjoyment and socialization in family setups for students with disabilities (MoE, 2018).

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter briefly discusses various methodological aspects especially research design which guided the research process. Sampling technique and sample size determination are also discussed in this chapter. Instruments that were used for data collection alongside their validity and reliability were discussed. The section also discusses how data was analyzed and also some of the ethical considerations involved while conducting the study.

#### **3.2 Research Design**

Descriptive survey and Correlation designs were employed for this study. According to Franken and Walled (2000), surveys are the most widely used technique in education and behavioral sciences for data collection. They are a means of gathering information that describe the nature and extent of a specified set of data ranging from physical counts and frequencies to attitudes and opinions by asking the same questions to a large number of individuals. This information in turn, can be made to analyze trends across time and generally to describe what exists, in what amount and in what context. According to Oslo and Omen (2005), surveys are justifiable by considering issues of economy, rapid data collection, and ability to understand population from part of it. Descriptive data are usually collected through a questionnaire, survey, an interview or observation (Gay, 1987).

The use of descriptive survey and correlation designs in the present study enabled the researcher to find out facts adequately, seek opinions, describe, analyze, correlate and interpret data in order to establish the determinants of the implementation of inclusive

education, focusing particularly on the influence of extra funding on implementation of inclusive education in public secondary schools, the extent to which human resources influence the implementation of inclusive education, the extent to which physical resources influence the implementation of inclusive education, and the extent to which students with disabilities and those without disabilities influence the implementation of inclusive education. The survey design and correlation designs were considered as most appropriate for answering the questions advanced for the study.

### **3.3 Study Area**

The study was conducted in Bungoma County, in what used to be Western Province of Kenya. The County is one of the four Counties that used to make up western province. This is one of the four counties that make up former western province of Kenya. Other counties include Kakamega, Vihiga and Busia. The County is situated on the southern slopes of Mt Elgon and Trans Nzioa County to the north, Kakamega County to the south east and Busia County to the south west. It lies between latitude 0 and latitude 1 30' north of the equator and longitude 34 20' east and 35 51' east of the Greenwich Meridian. The County has an area of 3,032.2 sq. km. and a population of 1,375,063 according to the 2009 population census. The County has 9 Constituencies namely Mt. Elgon, Sirisia, Kabuchai, Bumula, Kanduyi, Webuye East, Webuye West, Kimilili, and Tongaren. The climate of the County is as follows; temperature range from minimum of between 15-20 degrees Celsius to maximum of between 22-30 degrees celsius. It has two rain seasons with average rainfall from between 1200mm to 1800 per annum.. Underpinning its strength is agriculture: sugarcane, tobacco, coffee, onions, vegetables and daily cattle. Maize in Tongaren and Naitiri make the county a vital part of the country's bread basket.

Two main roads, the Webuye-Bungoma-Malaba highway and the Webuye-Kitale highway give the County a lifeline with long distance trucks ferrying produce to Uganda, Rwanda, Burundi and the Democratic Republic of Congo. The Mombasa to Uganda highway cuts through the County, as does the Uganda railway. Roads are paved from Webuye to Kitale, Kamukuywa to Kimilili and Chwele, and Kimilili to Kapsokwony near Mt. Elgon. Bungoma's strategic position in Western Kenya makes it ideally placed for cross-border trade with Uganda through Malaba in Busia (43 kilometres from Bungoma town), Lwakhakha and Chepkube along the common border. In Bungoma, historical sites, scenic hills and rivers dotted with whispering waterfalls, all make superb destinations for tourists. A visit to Chetambe Fort, the Golan Heights of Bungoma, from where the Bukusu and Tachoni watched the advancing colonialists is a must in the tourism map.

The fort was built on the hill by Chetambe Ifile, a Tachoni warrior, from where he mobilized his troops to resist colonial rule, leading to the 1895 massacre in which more than 450 people were killed by the British. Mr. Nelson Kakai, 60, a great grandson of Ifile, has preserved the fort, built behind a protective 12-foot defensive ditch. From the hill, one has a beautiful view of Webuye town and a carpet of sugarcane that stretches to horizon. Just a kilometer away, is the Nabuyole falls on the river Nzioa, where tourists troop to watch the water cascade a full seven metre height to the rocks below. Awaiting the tourists eyes are three trees of historical significance, planted by founding President Jomo Kenyatta, Uganda's first President Milton Obote and Elijah Masinde, a revered Bukusu leader of Dini ya Msambwa. (Omari, 2011) Twenty kilometers south two land marks- the Mwibale wa mwanja and Sang'alo hills. From

the summit of Mwanja, there is a superb view of in neighbouring Kakamega County, Bungoma and Webuye, plus endless vista of sugarcane.

Sang'alo's twin peaks are like the gap in a person's front teeth, with one peak appearing to clutch a huge rock that looks as if it is about to fall. Webuye town, planned as heart of the County's industrial might, is home to pan African Paper Mill, once the biggest paper manufacturer in East and Central Africa but which collapsed. The government is struggling to revive it but its future remains uncertain. Opposite stands Pan African Chemicals, makers of acids supplied all over the world. Bungoma, 28 kilometres further along Mombasa-Uganda road highway, is the County capital.

Both towns lie on the Uganda railway line, once an indispensable way to carry goods to Uganda and Central Africa. Other key towns in the new County include Kimilili, Chwele, Malakisi, Misikhu and Lugulu. Maeni, about 10 Kilometres from Kimilili town, is home of the dini ya Msambwa (Church of Spirits) of Elijah Masinde. A Mausoleum has been built at his home where politicians and other Visitors/Tourists go to take pictures of masinde, whose life was spent in and out of prison before and after independence. His set was opposed to white rule and independence remained critical of the government. But it is the secret bunker in which he hid from British soldiers for three years that is worth visiting. Near Sulwe village at the foot of Mt. Elgon, it is tended by Juda Israel, a splinter group of Masinde's sect whose members are keen to keep it hidden.

Mt. Elgon area is inhabited by the Sabaot sub-ethnic group of the Kalenjin ethnic group. The area has been a long standing dispute over land which led to the formation of the Sabaot

Land Defense Force, an illegal outfit that pretends to fight for their rights. The mountain forms a ring around the County to the north and part of the east. Apart from sightseeing it forms part of the Kenya-Uganda border with caves that open in Kenya onto Uganda. There is another beautiful waterfall on river Kuywa at Teremi, one with great potential for hydro-electricity power plant (Omari, 2011). Already, some local investors have formed the Teremi Falls Small Hydro Power Plant Company and are at advanced stage of building the plant. Mr. Joseph Simiyu Mukhamule, an engineer and one of the investors who conceived the project, said when completed it will produce four megawatts a day.

Such powerful supply, if not added to the national grid, could light up the whole county and meet its industrial needs. To a traveller, Bungoma County, which is 375 kilometres west of Nairobi, is a feast to the eye across a seemingly endless panorama of sugarcane a dependable cash crop spread all over the county. Tobacco fields are another eye catcher in Malakisi, 25 kilometres North of Bungoma town. They are like a huge field of Spinach.

The total enrolment in Primary schools stands at 400,407, while secondary schools have 41,310 students. Tertiary institutions include: Kibabii University that receive a charter on 14<sup>th</sup> November, 2014 officiated by President Uhuru Kenyatta. It the first public university in the County Kibabii diploma Teachers Training College, Sang'alo Institute of Agriculture, Kisiwa Technical Institute, Moi University Satellite at Siritanyi centre, Matili Technical Institute, Webuye Medical Training College and Bungoma Medical Training College. There are 3 public secondary schools in Bungoma County that have been registered by the Ministry of Education, Science and Technology (MOEST) to offer Inclusive Education (IE)



Programmes namely Nalondo CBM Special secondary School (school C) which is a mixed public secondary school, Bungoma Boys High school (School A), and lastly St. Cecilia G. H. school, Misikhu (School B).

### **3.4 Study Population**

The study population included; 1 Senior Assistant Director of Education 1 County Education Director, 1 County Education Officer In-Charge of SNE, 3 Principals of public secondary schools 10 Special Education Teachers, 130 Regular teachers, 107 Special Needs Education students, and 2348 Regular students.

### **3.5 Sampling Technique and Sample Size**

The study selected 1 Senior Assistant Director of Education (SADE), 1 County Education Director (CDE), 1 County Education Officer in-Charge of Special Needs Education (CEOCSNE), 3 School Principals of secondary schools, and 10 SNE teachers through Saturated sampling technique and ensured all participants took part in the study. A total of 122 regular teachers, 54 SNE students and 350 Regular students were selected using Simple Random Sampling Table 3.2). The sample sizes are representative of the study population using Fishers model (Mugenda & Mugenda, 2003).

**Table 3.1: Sample Frame**

<b>Respondents</b>	<b>Study Population</b>	<b>Sample Size</b>	<b>%</b>
SADE	1	1	100
CDE	1	1	100
CEOCSNE	1	1	100
Principals	3	3	100
SNE Teachers	10	10	100
Regular Teachers	130	122	93.8
Students with disabilities	107	54	50.5
Regular Students	2348	350	14.9
<b>Total</b>	<b>2601</b>	<b>542</b>	<b>20.8</b>

**Source: Bungoma County Education Office**

**Table 3.2: Population of three Public Secondary Schools registered for Inclusive Education**

<b>School</b>	<b>Boys</b>	<b>Girls</b>	<b>Total</b>
School 1	1252	0000	1252
School 2	000	886	886
School 3	124	86	210
<b>Total</b>	<b>1376</b>	<b>972</b>	<b>2348</b>

**KEY: School no.1:** Boys' public secondary school, **School no. 2:** Girls' public secondary school, **School no. 3:** Mixed public secondary school.

From Table 3.2, The population of public secondary schools registered for inclusive education programme includes School no. 3, which is a mixed public secondary school with a student population of 210, 86 girls and 124 boys. The Students in the Inclusive programme are the Physically Challenged; another school, is School no. 1 the boys’ public secondary school had a population of 1252 students. The school has three categories of disabilities namely; Low Vision, Total Blindness and physically challenges, and lastly School number 2, a girls’ public secondary school with a population of 886 students. The programme being implemented in this school is that of Low Vision. The three public secondary schools in Bungoma County mentioned above are registered by the government to run Inclusive Education programmes.

**Table 3.3:Population of Students with Disabilities in the three Public Secondary Schools**

<b>School</b>	<b>Disability</b>	<b>Boys</b>	<b>Girls</b>	<b>Total</b>
School no. 1	PC, & VI	23	00	23
School no. 2	VI	00	18	18
School no.3	PC	46	20	66
	<b>Total</b>	<b>69</b>	<b>38</b>	<b>107</b>

**KEY: PC-** Physical Challenges, **VI-** Visual Impairment

From Table 3.3, the population of students with disabilities in the three public secondary schools is 107. This is about 107(4%) of the student population in the three public secondary schools. School no. 3 has the highest percentage of about 66(31%) of students with disability because actually it is registered as a National Special school although it has embraced inclusive education. School no. 1 has about 23(2%) of the population of students with

disabilities. School No 2. has 18(2%) of students with disabilities. The total number of students with disabilities in three public secondary schools in Bungoma County was **107**, the number of boys **69(64.5%)** and the girls **38(35.6%)**.

### **3.6 Instruments of Data collection**

#### **3.6.1 Questionnaire**

The study employed questionnaire for data collection for Special Needs Education Teachers (SNET), the Regular Teachers (RT), SNE students and Regular Students (RS). The questionnaires were structured ones and close ended items. By structural items it means the questions were accompanied by a list of possible alternatives from which respondents selected the answer that best describes their situations (Mugenda & Mugenda, 2003). The advantage of using this type of instrument was the ease with which it accorded the researcher during analysis. Moreover, they were easy to administer and economical to use in terms of money. Open-ended questions were included in the instrument for advantage of giving insight into the motivation of the respondents. In addition, it made it possible to analyze qualitatively open-ended questions. Here the respondents were given complete freedom of response. Likert type of scale was employed in the structured items of the questionnaires to obtain the opinion of the respondents regarding implementation of inclusive education.

#### **3.6.2 The Interview Schedule**

The Interview Schedules were used to draw information from Senior Assistant Director of Education (SADE), the County Director of Education (CDE) of Bungoma County, Principals of the three public secondary schools with Inclusive Education programmes, and the Education Officer in charge of Special Needs Education (EOCSNE) of Bungoma County.

### **3.6.3 Document Analysis Guide**

Document Analysis Guide was used to collect data on the financial support for Inclusive Educational programme by the government, NGOs and any other agencies, Admission Records of students in the three public secondary schools in Bungoma County, the population of students with disabilities and those without in public secondary schools, confirmation of the qualification of Principals, teachers and other professionals in public secondary schools, records of the infrastructure improvements in the public secondary schools, check the records of Log book, Punishment book, Visitors' book, and Ledge book.

### **3.6.4 Observation checklists**

The observation checklist was used by the research to find out if the following were available in the public secondary schools for the implementation of IE policy: populations in the classroom, availability of resource rooms and how equipped they are, landscape of the school compound whether hilly or flat grounds, buildings, if storey- building, then do they have ramps. Pavements, how they have been constructed to promote mobility of Learners with disabilities especially those with visual impairments in the school, entrance to various important places, if accessible or not, doors to various rooms including toilets, if they are wide enough to enable accessibility. Communication designs in the school to promote inclusive Education, the interactions in the school among students with and without disabilities. Facilities in the school such as chairs, tables, and cup-boards, Braille machine, and talking computers, among others if they are adapted to the conditions of students with disabilities. Establish if adapted physical education, corrective physical education, remedial physical education, adapted sports, adapted games, outdoor games, and sports (football,

netball, volleyball, handball, hockey, basketball, goal ball, showdown, and athletics) are taught in the school or not. Investigator also checked if the following were given the required attention, namely Indoor games recreation, and Leisure activities in the community, music and dance, theatre performance, and disability friendly toilets.

### **3.7 Validity of the Instruments**

Validity is the extent to which a test measures what it is supposed to measure (Kombo & Tromp, 2006). A research instrument is valid if its content is relevant and appropriate to research objectives. Validation of the instruments was done before the actual research took place. According to Burton & Mazerolle (2011), there are three types of validity namely; Face validity, Content validity, and Construct validity. For Face validity, evaluations of instruments' appearance by a group of experts establish their ease of use, clarity, and readability. To address content validity, evaluation of instruments' representativeness of topic was done by experts from department of Special Education to establish their credibility, accuracy, relevance and breadth of knowledge regarding the domain (Burton & Mazerolle, 2011). Construct validity is the degree to which an operational measure correlates with the theoretical concept investigated. Construct validity provides the researcher with confidence that a survey actually measures what it is intended to measure. It allows researchers to draw legitimate conclusions from the findings (Netemeyer, Bearden & Sharma, 2003).

### **3.8 Reliability of Research Instruments**

Reliability refers to the consistency or stability in the measurements (Christensen, 1988). To test reliability of the instruments, the questionnaires was piloted to 1 County Director of Education of Busia County, one Education Officer in charge of Special Needs Education, 2

Principals of secondary schools, 2 teachers in charge of Special Needs Education, 18 regular teachers of secondary schools, 15 Students With Disabilities of public secondary schools and 201 Regular students of public secondary schools. Niewiadomy (2002) recommends approximately 9% to 10% of the final study sample size. The piloting was carried out in the neighboring Teso north and south Sub- Counties. The test instruments were administered to the same respondents twice with an interval of two weeks (Hinton- Bayre, 2010). Pearson product moment correlation ( $r$ ) was used to determine the correlation coefficient. The questionnaire and interview schedules were termed as reliable after they attained a threshold of 0.70 and above (Bowling, 2002). After two weeks the tests were repeated on the same respondents using the same questions but varying the numbering of the questions. Reliability coefficient for interview for principals of public secondary schools was 0.81, and reliability coefficient for questionnaire was SNE teachers 0.84, regular teachers 0.78, Students with Disabilities 0.89, and regular students 0.85. Questionnaires were analyzed and the results correlated to determine their reliability coefficients. Best and Kahn (1989) suggested that the Pearson product moment correlation is most often used because of its precision. Both reliability and validity should be high to be desirable (Fraenkel *et al.*, 1993).

### **3.9 Data Collection Procedures**

An introduction letter was obtained from the department of Special Needs Education and thereafter School of graduate studies, Maseno University, before proceeding to the field to collect data in secondary schools, Bungoma County. The County Director Education and all Principals of public secondary schools that have Inclusive Education Programmes were requested for consent before commencement of data collection. The appointments were made

with Education Administrators, Principals of secondary schools and teachers concerning the project.

Data was collected using questionnaires from, Special Needs Education teachers of public secondary schools, Regular teachers of public secondary schools, Students with Disabilities in the inclusive educational programme in the public secondary school, and Regular students in public secondary schools that have inclusive educational programme. Interview schedules for the Senior Assistant Director of Education, County Director of Education, Education Officer In-Charge of Education, and Principals of Public secondary schools were administered. Data was also collected using observation checklist.

### **3.10 Methods of Data Analysis**

Data analysis was carried out using both descriptive statistics as well as inferential statistics. The descriptive statistics that were used in the current study include the means, standard deviations standard errors among others. For the inferential statistics, the current study used multiple linear regression models with finance, human resources, and physical resources, students with special needs as well as regular students as independent variables or predictors alongside implementation of inclusive education in secondary schools as the criterion or dependent variable. Regression coefficients were computed using the SPSS software where the weight of the influence of each of the predictor variables was measured by the value of the regression coefficients. Before the regression model was used, there were some preliminary tests were carried out to ascertain how fit the model was. This preliminary test included test for normality by using Shapiro Wilk test as well as test for multicollinearity or



correlation among the independent variables or predictor variables, i.e. the multicollinearity test.

### **3.10.1 Normality tests**

The software the SPSS software was used to compute the test statistic for normality namely Kolmogorov-Smirnov as well as Shapiro-Wilk tests of normality. Both tests are used to check for normality but the current strategy adopted Shapiro-Wilk test to ascertain normality of the data for the variables. A value of the test statistic that was greater than 0.05 or 5% which is the significance level meant that indeed the data was normal in terms of the distribution. The table below shows the normality tests that were carried out to establish whether it was proper to be able to use them multiple linear regression model or not. From the values in the sig column under Shapiro-Wilk test, all the values are greater than the significance level which is 0.05 and therefore it can be concluded that for all the five aspects of the five factors that influence implementation of inclusive education all the data relating to these variables was normal. This therefore justifies the use of multiple linear regression models because all the conditions of normality for the key variables of the study were met.

**Table 3.5: Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Finance	.316	404	.201	.723	404	.602
Human resources	.211	404	.441	.843	404	.551
Physical resources available	.304	404	.344	.691	404	.305
Students with disabilities	.342	404	.357	.787	404	.790
regular students	.339	404	.109	.753	404	.301
Implementation of IE	.393	404	.333	.646	404	.288

**a. Lilliefors Significance Correction**

To be able to ascertain whether that is multicollinearity among the independent variables or that there are significant correlations among the independent variables themselves, the multicollinearity test was conducted using variance inflation factor column. For the variance inflation factor, many studies in the literature show that the tolerance range should be between 0.1 to 10 from the findings in the current study, it is clear that the values of variance inflation factor lie within this range which means that there is no multicollinearity in the model, or that there are no significant correlations among the independent variables or the predictors of the model.

**Table 3.6: Multicollinearity test**

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Finance	.120	8.354
Human_resources	.324	3.088
1 Physical_resources_available	.115	8.722
Students_with_disabilities	.181	5.516
regular_students	.265	3.780

### 3.10.3 Multiple Regression Model

The current study used multiple linear regression analysis so as to establish the functional relationship between the predictors which are the independent variables to the criterion which is the dependent variable. The general model of the linear regression was of the form:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \epsilon_1$$

**Key:**

Y Implementation of inclusive education in public secondary schools

X1 Finance

X2 Human resources

X3 Physical resources available

X4 Students with disabilities

X5 Regular students

$\beta_0$  Constant term

$\beta_{ij}$  Beta coefficients

$\epsilon_i$  Random Error term

Equation 1: Multiple regression models

### **3.11 Ethical Considerations**

Ethical considerations protect the rights of participants by ensuring confidentiality. It is unethical for the researcher to share identifying information regarding the study with anyone not associated with this study. This ethical consideration is necessary to maintain the integrity of the researcher (Creswell, 2009). The respondents were assured of the confidentiality of information given and were informed that their views were to be used for the purpose of the study only. Protection of respondent's identity was highly observed by not capturing respondent's name on the questionnaire.

**CHAPTER FOUR**  
**RESULTS AND DISCUSSION**

**4.1 Introduction**

This chapter presents the findings of the study and discussion. The themes are derived from the objectives of the study as follows;

- i. To establish the extent to which extra funding by MOEST influences implementation of inclusive education in public secondary schools in Kenya.
- ii. To determine the extent to which human resource influences implementation of inclusive education in public secondary schools in Kenya.
- iii. To determine the extent to which physical resources influences implementation of inclusive education in public secondary schools in Kenya.
- iv. To establish the extent to which students with disabilities influences implementation of inclusive education in public secondary schools in Kenya.
- v. To establish the extent to which regular students influence implementation of inclusive education for secondary schools in Kenya.

The return rate of questionnaires were as shown in Table 4.1

**Table 4.1: Return Rate of Questionnaire**

<b>Category of Respondent</b>	<b>No. Issued</b>	<b>No. Return</b>	<b>Percentage</b>
SNE teachers	10	10	100
Regular teachers	122	112	91.8
Students with Disabilities	154	49	90.7
Regular students	350	335	95.7

From Table 4.1 it can be noted that the return rate of the questionnaires were SNE Teacher 10(100%), Regular teacher 112(91.8%), Students with Disabilities 49(90.7%), and Regular students 335(95.7%) according Mugenda & Mugenda (2003), these return rates were adequate for data analysis.

#### **4.2 Influence of Extra Funding by MOE on implementation of Inclusive Education in public secondary schools**

The research question responded to was: To what extent does extra funding by MOE influenced implementation of Inclusive Education in public secondary schools? In response to this research question data on extra funding (Table 4.2) and the status of implementation (Table 4.3) were regressed and the results were as shown in Table 4.4.

**Table 4.2: Extra funding by MOE**

<b>Form</b>	<b>School S/N</b>	<b>No. of Students with Disabilities</b>	<b>Extra Funding in Kshs</b>
I	1	6	72,000
	2	4	48,000
	3	13	156,000
II	1	5	120,000
	2	6	144,000
	3	17	408,000
III	1	9	324,000
	2	3	108,000
	3	19	684,000
IV	1	3	144,000
	2	5	240,000
	3	17	816,000

**KEY:**

**SWD:** Students with Disabilities

**School 1:** Boys' public secondary school (23 SWDs).

**School 2:** Girls' public secondary school (18 SWDs).

**School 3:** Mixed National secondary school (107 SWDs)

Each Student with Disabilities (SWDs) receives extra funding of Kshs. 12,000/= (Twelve thousand only).

The extra funding by MOE in Table 4.2 shows that Form I , school number I and 6 students with disabilities and each student was given extra funds of Ksh. 12,000 and this totaled to Kshs. 72,000, school number 2 had enrolled 4 students with disabilities and each was awarded extra funds of 12,000/= totaling to 48,000/=. The school number 3 had 13 students

in Form one. Each student received 12,000/= and the total is 156,000/= Extra funding by MOE in Form II for school number 1 had 5 students with disabilities and the extra funds for these students would total to  $5 \times 2 \times 12000$ /= and total funding was 120,000/-. School number 2 for the form II had 6 students. This gave a total of 144,000/=. The school numbers 3 had 17 students with disabilities which meant that  $(17 \times 2 \times 12,000)$  the total extra funding is Kshs. 408,000/=

Extra funding by MOE in form III for the three public secondary schools were as follows: school number I totals to Ksh. 324,00, School number II was Kshs. 108,000/= and school number III was Kshs. 684,000/= In form four, the extra funding by MOE was as follows; school No. 1 was  $3 \times 4 \times 12000$  totals to 144,000/=; school No. 2 was  $5 \times 4 \times 12000$  which is equal to 24,000/= and school numbers 3 had  $17 \times 4 \times 12000$  totaling to 816,000/=. The Ministry of Education would have released a total of Ksh. 660,000 for school number 1, and for school number 2, the total was Kshs. 540,000 and school number 3 had the total of Kshs. 2,064,000. The grand total for the three public secondary school was Ksh. 3,264,000.



**Table 4.3: Status of Implementation of IE**

Aspect of Implementation		Ratings					Total	Mean Rating
		1	2	3	4	5		
Ratio of SWD to RS	F	0	2	1	0	0	3	2.3
	S	0	4	3	0	0	7	
Degree to which SWDs are adequately incorporated into learning activities	F	0	2	0	1	0	3	2.66
	S	0	4	0	4	0	8	
Degree to which SWDs are incorporated with co-curricular activities	F	0	2	1	0	0	3	2.3
	S	0	4	3	0	0	7	
Degree to which physical facilities have been adapted to conditions of SWDs	F	0	3	0	0	0	3	2.0
	S	0	6	0	0	0	6	
Degree to which teaching /learning resources are equitably distributed to SWDs and regular standards	F	0	0	2	1	0	3	3.3
	S	0	0	6	4	0	10	
Degree to which SWDs appreciate learning with R.S	F	0	0	0	3	0	3	4.0
	S	0	0	0	12	0	12	
Degree to which regular students appreciate learning with SWDs	F	0	0	0	3	0	3	4.0
	S	0	0	0	12	0	12	
Degree of interaction between SWDs and R.S	F	0	1	2	0	0	3	2.66
	S	0	2	6	0	0	8	
Degree to which regular teachers appreciate SWDs	F	0	0	2	1	0	3	3.3
	S	0	0	6	4	0	10	
Degree to which SWDs appreciate regular teachers	F	0	2	1	0	0	3	2.3
	S	0	4	3	0	0	7	
Degree to which SNE teachers appreciate R.S	F	0	1	2	0	0	3	2.66
	S	0	2	6	0	0	8	
<b>Overall Mean</b>								<b>2.86</b>

**Key: F – Frequency**

**S- Scores**

**Interpretation of Mean Ratings**

1.00 -1.44      Very Low

1.45 -2.44      Low

2.45 -3.44      Moderate

3.45 -4.44      High

4.45 -5.00      Very High

From Table 4.3, the ratio of students with disabilities to regular students had the mean rating of 2.3. This is low and therefore requires concentrated efforts to improve the ratio rating. The degree to which SWDs are adequately incorporated into learning activities had the mean rating of 2.66. The rating is moderate a sign of fairly positive status of the implementation of IE. The incorporation in the co-curricular activities is also low with a mean rating of 2.3. This implies that co-curricular activities are not taken seriously in public secondary schools for SWDs while RS enjoy those activities in those schools. The degree to which physical facilities have been adapted to the conditions of SWDs was observed during the study because most of the physical facilities had been constructed to serve regular students an indication that implementation of IE is seriously affected by physical facilities.

The teaching and learning resources had the mean rating of 3.3 which was moderate. There was need for teaching and learning resources to be supplied adequately by the government and MOE for the implementation of the IE to be very high at least above 4.45, this would help motivate SWDs to be in public secondary schools. The degree to which regular students appreciate learning with SWDs had the mean rating of 4.4 which was high and it correlated with the findings that SWDs and regular students interacted socially and academically well.

The degree to which regular students appreciate learning with SWDs was also rated at the mean of 4.4. This implied that regular students were ready to learn with the peers with SWDs. The degree of interaction between SWDs and regular students had mean rating of 2.66 which was moderate; this rating need to be improved to enhance implementation of inclusive education in public secondary schools. The degree to which regular teachers appreciated SWDs was rated at the mean of 3.3 which was moderate. There was need for seminars and workshops to improve mean rating.

Degree to which SWDs appreciated the regular teachers was low with the mean rating of 2.3. This implies that SWDs are not helped by regular teachers as required a situation that impacts negatively in the implementation of IE. The degree to which SNE teachers appreciate RS is rated at a mean of 2.66, this was a moderate rating. There was need for SNE teachers to appreciate RS highly so that they influence them to interact with SWDs. Generally, all the eleven aspects of the implementation of IE, there is none that had mean rating that was very high between 4.45-5.00, this implies more efforts are required to improve the ratings. The overall mean was rated at 2.86 which is moderate.

Funding is the driving force in all forms of human undertakings. That is no activity can start and be propelled to logical conclusion without money. It is against this backdrop that this study sought to establish the influence of extra funding on implementation of Inclusive Education. For purposes of implementation of Inclusive Education each student with disability receives extra funding of Kshs. 12,000/= while special needs education teachers

receive special allowance of 10% of their basic salaries. It is extra funding that was regressed against the status of Inclusive Education. The results were as shown in Table 4.4.

**Table 4.4: Model Summary of Regression Analysis of extra funding by MOE and Implementation of IE**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.788 <sup>a</sup>	.620	.608	.62403	.620	47.822	4	117	.000

a. Predictors: (Constant), Extra funding by MOEST.

From Table 4.4 it can be noted that extra funding by MOE accounted for 60.8% of the variance in the implementation of inclusive education as was signified by the coefficient Adjusted R Square .608. The other 39.2% was due to other factors that were not the subject of this study. These findings mean that extra funding by MOEST for Students with Disabilities had been put on proper use in public secondary schools. Regular teachers in public secondary schools have attended seminars and workshops to enhance implementation of Inclusive Education, and MOEST paid enough special allowance to special teachers to influence the implementation of Inclusive Education. Furthermore, Public secondary schools had undertaken projects that influence Implementation of Inclusive Education.

Extra funding means the implementation of Inclusive Education will be positive, that is why it accounts for 60.8% of the factors that influence the implementation of Inclusive Education. Funding has never been adequate but without funding implementation of Inclusive Education may not work in public secondary schools. Although the MOEST has tried in funding the implementation of Inclusive Education, however, one may not be sure of how the

funds are utilized because the public secondary schools under study could not sufficiently account how the funds were utilized through interviews. This concurs with what Mbaka and Oduor (2013) who pointed out that the report by the Auditor General revealed alleged massive embezzlement of project funds in national and provincial schools (currently county and extra county schools) has made parents, leaders more worried than ever before and may impact negatively on the implementation of IE in public secondary schools. The report raised audit queries on alleged misuse kshs. 5.5 billion For free primary and day secondary education in the 2010/2011 financial year.

But it is the lost millions of shillings meant for elevation of national schools that has raised serious concerns among public secondary schools stakeholders. Among the schools audited by the Auditor General for alleged embezzlement or misappropriation of money are Kenya High, Lenana School, Nairobi school, Friends school Kamusinga, Starehe Girls school, Kenyatta High school Mwatate, Malindi school and Jamhuri high school Mwatate, Malindi school and Jamhuri high school, this may cause concern in the implementation of Inclusive Education. The extra funding the government released through MOEST is meant to assist students with disabilities to get quality education in public secondary schools.

The students' welfare was not adequately taken care of in terms of exposure as required to the right resources and equipment. This was also observed by Ochina (2015) who emphasized that students with disabilities don't enjoy access to society on an equal basis with the able ones because of insufficient funding to schools to enforce implementation of Inclusive Education. He further argued that developing nation are constantly struggling to meet their national budgets, our country being one of them, most of them only manage

through borrowing and getting grants from developed nations, International Monetary Fund and World Bank but one will observe that much of what is borrowed is not reflected in the implementation of inclusive education, which implies that students with disabilities' welfares are not catered for as required.

Ngugi and Kabuchora (2010) in their argument emphasized that it is economical for regular schools to embrace IE because they will not require extra resources and funding, an approach that countries like USA, Germany, Israel, Ghana, Taiwan and the Philippines have realized as cost effective. The authors further emphasized that funds can be used more effectively to cater for IE; training nonmaterial resources such as teachers, regular students, management teams and community to enhance the capacity of the school to respond to learners diversity. But the infrastructural establishments which are effected through funding cannot be taken for granted. If some schools structures have buildings with stairs and they have not constructed ramps probably because the funds were not made available or out of ignorance, students with physical impairment and visual disabilities may find it hard to access rooms on the upper floors.

It was also established that funds from the government were not sent to schools in good time. These hamper the implementation of Inclusive Education. It was also noted that signatories of accounts in the public secondary schools of the three public secondary schools that were under study did not involve the specially trained teacher in signing before the funds are withdrawn for the project in the schools. This means, the Board of Management were not accountable to the school. Funds being extra to assist Students with Disabilities, one would

expect some funds are set aside for medical attention and others aspects that affect learners with disabilities, which was not the case in the three public secondary schools.

Daily Nation’s correspondents (2014), when covering the function of the Cabinet secretary Ministry of Education and Technology when opening a university for the persons with hearing impairments, the Cabinet Secretary pointed out that students with disabilities face challenges therefore require extra funding in regular schools in order to be able to maximize their education and join tertiary institutions and universities. The views of the former Cabinet Secretary concurred with the three principals of public secondary schools that are implementing inclusive education and also special teachers who argued that extra funds are not sufficient to implement inclusive education. He said that the government had set aside Kshs. 390 million in the year 2013, and the same amount in the year 2014 for students with disabilities. However, there was no clear information for the Minister if the amount stated is sufficient to implement inclusive education and in how many schools.

The study further sought to establish whether extra funding by MOEST was a significant predictor of IE and the results were as shown in Table 4.5.

**Table 4.5**

**ANOVA of Influence of Extra funding on implementation of IE**

<b>Model</b>	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1 Regression	18.834	4	4.708	8.115	.000 <sup>b</sup>
Residual	67.888	117	.580		
Total	86.721	121			

a) Dependent Variable: Implementation of Inclusive Education

b) Predictors: (Constant), Extra funding by MOEST

From Table 4.5 it can be observed that extra funding by the MOE was a significant predictor of the implementation of IE. This means that the MOE's extra funding of SWDs indeed influenced implementation of IE [ $F(4,117) = 8.115, p < .05$ ]. This was as a result of utilization of the extra funds on proper use for attendance of seminars and workshops by regular teachers and SNE teachers for purposes of enhancing their capacities to participate effectively in curriculum and co-curriculum activities of IE. Payment of special allowances, to SNE teachers which has boosted their morale besides capacity building through workshops and seminars. Other monies were used to adapt the existing facilities to Students with Disabilities (SWDs). For instance, construction of ramps, lower case toilets and coordination with the Educational Assessment and Resource Centres, (EARC) for support. This means that extra funding by MOEST for Students with Disabilities had been put on proper use in the school to influence implementation of IE positively. Regular teachers had attended seminars and workshops to enhance implementation of IE in public secondary schools through the sponsorship of the MOEST. MOEST paid enough special allowance to special teachers to influence the implementation of IE positively. Public secondary schools had undertaken projects that influence Implementation of Inclusive E because MOE had availed extra funds for Students with Disabilities.

To establish the actual influence of extra funding by MOE on implementation of IE, multiple regression analysis was computed as shown in Table 4.6.



**Table 4.6: Multiple linear regression Analysis of the influence of Extra funding by MOE and Implementation of IE**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.581	.309		8.349	.000
Projects funded by MOE for SWDs	-.069	.054	-.108	-1.272	.206
Special allowance paid to special needs teachers to influence the implementation of IE.	.005	.052	.007	.089	.929
1 Seminars and workshops for regular teachers to enhance implementation of IE in public secondary schools through the sponsorship of the MOEST.	-.031	.052	-.050	-.591	.556
Extra funding by the MOE for Students With Disabilities.	.325	.058	.463	5.602	.000

a. Dependent Variable: Implementation of Inclusive Education.

Regression Equation  $Y = B_0 + BX_1$

Predictors in the Model: (Constant), the extra funding by the MOEST for students with disabilities. The funds had been put on proper use in the school to influence implementation of Inclusive Education positively, hence extra funding influenced implementation of Inclusive Education. Regular teachers had attended seminars and a workshop to enhance implementation of Inclusive Education in public secondary schools through the sponsorship of the MOEST is not significant as p-value was greater than the set .05 critical value. This implies that seminars and workshops don't influence implementation of IE in any way. The paid special allowance to special needs education teachers to influence the implementation

of IE however the p-value of .929 meant that it was not a significant factor, as the p-value was greater than the set level of significance of .05. In other words, payment of special allowances had no influence on the implementation of inclusive education. May be the allowances were no enough. Public secondary schools had undertaken projects that influence Implementation of IE, but regression analysis revealed that the projects did not influence implementation of inclusive education. Extra funding by MOEST, significantly influenced Inclusive Education as the critical value was less than .05. Thus for every one unit increase in extra funding of Students with Disabilities there was .325 units improvement in the implementation of IE.

The selected three public secondary schools also revealed that; one of the schools, which was is a boys' public secondary school had crowded toilets that were used by both students with disabilities and the regular students. The observation revealed the suffering of students with disabilities, especially those with Low vision and Blind students that have been enrolled in this school. One wonders why the school administration cannot use extra funds to correct the situation.

On the positive side one of the selected schools, a girls' school had prudently used extra funds to purchase Creams for the SWDs especially those students with Albinism, which has helped the girls to be more comfortable especially when exposed on the rays of light. This is a very good influence in the implementation of IE because the efforts has imparted positively on the students because they are retained in the school.

One of the selected public secondary schools that are implementing inclusive education and it is a mixed public secondary school has constructed adapted toilets suitable for students with physical disabilities, especially those ones with wheelchairs. The toilets have ensured privacy when using the toilets.

### 4.3 Influence of Human Resources on Implementation of IE

**Table 4.7: Model Summary of Regression Analysis of Human resource and Implementation of I.E**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.464 <sup>a</sup>	.216	.189	.76244	.216	8.045	4	117	.000

a. Predictors: (Constant), Human Resource

From Table 4.7 it can be noted that human resource accounted for 18.9% of the variance in the implementation of inclusive education as was signified by the coefficient adjusted R square .189. The other 81.1% was due to other factors that were not the subject of this study. These findings means that human resources have ensured that public secondary schools have influence in the implementation of implement IE., Special needs through over-loaded in the school in teaching influence implementation of inclusive education. Non- teaching staff members in the school don't have the knowledge, Skills and the positive attitudes to handle learners with disabilities, negative implementation of Inclusive Education, whereas those who are benevolent in character enhance implementation of Inclusive Education.

The few trained teachers in SNE have had an influence in the implementation of IE in public secondary schools. However, since majority of the teachers have no training in SNE, they have no knowledge and skills in handling students with disabilities, hence they are likely not to positively influence the implementation of IE. The school administrators also indicated

lack of knowledge in SNE; therefore, they could not also have positive influence in the implementation of inclusive education. In addition, the mean score factor impacts negatively on the implementation of IE. Public secondary schools would like to post high mean scores to appear in the print media headlines hoping to capture the attention of MOE hence students with disabilities are likely to be neglected, or ignored and sometimes be forced to repeat lower classes and even at times they are forced to drop out of school.

Regular teachers in public secondary schools may have been exposed to seminars or workshops which may positive influence implementation of inclusive education, but the frequency and consistence of their exposure is what matters. Through interviews, it appeared seminars and workshops were rare hence negative affected implementation of IE. Other professionals like teacher aids, physiotherapists, social workers, occupational therapists, school nurses, counselors among others who are likely to influence the implementation of IE are not posted to the selected three public secondary schools apart from school nurses that serve all students in the school.

Boards of Management of the public secondary schools that implement Inclusive Education have not been very supportive to the implementation of IE. Special allowances of 10% of the basic salary of teachers trained in Special Needs Education may not adequately influence implementation of IE. The allowance may not be adding value to the implementation of Inclusive Education. One would expect that even regular teachers are given some reinforcement so that they develop interest in the implementation of Inclusive Education.

To establish whether Human Resource was a significant predictor of the implementation of IE, ANOVA was computed. The results were as shown in Table 4.8.

**Table 4.8: ANOVA Human Resource and Implementation of I.E**

<b>Model</b>	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1 Regression	18.707	4	4.677	8.045	.000 <sup>b</sup>
Residual	68.014	117	.581		
Total	86.721	121			

a. Dependent Variable: implementation of inclusive education

b. Predictors: (Constant), Human Resource

From Table 4.8 it can be observed that human resource was a significant predictor of the implementation of IE. This means that Human Resource indeed influenced implementation of IE ( $F(4,117) = 8.04, p < .05$ ). This was as a result of the school administration being keen in looking for enough human resources to influence implementation of IE positively. Ministry of Education has ensured that public secondary schools have human resource to implement IE. Special Needs teachers are however over-loaded in the school in teaching other Subjects in the curriculum which influence implementation of inclusive education somewhat negatively.

To establish the predictors of Human Resource that influence implementation of IE multiple linear regressions were computed and the results were as shown in Table 4.9.

**Table 4.9: Multiple Regression Analysis of the influence of Human Resource on implementation of Inclusive Education**

Model	Unstandardized		Standardized	t	Sig
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	2.654	.341		7.781	.000
Adequacy of human resource to implement IE.	.000	.045	-.001	-.009	.993
Training of teachers in SNE is adequate	.007	.033	.012	.203	.840
Overloading SNE teachers affect implementation of IE	-.060	.051	-.097	-1.183	.239
Non- teaching staff	-.045	.051	-.073	-.886	.377
The school administration	.317	.058	.451	5.497	.000
MOE is determined to influence IE	-.140	.052	.192	2.710	.008
Implementation of IE is being boosted by training of teachers	.003	.036	.005	.081	.936

a. Dependent Variable: implementation of Inclusive Education

$$\text{Regression Equation } Y = \beta_0 + \beta_1 X_1$$

From Table 4.9 it can be observed that school administration significantly influenced the implementation of Inclusive Education. Thus for every one unit increase in administrative activities on integration of SWDs in the school system, implementation of I.E improved by .327 units. The results indicate that human resource plays a very critical role when it comes to implementation of inclusive education programme in secondary schools. Empirical studies have shown that indeed human resources address critical role when it comes to implementation of inclusive education in public secondary schools. Having shown that human resources play a critical role in implementation of inclusive education in public

secondary schools the current study seems to agree with the position held by other researchers in this area for instance, Agbenyega (2006) observes that lack of preparedness on the side of the regular teachers lead to fear of implementation of inclusive education in regular learning institutions and is what contributes towards undermining such efforts to implement the programme. This position was emphasized by other scholars such as Gary (1997) and Tiegerman Farber (1998) who believe that in the end if this happens then there is likelihood that there could be even lower academic standards in the learning institutions that have embraced inclusive educational programme. This therefore underscores the need for there to be adequate preparation on the side of the teachers so that there could be a successful implementation of inclusive education programme in public secondary schools.

The MOE have tried to organize seminars and workshops to educate and enlighten school administrators, regular teachers, and other non-teaching staff members who have positively influenced implementation inclusive education positively in the selected public secondary schools, but according information through interviews the frequency of these programmes are minimal because of financial constraints.

According to Hiuhu and Nabea (2009), advocated for a strong human resource with a Will to offer support services in education of students with disabilities for the realization of inclusive education in public secondary schools. The views of the above scholars are in agreement with the views that, the school administration is keen in looking for enough human resources to influence the implementation of inclusive education in public secondary schools. However, the challenge has been the shortage of teachers with the knowledge, skills and

positive attitudes to handle students with disabilities. There are institutions like Kenya Institute of Special Education (KISE), which train teachers in Special Needs Education but at diploma and certificate levels that are mostly deployed in special schools or integrated programmes in primary schools. Other known institutions that train teachers at bachelor's level and above like Maseno University, Kenyatta University, and Moi University may not be having adequate output and may be these graduates may be ending up in special schools, Units attached to regular schools or integrated programmes also in regular schools, and these programmes are different from inclusive education. Such arrangements have been affecting implementation of inclusive education in my view.

Appendix J shows the total number of 85 programmes in the Country that offer Special Education. The schools in bold are Special schools others are either integrated programmes/Units attached to regular public secondary schools/inclusive programmes. There are 24 special schools and 61 are either integrated programmes or units attached to regular public secondary schools or inclusive programmes. These programmes may not get enough personnel to teach in special schools or integrated programmes.

The emphasize has been inclusive education for last two decades, but still we have special schools as shown in appendix J, one wonders if MOEST and the government are serious in effecting implementation of Inclusive Education because it appear that Special schools, integrated programmes, Units and Inclusive Education programmes will continue competing for the few teachers trained in Special Needs Education. The few graduates in Special Needs



Education when shared out among these entire four programme may just turn out to be a mere drop in the ocean, in a such scenario implementation of IE has a long way to go.

There is also confusion in the terminologies are used. For instance it is not easy to tell the difference between integrated programme and Units attached to regular public secondary schools; the misconception has not done well to the implementation of IE in public secondary schools. Therefore, as much as Hiuhu and Nabea (2009) advocated for a strong human resource with a WILL to support the services for SWDs it will take time as it was observed during the , however, school administrators should double their efforts to get personnel to continue influencing implementation of IE positively.

Bowman (1986), in her 14-nation UNESCO study, reported a wide difference in education administrators and teachers' opinions regarding inclusion. The countries surveyed were; Egypt, Jordan, Columbia, Mexico, Venezuela, Botswana, Senegal, Zambia, Australia, Thailand, Czechoslovakia, Italy, Norway and Portugal. The educators were found to favour different types of children for inclusion into ordinary classes. Although teacher responses varied in terms of the development of their educational systems in general and of special education in particular, there was a general hierarchy of conditions that were more or less of inclusion. These views were also indicated by some teachers and administrators who suggested that students with disabilities should join special schools, such sediments are the ones that may impact negatively in the implementation of inclusive education. The negative attitudes by teachers, school administrators, members of the school board of management; non-teaching staff can be a big blow in the efforts to implement inclusive education in public secondary schools.

Botswana (Ministry of Education has introduced school intervention teams – Advising teachers who have children with special educational needs. If such practice can be used in our country in the implementation of inclusive education, it may add value in the struggle to implement IE in public secondary schools. Sometimes regular teachers may be lacking exposure and courage to handle SWDs; however, with school intervention teams as it practiced in Botswana, the situation may change.

Meadan, Konde and Amaya (2008) viewed an inclusive setting as most challenging because school populations have become increasingly diverse. This concurs with what was observed by the researcher in the public secondary classrooms in the selected schools under study where on average the population of students per stream were 45, with diverse in ability and given the fact that some students had disabilities, it is not easy for students to get quality education such crowded environment which obvious may undermine implementation of IE, therefore in a such situation human resources if adequate may rescue the situation.

Bennett and Katzenmeyer (1997) suggest that access to resources and specialists support affects confidence and attitudes towards IE.

#### **4.4 Influence of Physical Resources on the Implementation of Inclusive Education**

Physical resources are vital in implementation of any system of education. The other factors include human resources, financial resources, infrastructure, and land among others. Notwithstanding the role of these factors, this study focused on physical resources because, the other factors had been largely researched on. Thus to establish the influence of physical resources on implementation of I.E regression analysis was computed (Table 4.10).

**Table 4.10: Model Summary of Regression Analysis of Physical Resources and Implementation of Inclusive education**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.454 <sup>a</sup>	.206	.189	.75242	.206	7.042	4	117	.000

a. Predictors: (Constant), Physical resources

From Table 4.10 it can be noted that physical resources accounted for 18.9% of the variance in the implementation of inclusive education as was signified by the coefficient adjusted R square .189. The other 81.1% was due to other factors that were not the subject of this study. The influence was significant as the p-value was less than .05, the set value of significance  $r=.454$ ,  $N = 122$ ,  $P < .05$ ). These physical resources included chairs, desks, tables, classrooms, libraries and play fields.

**Table 4.11: ANOVA of Physical Resources and implementation of Inclusive Education**

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	1.503	4	.376	.516	.000
1	Residual	85.219	117	.728		
	Total	86.721	121			

a. Dependent Variable: implementation of inclusive education

b. Predictors: (Constant), Physical resources

From Table 4.11 it can be observed that physical resources were not a significant predictor of the implementation of Inclusive Education. This means that the physical resources of Students with Disabilities indeed influenced implementation of IE [ $F(4,117) = 8.115$ ,  $p < .05$ ].

This was as a result of sports and games facilities in the school not being suitable for students with Disabilities in their school. This means that physical facilities are real drivers of the implementation of inclusive education. Physical resources are valuable both in curricular and co-curricular activities and indeed enhance the process of education. This means that in the absence of physical resources no meaningful learning can take place.

**Table 4.12: Coefficients of Physical Resources**

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	3.581	.381		9.388	.000
Classroom	.027	.058	.043	.469	.040
1 School equipment and library resources	-.046	.059	-.073	-.786	.034
Toilet facilities	-.071	.065	-.100	-1.093	.027
Sports and games facilities	.016	.051	.028	.310	.051

a. Dependent Variable: Implementation of Inclusive Education

$$\text{Régression Equation } Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

From Table 4.12 it can be observed that classrooms influenced positively the implementation of Inclusive Education such that for every one unit increase in classrooms implementation of Inclusive Education improved by .027 units. Although the units were small, the influence was significant. This means that the model can be applied to the study population. Sports and games facilities equally had a positive influence on the implementation of Inclusive Education, though the influence was small but significant. Thus for every one unit increase in sports and games facilities, implementation of Inclusive Education improved by .016 units. School equipment and library resources; and toilet facilities, however had negative influence

on implementation of Inclusive Education. Thus, for every one unit increase in school equipment and library facilities, implementation of inclusive education reduced by .046 units and for every one unit increase in toilet facilities, implementation of inclusive education declined by .071 units. This means that classrooms, games and sports enhanced implementation of inclusive education while school equipment and library resources and toilet facilities reduced implementation. Regression Equation  $Y = 3.581 + 0.27X_1 + -.046X_2 + -.071X_3 + .016X_4$ . The influence generally was low.

These findings were supported by findings in the observation checklist by the Researcher the following were noted in the sample public secondary schools that were implementing Inclusive Education: there was overcrowding student populations in the classroom an average of 55 students per stream, two schools had resource rooms but not fully equipped as required but one school did not have a resource room, landscape of the school compounds were suitable for students with disabilities because they had flat grounds. The sample selected public secondary schools had a number of structures but one of the schools had a storey- building but there were no provisions for ramps and rails that could assist students with disabilities who experience mobility problems.

One of the schools had pavements well constructed to enhance mobility of Students with disabilities especially those with visual impairments and physical challenges. Entrance and accessibility to various important places like toilets, classrooms and offices were not taken into consideration in the two public secondary schools of the sampled selected ones. Good attempts were made in putting in place the Communication designs in the school to promote

inclusive Education, and the interactions in the school among students with disabilities and regular students.

Most of the facilities in the school such as chairs, tables, and cup-boards, Braille machine, and computers, among others were not adapted to the conditions of students with disabilities. The adapted physical education, corrective physical education, remedial physical education, adapted sports, adapted games, outdoor games, and sports (football, netball, volleyball, handball, hockey, basketball, goal ball, showdown, and athletics) were not made available in the public secondary schools. The investigator also established that the following were not given the required attention, Indoor games recreation, Leisure activities in the community, music and dance, theatre performance, and disability friendly toilets.

From the findings in the current study, physical resources are also among the key determinants of implementation of inclusive education in secondary schools in Bungoma County. The presence of enough physical resources as a determinant on inclusive education is also emphasized by researchers such as Barbara and William (1998) who strongly advocate for the case of ensuring that physical infrastructure such as buildings being fitted with equipment that should take care of persons with and without any form of disabilities. Such position is similarly shared by researchers such as Javier and Calvo (2014) who strongly feel that visual impairment for instance as a form of disability needs to be taken care of so that when it comes to access to information persons with visual impairment can equally be in a position to access information just like everyone else.

Physical Education and Sports are very important because they promote learners' social, physical, mental and emotional development through movement activities. It was observed

that the sampled public secondary schools implementing inclusive education in Bungoma County scored very poorly in these areas. The schools are supposed to have Adapted Physical Education, which is the modification of Physical Education programmes to meet the diverse needs of individual learners and to enhance their participation and enjoyment which is not the case. It provides a situation where physical activities are modified to meet the physical, mental, social, and emotional needs of learners with special needs. Corrective physical education, Remedial physical education, adapted sports and adapted games were also non existence in the schools.

There are games played outside in specific marked areas: Football, Netball, Volleyball, Handball, Hockey, Basketball, and Goal ball, Show down, and Athletics. The adaptation of outdoor activities is useful because it ensures the students with disabilities participate in all school activities; demonstrate their abilities, experience success making a major step towards independent living.

The three common game activities in the sample public secondary schools from the research findings included; Football game, Volleyball game, and Netball game. The expected adaptations for the Football Game which was supposed to include; the reduction of the size of the field to suit players with mobility problems, the exemption from some rules like offside, handball, participation on mobility aids and others, a lighter ball suitable for those with weak limbs, blind folding sighted players when playing with the blind, using left leg only, making players with special needs play specific numbers of goal keeper and referee, having seated players to play with their hands, and scoring whenever a ball passes an

opponent defense line, or backline among others are not done the schools. This leaves learners with special needs and spectators and idlers during games time.

The Netball game that is played with hands by seven players aside in a marked field that was found to be popular in the only girls' public secondary schools that is implementing inclusive education had no adaptations to include students with disabilities. The school has an inclusive programme for learners with Visual problems and most of them have low vision.

The expected adaptations of increasing numbers of players especially those with mobility aids, lowering height of Goals for ease of access to those with visual impairments, increasing the circumference of the ring to enhance success in scoring by players with visual problems, deployment of players without disabilities in fixed positions like shooters to be receiving the ball and shoot without movement, varying netball rules to suit players of with special needs, adapting a ball in terms of size, and weight or inclusion of an audio device as signals to goal rings for students with visual impairments could not be noticed anywhere in the playgrounds infrastructure hence suggesting that students in the two schools are not included in this game of netball.

One of the schools in the sample that been champions in the game of netball at Provincial level and also participated in National and East African competitions for over ten years had two fields of netball but courts are unfriendly to the learners with Visual impairments and the games teachers confidently confided that those students can be at best spectators of the game, terming the student to of no use the game.



The game of volleyball that is played by six players aside across a net using the hands to strike the ball over the net to the opponents' court as the opponent prevents the ball from landing in their court was noticed in all the sampled public secondary schools that embrace inclusive education.

However, still no adaptation of the game was noticed such as increasing the number of players aside especially for those with visual impairment and mobility problems, lowering height of nets, deploying all the players in fixed positions, varying any ball rule to suit the player with special needs in the class, adapting the ball by using light balls, increasing the grip (rough balls), and using balls with sound for players with visual impairments.

Handball game that is played in marked field using hands by throwing to team mate and scoring into a goal outside a specified area around the goal was only found to be played in two schools. Two schools in the sample are the only schools that have fields and play the game of handball. The game is only played by students who have no disabilities. In this game there are no adaptations such as reducing the number of players, using a smaller and/or lighter ball, allowing shooting in the restricted area, reducing the area of play, and reducing time of play. Like other games students with disabilities are not given chance due to probably ignorance and lack of facilities.

Hockey game that is played by eleven players aside where the ball is passed using designed stick was found also only in the two schools that embrace Inclusive Education. In fact one of the schools which is a girls' school has held National championship in 2001, 2003, 2004, 2017 and East African champion in the year 2009. However, all said and done, students with disabilities who are mostly of Visual Impairment have never participated in the game.

Therefore, the game that is so popular in the school only involves students without disabilities.

The two among sampled schools, therefore have not done any adaptations for the hockey game like reducing the area of play to check on players' fatigue, increasing the number of players, providing a lighter ball, using a lighter hockey stick, which may be adapted further for ease of grasp by players with poor grasp, having a bell for learners with visual impairments, players with special needs can be goalkeepers, allow players to use hands to guide the stick to the ball, adjust rules to control stick lifting, player movement so that they the ball across the centerline with each team in its own court, use the whole backline/goal line to be the goal so that the whole team plays the goalkeeper, each player at his position to prevent the ball from passing and closing over, widen the hook (ball containing part of the stick) to increase the chances of contacting with the ball.

Basketball game which is played by five players aside to form a team is played by dribbling the ball, then thrown and eventually shot into a ring. From observation and interview schedule carried out, this game is played in the selected three public secondary schools that implement Inclusive Education by regular students only but students with disabilities are either spectators or they could not know was going on. As usual, this game only involves students who do not have disabilities. The major reason the game has not been adapted to be attractive or draw the interest of students with disabilities such as lowering the height of the ring, increasing the circumference of the ring, increasing the number of players, allowing the use of mobility aids like wheelchairs, use of lighter ball, and having a bell in the ball used by players with visual impairments.

Out of the three public secondary schools that are officially registered for inclusive education in Bungoma County, two schools had enrolled students of visual impairments. These are public secondary school No.1 a boys' school, and public secondary school no.2 a girls' school. Public secondary school no.3 which is a mixed school is programmed to implement inclusive education for students with physical challenges. But unfortunately, the known game for the students with visual impairments like Goal ball game and Show Down game are unknown sports in these schools. The interview schedule with games teachers revealed that the tutors do not know that we have such games in existence. Goal ball game which is popular for the visually impaired students is played by two teams of three players with a maximum of three substitutes for each. The game is conducted on a smooth floor within rectangular court (18x9) metres which is divided into five parts. Goals are erected at either end. The game is played with a bell ball. The objective of the game is to roll the ball across the ball across the opponents goal line while the other team attempts preventing this from rolling. Any part of the body or the whole body can be used to prevent the ball from rolling across the goal line. The bullets at each portion of the court (playing area) mark the position of each player for example the centre and the two wings left and right players.

Show down Game is also designed to be played by blind persons. This means that it does not require the use of sight. All players who are not blind must therefore be blind folded to ensure that none of them has a visual advantage over the blind. The game is played on a rectangular table with goal pockets at each end and a centre screen. It is played with bats and a ball in which pellets have been inserted to make it audible. The objective of the game is to bat the ball across the table under the centre screen, and into the opponents' goal pocket

while the opponent tries to prevent this from happening. It is important to note that the two games: goal ball and showdown games are the most suitable games in an inclusive setting for learners with visual impairments. Teachers are encouraged to introduce the game in their schools to accommodate the increasing number of those without sight. The findings in Sports also revealed that physical facilities are the major led down to the implementation of inclusive education in public secondary schools. The athletics which is the sports that students compete in such activities like running, jumping and throwing are not made friendly to students with disabilities.

Starting with Races which include Sprints (short races), middle distance races, and long races it was established that the sprints that include 100 m race; 200 m race; 400 m race; 100 m hurdles; 110 m hurdles, 400 m hurdles, and wheelchair races had not adapted to meet the specific needs of different categories of by reducing distance to be covered, using guided sights, covering lights of hurdles, and reducing the number of hurdles.

The Middle distance Races, which are relatively longer races taken within a specified time and usually covering a distance of 800 m – 1500 m. in the middle distance races, the whole race course may be covered by an individual competitor with special needs or share between groups of learners, people, as happens in relays. Middle distance races include 800 m; 1500 m; 4x100 m Relay; and 4x400 m Relay. However, these schools do not have them. The adaptations of Middle distance races that include reducing distance to be covered, participants being allowed to use their mobility aids, use of sighted guides, and use of groups to share distances to be covered to allow students with disabilities to participate successfully in an inclusive setting were not being implemented in the selected three public secondary

schools in Bungoma county. One of the schools where inclusive education is being implemented with mainly students with physical challenges was expected have Wheelchair racing as important sports in the school, but actually it is not the case in this school because this sport is non-existence. In this race, Wheelchairs are used by players with lower limbs weakness to cover different distances.

According to MOE (2018), Sector Policy for Learners and Trainees with Disabilities, suggested that adequate resources for infrastructure and learning and training materials should be mobilized for implementation of Inclusive Education. Policy also intends to ensure that entrances put in place the following: design primary entrances to buildings so that they are accessible, construct a ramp in the approach to the entrance that is free of stairs and steps, provide an accessible route in multi-storey buildings, so that the accessible entrance can permit access to a conveniently located elevator, add the international symbol of accessibility and paint the entrance door with a colour that will contrast with the surrounding surface to make it clearly identifiable, enlarge the landing area (space between stair cases) to ensure that the entrances landing dimensions are able to accommodate a wheel chair, add a slip-resistant finish so that the landing surface is level and non-slippery, and the door width should be at least 0.90m. Automatic sliding doors can also be installed or the use of swing clear hinge doors be adopted. The Policy is in agreement with what was observed in the three selected public secondary schools for implementation of IE but infrastructural were not proving Least environmental restrictions to SWDs.

#### 4.5 Influence of Students with Disabilities on the Implementation of Inclusive Education

**Table 4.13: Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.620 <sup>a</sup>	.384	.374	.66993	.384	37.114	2	119	.000

a. Predictors: (Constant), Students with Disabilities

From Table 4.13 it can be noted that students with disabilities accounted for 37.4% of the variance in the implementation of inclusive education as was signified by the coefficient adjusted R square .374. The other 62.6% was due to other factors that were not the subject of this study. Students with disabilities always petition school administration for assistance to fit in the school programme, Student with Disabilities interact socially and academically well with regular students and therefore influence implementation of IE.

**Table 4.14: ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	33.314	2	16.657	37.114	.000 <sup>b</sup>
	Residual	53.408	119	.449		
	Total	86.721	121			

a. Dependent Variable: implementation of inclusive education

b. Predictors: (Constant), Students With Disabilities

From Table 4.14 it can be observed that students with disabilities are significant predictor of the implementation of IE. This means that the MOE's extra funding of SWDs indeed

influenced implementation of IE ( $F(4,117) = 8.115, p < .05$ ). This was as a result of Students with disabilities always petition school administration for assistance to fit in the school programme, Student with Disabilities interact socially and academically well with regular students and therefore influence implementation of IE.

**Table 4.15: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.491	.300		4.971	.000
Student with Disabilities interact socially and academically well with regular students and therefore influence implementation of IE.	-.014	.050	-.021	-.285	.776
Students with disabilities always petition school administration for assistance to fit in the school programme	.553	.065	.617	8.498	.000

a. Dependent Variable: implementation of inclusive education

Students with Disabilities have a role to play when it comes to implementation of inclusive education in a given organization and more so in public secondary schools within Bungoma County in this particular case. As shown in the table of regression coefficients, the value of the coefficient for students with Disabilities is 0.401. This is also moderately high as compared to such issues as physical resources, finance and even human resources. However it must be noted that this value is not statistically significant, this means that there's not much

that can be inferred from this if a bigger population or a larger population was used in this study.

The results in Table 4.15 clearly indicate that students with disabilities have an influence on the implementation of inclusive education in secondary schools in Bungoma County. A number of scholars have been able to show that indeed students with disabilities have an influence on implementation of inclusive education in public secondary schools. The results in the current study are in agreement with a commentary on daily news of November 7th 2013, which talks about the Tanzanian Ministry of Education, and Vocational training that emphasized the implementation of the 2010 Act of parliament about persons with disabilities. This means that the fact that there are individuals with disabilities then a government or a government department will be forced to come up with some ways and means to ensure that the welfare of the people with disabilities is taken care of and hence this means that at least they'll be implementing inclusive education. Other researchers approach the discourse of inclusive education by discussing the issue of curriculum. They opined that changes in the curriculum need to be effected so as to suit persons with disabilities especially while focusing on such issues as talent. Odhiambo (2016) strongly agrees with this because as he comments the current system only “celebrates excellence” of the learners. Therefore the presence of students with disabilities in an institution of learning compels the necessary stakeholders in the education sector to come up with ways and means to cater for the needs of people with special needs. Such can be implemented through change of curriculum.



Ondiek and Kakah (2017), also report about two persons working with disability namely Mr. Gedion Kipchumba, 27, who is blind but works in the High Court registry at Milimani Law Courts, Nairobi. He uses his computer to feed data into Excel sheets, including daily court returns. Students with Disabilities have a role to play when it comes to implementation of inclusive education in a given organization and more so in public secondary schools within Bungoma County in this particular case. As shown in the table of regression coefficients, the value of the coefficient for students with Disabilities is 0.401. This is also moderately high as compared to such issues as physical resources, finance and even human resources. However it must be noted that this value is not statistically significant, this means that there's not much that can be inferred from this if a bigger population or a larger population was used in this study.

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education by discussing the issue of curriculum. They opined that changes in the curriculum need to be effected so as to suit persons with disabilities especially while focusing on such issues as talent. Odhiambo (2016) strongly agrees with this because as he comments the current system only “celebrates excellence” of the learners. Therefore the presence of students with disabilities in an institution of learning compels the necessary stakeholders in the education sector to come up with ways and means to cater for the needs of people with special needs. Such can be implemented through change of curriculum. Ondiek and Kakah (2017), also report about two persons working with disability namely Mr. Gedion Kipchumba, 27, who is blind but works in the High Court registry at Milimani Law Courts, Nairobi. He uses his computer to feed data into Excel sheets, including daily court returns.

#### 4.6 Influence of Regular Students on the implementation of Inclusive Education

**Table 4.16: Model Summary**

Model	R	R Square	Adjusted R Square	Change Statistics					
				R Square Change	F Change	df1	df2	Sig. F Change	
1	.564 <sup>a</sup>	.318	.307	.7049 7	.318	27.747	2	119	.000

a. Predictors: (Constant), Regular Students

From Table 4.16 it can be noted that regular students accounted for 30.7% of the variance in the implementation of inclusive education as was signified by the coefficient adjusted R square .318. The other 67.3% was due to other factors that were not the subject of this study. These findings means that Regular students interact socially and academically well with SWDs and therefore influence implementation of IE .Regular Students regularly demand that school administration provide for the necessities for SWDs.

**Table 4.17: ANOVA**

<b>Model</b>		<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
	Regression	27.580	2	13.790	27.747	.000 <sup>b</sup>
1	Residual	59.142	119	.497		
	Total	86.721	121			

a. Dependent Variable: implementation of inclusive education

b. Predictors: (Constant), Regular Students

From Table 4.17 it can be observed that extra funding by the MOEST was a significant predictor of the implementation of IE. This means that the MOE's extra funding of SWDs indeed influenced implementation of IE ( $F(4,117) = 27.747, p < .05$ ). This was as a result of Regular students interact socially and academically well with SWDs and therefore influence implementation of IE. RS regularly demand that school administration provide for the necessities for SWDs.

**Table 4.18: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
(Constant)	1.675	.317		5.291	.000	
1	RS regularly demand that school administration provide for the necessities for SWDs	.491	.067	.562	7.326	.000
1	Regular students interact socially and academically well with SWDs and therefore influence implementation of IE.	-.006	.053	-.009	-.120	.905
1	Students with disabilities always petition school administration for assistance to fit in the school programme, Student with Disabilities interact socially and academically well with regular students and therefore influence implementation of IE . <sup>b</sup>					Enter

a. Dependent Variable: implementation of inclusive education

**Table 4.19: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.624 <sup>a</sup>	.389	.363	.67592	.389	14.763	5	116	.000

**Predictors:** Extra funding by MOEST, Human Resource, Physical resources, Students with Disabilities and Regular Students

From Table 4.19 it can be noted that extra funding by MOEST, Human Resource, Physical resources, students with disabilities and regular students accounted for 36.3% of the variance in the implementation of inclusive education as was signified by the coefficient adjusted R

square .389. The other 63.7% was due to other factors that were not the subject of this study. These findings mean that extra funding by MOEST.

**Table 4.20: ANOVA**

<b>Model</b>		<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
	Regression	33.724	5	6.745	14.763	.000 <sup>b</sup>
1	Residual	52.997	116	.457		
	Total	86.721	121			

a. Dependent Variable: implementation of inclusive education

Predictors: (Constant), Extra funding by MOEST, Human Resource, Physical resources, Students with Disabilities and Regular Students

From Table 4.20 it can be observed that extra funding by the MOEST was a significant predictor of the implementation of IE. This means that the MOE's extra funding of SWDs indeed influenced implementation of IE ( $F(4,117) = 8.115, p < .05$ ). This was as a result of Finance, Human Resources, Physical Resources, Students with Disabilities, Regular Students.

**Table 4.21: Coefficients**

<b>Model</b>		<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
	Finance	.054	.131	.049	.410	.683
	Human Resources	.035	.112	.029	.314	.754
1	Physical Resources	-.104	.150	-.083	-.690	.492
	Students with Disabilities	.537	.070	.598	7.722	.000
	Regular students	.028	.082	.030	.337	.737

a. Dependent Variable: implementation of inclusive education

It is without a doubt that regular students play a very important role when it comes to implementation of inclusive education in public secondary schools. The results from the current study show that there is no significant influence of regular students on the implementation of inclusive education in public secondary schools. With a value of 0.962 for un-standardized coefficient and 0.825 for standardized coefficient, regular students have the highest value of the regression coefficient as compared to all the other variables of the study. In other words regular students in public secondary schools don't support the implementation of inclusive education as required; therefore these learners need to be educated to support the programme.

Therefore results in the current study seem to agree with a number of scholars who mostly provide advocacy for the rights of students with disabilities to be treated equally and fairly by their peers. Researchers such as Kayale and Forness (1996) added their voice to this by noting that when students with disabilities experience less interaction and more of rejection as well as low social status, this is likely to impact negatively on their academic achievement and hence the overall need to implement the inclusive education may be jeopardized or undermined.

In cognition for the need for people without disabilities to impress people with disabilities, most of the extant literature provides advocacy for people with special needs to be taken care of so that they can live normal lives just like the others. For example the government of Kenya 2008 ratified convention that emanated from the United Nations laws with regard to the rights of people with disabilities. The whole essence of this was to ensure that the rights and privileges of people with disabilities are enshrined in some form of policy framework.

Most of the literature corroborate with the findings from the current study in Bungoma County where indeed most of the respondents felt that regular students have a very important role to play as far as implementation of inclusive education in secondary schools is concerned.

Students with disabilities constitute the determinant of the fact of inclusive education. That is, it is their inclusion and participation in education that makes education inclusive. This inclusive education means a system whereby children or students with and without disabilities participate and learn together in the same classes. This is based on the principle that when a Child with Disabilities attends classes alongside peers who do not have disabilities, good things happen. This means that when all students, regardless of any challenges they may have, are placed in age-appropriate education classes receive quality education as interventions and support enable them to be successful in the core curriculum. It is important to note that “successful inclusive education happens primarily through accepting, understanding and attending to student differences and diversity, which include the physical, cognitive, academic, social and emotional” Mc Manis (2018). She adds that “The driving principle is to make all students feel welcomed, appropriately challenged and supported in their efforts. It is also critically important that the adults are supported too. This includes the regular education teacher and the special education teacher as well as all other staff and faculty who are key stakeholders; and that also includes parents (Mcmanis, 2018). She concludes that inclusive education results in higher achievement for the students with disabilities and regular students. For instance, in 2017 the top Kenya Certificate of Primary Education pupil was a person with albinism Goldalyn Kakuya who scored 455 marks out of

500 in St. Anne Junior Lubao in Kakamega, under Inclusive Education programme (<https://www.capitalfm.co.ke>). This does not mean that there are no challenges in inclusive education. The challenges include: individual needs may not be effectively taken care of, particularly in large classes; parents are not always positive, relaxed, and supportive; and sometimes teachers and students themselves are not confident.

A number of scholars have been able to show that indeed students with disabilities have an influence on implementation of inclusive education in public secondary schools. The results in the current study are in agreement with Nyirenda (2013) who states that the Tanzanian Ministry of Education and Vocational training has emphasized the implementation of the 2010 Act of parliament about persons with disabilities. This means that the fact that there are individuals with disabilities then a government or a government department is forced to come up with some ways and means to ensure that the welfare of the people with disabilities is taken care of and hence this means that at least they are implementing inclusive education. Other researchers approach the discourse of inclusive education by discussing the issue of curriculum. They contend that changes in the curriculum need to be effected so as to suit persons with disabilities especially while focusing on such issues as talent. Odhiambo (2016) strongly agrees with this because as he comments that the current system only “celebrates excellence” of the learners. Therefore the presence of students with disabilities in an institution of learning compels the necessary stakeholders in the education sector to come up with ways and means to cater for the needs of people with special needs. Such can be implemented through change of curriculum, that is, has an adapted curriculum.



Ondiek and Kakah (2017), also report about two persons working with disability namely Mr. Gedion Kipchumba, 27, who is blind but works in the High Court registry at Milimani Law Courts, Nairobi Kenya. He uses his computer to feed data into Excel sheets, including daily court returns and either nitty-gritty. Students with Disabilities have a role to play when it comes to implementation of inclusive education in a given organization and more so in public secondary schools within Bungoma County in this particular case. As shown in Table 4 of regression coefficients, the value of the coefficient for students with Disabilities interaction with regular students was - 0.014. However it must be noted that since this value is not statistically significant, it means that there is not much that can be inferred from this if a bigger population or a larger population was used in this study. Nevertheless, from Table 4 it can be observed clearly that students with disabilities have an influence on the implementation of inclusive education in secondary schools with regard to students with disabilities petitioning school administrators for assistance to fit in the school programme.

In an inclusive setting social interaction and academic performance of SWDs are enhanced as was observed in the three selected public secondary schools during the study. Students with disabilities were walking hand in hand with those ones without disabilities. They share ideas, develop friendship and are likely to make students with disabilities succeed in life and become independent.

As Kipchumba (2018) narrates the life of Professor Michael Ndurumo, who became deaf at the age of 8 years after suffering from meningitis an airborne disease, he had an inspirational feeling of the phrase “never-say-die attitude” that brought him to the pinnacle of academic success. He was in class one when he became deaf in 1960, there being no primary school for the deaf near his home, the young Ndurumo was forced to learn with normal pupils at the

local primary school. His teachers and classmates made sure he did not fall behind in the studies and eventually passed very well his primary examination and thereafter he got a scholarship to further his education in USA. Eventually, in 1980 he completed his PhD degree being the third deaf African and first East African to acquire the qualifications. Professor Ndurumo was ushered in the inclusive education, because he was helped by teachers and peers socially and academically leading to his success. To influence the implementation of IE, the same case should happen in the public secondary schools in our country.

It was observed that some regular students advocate for SWDs welfare by presenting memoranda to class teachers and the school administration. This concern was a positive way of influencing the implementation of IE. Although some issues were not responded to but if they become persistent then there is hope that things will change even if it may take time.

It was established that in an inclusive setting some Regular students learn to value and accept SWDs. They get used to them and eventually learn to understand them and accept their challenges and diversity. In school C, where students have physical impairments, regular students could be seen pushing them on wheelchairs from class, to the toilets, to the fields, to dining hall, to labs for practical lessons, and to their dormitories. This was very encouraging and it is actually a positive way of influencing implementation of IE in public secondary schools. There were also cases in school B, where students with Visual Impairments and students have to climb stairs to access their classroom, because one stream in this school the form 4C then (2015) was on the first floor of the storey building that has only steps but ramps were not installed. Some regular students could hold their hands to make their peers mobility easier, which positively influences the implementation of IE in the school.

Other positive aspects in the implementation of IE observed in the three selected public secondary schools was where students with disabilities were desk mates in the classrooms, SWDs were also spread in group discussions, there instances where regular students had elected SWDs as represents in students body of governors in the school, RS gave chance to some SWDs to sit in front of the class where they could effectively get information from teachers clearly. However, it was observed that some regular students disliked SWDs because felt that teachers concentrate on SWDs at their expense during lessons. Although the ones who demonstrated this behavior were very few but such attitudes negate efforts being made to implement IE.

Some regular students observed during the study were using unacceptable terms such “the disabled” “cripple,” “the blind,” “the Albino,” among to verbal assault. This is in agreement with what Kabendera (2012), who reported a case in Kagera region of Tanzania which is considered as “Land of the Superstitious” an area where individuals with Albinism are give the name “Omwera” which literally means a white person. The name was discriminatory to the persons with Albinism. He also narrated a story where the teacher used students with Albinism in drama because of their strange skin colour. The above information concurs with the views of Mwaura who explained that he was discriminated right from birth disowned by parents due to Albinism and that it was hard to cope in school where he was ridiculed from other children. According to Nyongesa (2011), Vivian born and raised in Ahero, Kisumu did not go beyond primary school because of what she termed lack of conducive environment in the school. In such scenario implementation of IE will not be smooth.

## **CHAPTER FIVE**

### **SUMMARY CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary, conclusion and recommendations of the study. The presentation is based on the objectives of the study.

#### **5.2 Summary of the Findings**

##### **5.2.1. Extent to which extra funding influences the implementation of inclusive education**

Each Student with Disability in public secondary school receives 12,000/= (twelve thousand), as extra funds compared with regular students for implementation of Inclusive Education. Extra funding by the Ministry of Education accounted for 60.8% of the variance in the implementation of Inclusive Education as was signified by the coefficient adjusted R. Square .608. This implies that extra funding by MOE to Students with Disabilities had been put on proper use in public secondary schools. It also means that, public secondary schools and the MOE have successfully organized seminars and workshops to enhance implementation of IE and the 10% special allowances to special education teachers have positive influence to the implementation of IE.

The extra funding to SWDs often delays to be delivered to public secondary schools. This causes suffering of SWDs who depend on the funds to get quality education, there is need for prompt release of the funds to make implementation of IE smooth in public secondary schools.

It was established through interviews that extra funds were not properly accounted by the BOM. Lack of transparency and accountability is likely to affect implementation of IE negatively such as dropping out of school by SWDs. The three principals of the selected public secondary schools could not comfortably show how the funds were utilized.

It was also observed that extra funding by MOE was a significant predictor of implementation of IE, hence it influenced implementation of IE ( $4,117 = 8.115, P < .05$ ).

Extra funding by MOE has been prudently used by the school administrators to purchase creams that are used by Students with Albinism. The selected school public secondary school for IE was a girls' school, a decision that had encouraged students to like the school. One of the three selected public secondary schools that are implementing IE which is a mixed public secondary school has constructed adapted toilets that are used by students with disabilities especially those ones with physical disabilities who use wheelchairs.

### **5.2.2 Extent to which Human Resources influence implementation of inclusive education**

Human Resources accounted for 18.9% of the variance in the implementation of IE as signified by the coefficient adjusted R Square .189. Although the influence of human resources is small but it points to the fact the implementation of IE in public secondary schools will be highly boosted if the government and MOE ensure that there are sufficient human resources.

According to the Sector Policy for Learners and Trainees with Disabilities (2018), the MOE suggests that one of the strategies or guidelines is to allocate adequate resources to sustain IE,

especially human resources to provide quality learning in the public secondary schools that are registered to integrate or mainstream students with disabilities. In this case, there is need to emphasize that all institutions training prosperous teachers needs to undertake Special Needs Education.

The school administrators in the selected three public secondary schools were not having any training in special education, a situation that affects the implementation of IE because these managers are ignorant of what they are implementing and only depended on what special teachers were being told.

Although regular teachers had been exposed to seminars and workshops about special Needs Education and by extension IE, but the frequency and consistence of this exposure appeared not enough to give them knowledge, skills and change their attitudes to handle SWDs in the public secondary schools. The need to motivate regular teachers may be farfetched but can influence the implementation of IE positively.

The other professionals apart from the teaching staff were insufficient in the three selected public secondary school that have been registered to implement IE. There is need to have other professionals like; psychologists, trained Counselors, Social workers, Physiotherapists, Occupational therapists among others to help SWDs in the public secondary schools.

The non-teaching staff members like Matrons, Patrons, Watchmen, Store keepers, secretaries, grounds men and women, cooks, lab technicians among others did not have knowledge and skills pertaining to disabilities, which appeared to influence implementation of IE negatively from observation in the selected three public secondary schools that are implementing IE.

### **5.2.3 Extent to which Physical Resources available affect the implementation of Inclusive Education**

Physical resources accounted for 18.9% of the variance in the implementation of inclusive education as was signified by the coefficient adjusted R square .189. The influence was significant as the p-value was less than .05, the set value of significance  $r=.454$ ,  $N =122$ ,  $P<.05$ ). These physical resources included chairs, desks, tables, classrooms, libraries and play fields. Classrooms influenced positively the implementation of Inclusive Education such that for every one unit increase in classrooms implementation of Inclusive Education improved by .027 units. Although the units were small, the influence was significant.

One of the schools had pavements well constructed to enhance mobility of Students with disabilities especially those with visual impairments and physical disabilities. Entrance and accessibility to various important places like toilets, classrooms and offices were not taken into consideration in the two public secondary schools of the sampled selected ones. Good attempts were made in putting in place the Communication designs in the school to promote IE, and the interactions in the school among students with disabilities and regular students.

Adequate resources for infrastructure, learning and training materials should be mobilized for implementation of Inclusive Education. The design of primary entrances to buildings should be accessible and construction of ramps in the approach to the entrance is essential instead of stairs and steps, to provide accessible routes in multi-storey buildings as recommended by MOE. This is very important especially students with physical disabilities and use mobility devices like wheelchairs. The classrooms enhanced implementation of IE by .027 for every one unit increase in the implementation of IE, the units were small but the

influence was significant. Sports and games facilities improved by .016 units for every one unit increase in the implementation of IE.

#### **5.2.4 Extent to which Students with Disabilities influence implementation of IE**

Students with disabilities accounted for 37.4% of the variance in the implementation of inclusive education as was signified by the coefficient adjusted R square .374. Students with disabilities always petition school administration through class teachers for assistance to fit in the school programme. Student with Disabilities interact socially well with regular students to influence implementation of IE in public secondary schools. Students with disabilities interact academically with regular students that had influenced implementation of IE by providing quality education to SWDs.

#### **5.2.5 Extent to which Regular Students influence implementation of IE**

Regular students accounted for 30.7% of the variance in the implementation of inclusive education as was signified by the coefficient adjusted R square .318. This means that Regular students interact socially and academically well with SWDs and therefore influence implementation of IE.

Regular Students regularly demand through their class teachers that school administration provides for the necessities required by Students with Disabilities.

Three principals of the selected public secondary schools interviewed unanimous said that funding by the government of Kshs 12,000/= for implementation of inclusive education programme was inadequate. They all suggested that funding should be increased by the MOE to enhance implementation of IE in their respective schools. Human resources only



account for 18.9% of the variance in the implementation of IE. The percentage was small and could not be helping so much in the implementation of IE. The MOE and the government of Kenya was due bound to train more personnel in SNE to boost the implementation of IE in public secondary schools. The regular teachers in public secondary schools are not fully involved in the implementation of IE. If they are properly given the knowledge, skills and the positive attitudes towards implementation of IE, think they would embrace the programme.

While Physical Education is very important because it promotes a learner's social, physical, mental and emotional development through movement activities, it was established through observation that the selected public secondary schools that are implementing inclusive education in Bungoma County do not have any serious plan involving Students with disabilities in physical education.

The schools are supposed to have Adapted Physical Education, which is the modification of Physical Education programmes to meet the diverse needs of individual learners and to enhance their participation and enjoyment. It provides a situation where physical activities are modified to meet the physical, mental, social, and emotional needs of learners with special needs. Unfortunately all the three schools have not made any efforts to involve the students in adapted physical education, Corrective physical education, Remedial physical education, adapted sports and adapted games.

In public secondary school No. 3, that is mainly for the physically challenged students has Toilet types that were categorized as either "regular" or "disability-friendly", this being based on observation and direction from the head teacher, or other teachers assigned to help the researcher during the survey. On average, 33 learners without any reported disability

shared one “regular” toilet while an average of 12 students with disability shared a “disability-friendly” toilet. Whilst the numbers look commendable, it is also worth noting that the toilets are dangerous and risk to the learners with physical impairments in terms of hygiene and accessibility by students. The BOM school administration, SNE teachers, and regular teachers should be in a position to appreciate diversity of abilities among students and in the process the SWDs and RS will interact socially and academically and influence implementation of IE positively.

### **5.3 Conclusion**

#### **5.3.1: The extent to which extra funding influences implementation of IE**

Students with Disabilities receive extra funds of 12,000/= (twelve thousand) compared with their colleagues, the Regular students in public secondary schools. Extra funding by MOE accounted for 60.8% of the variance in the implementation of IE as was signified by the coefficient adjusted R. Square .0608. The extra funding has enable the selected three public secondary schools that are implementing IE to purchase some equipment like Braille machines and construction of pavements in some of the selected public secondary schools implementing IE. Extra funding has enabled one of the three selected schools to purchase creams that are used by students of Albinism. This prudence use of extra funds was in the only girls’ school that is implementing IE.

The extra funds has also been used to design and construct adapted toilets in one of the three selected public secondary schools that is mixed and hence, the project has encouraged retention of Students with Disabilities in school.

### **5.3.2: Extent to which human resources influence implementation of IE**

Human Resources accounted for 18.9% of the variance in the implementation of IE as signified by the coefficient adjusted R Square .189. There is need to emphasize that all institutions training teachers need to include in their curriculum Special Needs Education as core units that may enable teachers to effectively implement IE in public secondary schools. This is because the knowledge, skills and attitudes of teachers appeared not adequate to implement IE in public secondary schools.

The school administrators in the selected three public secondary schools lacked training in SNE which had negative influence in the implementation of IE.

The regular teachers although had been exposed to seminars and workshops about special education but appeared to lack interest in the implementation of IE, hence the need to have more exposure and motivation because the government and the MOE cannot afford to leave out in the implementation process.

The other professionals and non-teaching staff in the three selected public secondary school were not involved in the implementation of IE leading misunderstanding of SWDs in those schools.

### **5.3.3: Extent to which physical resources available influence implementation of IE**

The Physical resources in the selected public secondary schools accounted for 18.9% of the variance in the implementation of IE in the three selected public secondary schools as was signified by the coefficient adjusted R square .189.

The influence was significant as the p-value was less than .05, the set value of significance ( $r=.454$ ,  $N=122$ ,  $p<.05$ ).

Adequate resources for infrastructure and learning and training materials need to be mobilized for implementation of Inclusive Education.

The design of buildings of entrances in the three selected public secondary schools, to be made in such a way that they are accessible by Students with Disabilities. The construction of ramps in the approach to the entrance is essential instead of stairs and steps, to provide accessible routes in multi-storey buildings as recommended by MOE. This is very important especially for students with physical disabilities and those who use mobility devices like wheelchairs. Classrooms, games and sports enhanced implementation of IE by .027 units and .016 units respectively. School equipment, library resources and toilets had negatively influenced by .046 units and .071 units respectively. The regression equation  $Y = 3.581 + 0.27X_1 + -.0462X_2 - .071X_3 + .016X_4$ , this implies the influence was generally low, Although physical education and sports activities are important for SWDs, the three sampled public secondary schools implementing IE had not adapted the fields /playgrounds for physical education, sports and games that negatively influence implementation of IE.

#### **5.3.4: Extent to which students with disabilities influence implementation of inclusive education**

The Students with disabilities was the second highest in the influence of the implementation of IE after the extra funding because it accounted for 37.4% of the variance in the implementation of inclusive education as was signified by the coefficient adjusted R square .374. Student with Disabilities in the three selected public secondary schools interact socially and academically well with regular students and therefore influence implementation of IE positively.

### **5.3.5: Extent to which regular students influence Implementation of IE**

The influence of Regular students is the third highest after extra funding and SWDs because it accounted for 30.7% of the variance in the implementation of inclusive education as was signified by the coefficient adjusted R square .318. Regular Students in the three selected public secondary schools interact socially with students with disabilities that influences IE positively. Regular students interact academically with SWDs, hence they influenced their learning positively.

Regular Students observed were ready all the time to assist students with disabilities, especially in mobility and academic work in the sampled three public secondary schools. The degree to which RS appreciated learning with SWDs was rated at a mean rate of 4.0 out of 5.0 which was quite high.

### **5.4 Recommendations**

Based on the findings, the study recommended that in order for the implementation of Inclusive Education to be successful:

- i. There was need for the government to provide more funding to public secondary schools to enhance implementation of IE.
- ii. Stakeholders in the educational sector to approach international, national and local NGOs to provide charity and welfare to SWDs in public secondary schools to supplement government's effort in the implementation of IE.
- iii. MOE to ensure prudent utilization of funds disbursed by the government or any other agent to avoid the loss of funds meant to benefit SWDs in public secondary schools.
- iv. MOE should pay teachers reasonable allowances, at least more than the 10% of their basic salary being paid currently, in addition regular teachers in public secondary

- schools with IE programmes should be considered even if it is a small percentage like 5%, for motivational purposes so that they help SWDs.
- v. Teacher training institutions in Kenya should put emphasis on special needs education and make it one of the major core areas in their teacher training curriculum to induct teachers on the practical aspects of implementing IE in public secondary schools.
  - vi. MOE needs to other professionals like Educational Psychologists, Physiotherapists, Occupational therapist, Social workers, Counsellors among others to assist teachers in the implementation of IE in public secondary schools.
  - vii. Physical facilities should be provided in public secondary school to make implementation of IE smooth.
  - viii. The design of buildings to ensure accessibility by Students with Disabilities.
  - ix. The constructions of ramps are important for mobility purposes especially for students with physical disabilities who depend on devices like wheelchairs.
  - x. Students with disability should be given leadership positions in public secondary schools where they are mainstreamed so that they feel they belong to the schools.
  - xi. Teachers need to encourage social and academic interactions among students with disabilities and those ones without disabilities.
  - xii. Regular students should be encouraged to understand their colleagues who are different from and value them as human beings in order to embrace them during lessons.
  - xiii. Class teacher to chart ways in their classes so that all students despite their diversity understand each other.

## **5.5 Suggestions for Further Research**

On account of the study limitations and methodological insights, this study identifies the following areas that need to be addressed through further research;

- i. Future research should be done at primary school level and even tertiary level to get proper analysis of implementation of inclusive education across all levels of learning.
- ii. It is suggested that there is need to undertake a study to establish school factors and teaching methods that can positively affect implementation of inclusive in public secondary school.
- iii. Future study to investigate the learners' levels of cognitive, psychomotor and affective abilities that impact on the implementation of inclusive education in primary school levels or secondary school levels.
- iv. Future research to examine collaboration and community involvement in the implementation of inclusive education.

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## APPENDICES

### APPENDIX A

#### QUESTIONNAIRE FOR SPECIAL EDUCATION TEACHERS AND REGULAR TEACHERS

##### SECTION A: BACKGROUND INFORMATION OF RESPONDENTS.

Data provided in this section will provide vital information on the current study of the implementation of Inclusive Education.

Please tick or fill in the blank spaces as appropriate.

1. Gender of respondent: (a) Male [ ] (b) Female [ ].
2. Age of respondent: (a) Below 25 [ ] (b) 26-35 [ ] (c) 36-45 [ ] (d) 46-55 [ ]  
(e) Above 55 [ ]
3. Present level of professional qualifications: (a) Untrained [ ] (b) Certificate [ ]  
(c) Diploma [ ] (d) Bachelors [ ] (e) Masters [ ] (f) PhD [ ]
4. Nature of employment: (a) Permanent and Pensionable [ ] (b) Contract  
(c) Part Time (d) BOM Employee
5. Education:
  - a) Are you currently pursuing further studies? (1) Yes [ ] (2) No [ ]
  - b) If yes, which degree are you pursuing?  
(1) Bachelors [ ] (2) Masters [ ] (3) PhD [ ]
  - c) If you are pursuing high degree, which mode of study?  
Fulltime [ ] (2) Evening [ ] (3) Part time [ ] (4) Open and distance learning [ ]

### Status of Implementation of IE

On a five point rating scale rate the status of implementation of inclusive education in your school based on the following constructs. Where; (1) Very Low (2) Low (3) Moderate (4) High (5) Very High

Aspect of implementation	Ratings				
	1	2	3	4	5
Ratio of Students with disabilities (SWD) to Regular Students (RS)					
Degree to which SWDs are adequately incorporated into learning activities					
Degree to which SWDs are incorporated with co-curricular activities					
Degree to which physical facilities have been adapted to conditions of SWDs					
Degree to which teaching /learning resources are equitably distributed to SWDs and regular standards					
Degree to which SWDs appreciate learning with R.S					
Degree to which regular students appreciate learning with SWDs					
Degree of interaction between SWDs and R.S					
Degree to which regular teachers appreciate SWDs					
Degree to which SWDs appreciate regular teachers					
Degree to which SNE teachers appreciate R.S					
<b>Overall Mean</b>					



1. Questions on the extent of extra funding influence implementation of Inclusive Education. To what extent do you agree or disagree with the statements below:  
 (1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree.

S/NO.	Statement	Response				
		1	2	3	4	5
1.	MOE adequately funds implementation of Inclusive Education (IE) in public secondary schools.					
2.	Public secondary schools have undertaken projects because of extra funding by MOE to influence Implementation of IE.					
3.	MOE pays enough special allowance to special teachers to influence the implementation of IE.					
4.	Regular teachers in public secondary schools have attended seminars and workshops because of extra funding by MOE					
5.	The extra funding by MOE for SWDs has been put to proper use in public secondary schools.					
6.	Implementation of IE programme is doing well in your school because of the extra funding by the government					
7.	Successful implementation of IE in your school has been realized because of prudent utilization of extra funding by MOE.					

2. Questions on extent to which Human resources influence on the implementation of Inclusive Education. To what extent do you agree or disagree with the statements below:

(1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree.

S/NO.	Statement	Response				
		1	2	3	4	5
1.	MOE has ensured that public secondary schools have enough human resources to implement IE.					
2.	Teachers in public secondary schools are trained in Special Needs Education qualified to implement IE.					
3.	Special need education teachers in public secondary schools teacher other Subjects of the curriculum instead of concentrating on the welfare of SWDs.					
4.	Non- teaching staff in public secondary schools has knowledge and skills to handle SWDs to influence implementation of IE positively					
5.	The school administration is keen in looking for human resources to influence implementation of IE positively.					
6.	MOE is determined that implementation of IE is not derailed by anybody.					
7.	Implementation of IE is being boosted by training of teachers across the country in Special needs Education.					

3. Questions on the extent Physical Resources influence the implementation of Inclusive Education. To what extent do you agree or disagree with the statements below:  
 (1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree.

S/NO.	Statement	Response				
		1	2	3	4	5
1.	Your school has enough spacious rooms to enhance implementation of IE.					
2.	Your school is well equipped to implement IE.					
3.	Your school has suitable Toilet facilities for use by SWDs.					
4.	Sports and games facilities in your school are suitable for SWDs.					
5.	Your school has a resource room that is used to integrate enrich SWDs in public secondary school.					
6.	Implementation of IE has been successfully carried out by your school because of availability of physical resources.					
7.	Implementation of IE in your school has picked up very well because of proper design of infrastructure.					

## APPENDIX B

### QUESTIONNAIRE FOR STUDENTS WITH DISABILITIES

You are Request to respond to a few questions concerning the implementation of Inclusive Education, particularly on Financing, Human resources, Physical resources and Influence of both students with disabilities and those without

#### INSTRUCTIONS:

- ✓ Tick the responses that are applicable in your case
- ✓ Respond to the questions as truthfully as possible
- ✓ Do not write your name anywhere in this questionnaire
- ✓ Remember that confidentiality is guaranteed
- ✓

#### Section A: Background Information

- a) Please indicate your gender. Male [ ] Female [ ]
  - b) Indicate your age Bracket  
Young than12 [ ] 13- 16 [ ] 17- 20 [ ] 21 and above [ ]
  - c) Indicate your current form/class.  
Form one [ ] Form two [ ] Form three [ ] Form four [ ]
- 4 Questions for Students with Disabilities on the implementation of Inclusive Education.

To what extent do you agree or disagree with the statements below:

(1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree.

S/NO	Statement	Response				
		1	2	3	4	5
1.	Students with disabilities (SWDs) petition school administration through their class teachers to enable them participate in sports and games.					
2.	SWDs always petition their class teachers in the school to inform the school administration to construct ramps in school buildings, to enable them access buildings with stairs.					
3.	SWDs always advocate for the classrooms that are not crowded for their use.					
4.	SWDs regularly send requests to the school administration for adapted desks, reading glasses and talking computers for their use.					
5.	SWDs always petition school administration through their teachers that they need enough trained personnel to take care of their needs.					
6.	SWDs regularly send requests to the school administration through class teachers to modify the Library facilities for their use.					
7.	I enjoy learning in my present school because inclusive education has been successfully implemented.					
8.	The school administration is concerned with the welfare of SWDs making implementation of IE successful.					

## APPENDIX C

### QUESTIONNAIRE FOR REGULAR STUDENTS

You are Request to respond to a few questions concerning the implementation of Inclusive Education, particularly on Financing, Human resources, Physical resources and Influence of both students with disabilities and those without

#### INSTRUCTIONS:

- ✓ Tick the responses that are applicable in your case
- ✓ Respond to the questions as truthfully as possible
- ✓ Do not write your name anywhere in this questionnaire
- ✓ Remember that confidentiality is guaranteed

#### Section A: Background Information

d) Please indicate your gender. Male [ ] Female [ ]

e) Indicate your age Bracket:

Young than12 [ ]

13- 16 [ ]

17- 20 [ ]

21 and above [ ]

f) Indicate your current form/class.

Form one [ ] Form two [ ] Form three [ ] Form four [ ]

To what extent do you agree or disagree with the statements below:

(1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree.

S/NO.	Statement	Response				
		1	2	3	4	5
1.	Regular Students (RS) always remind the teachers to inform the school to advocate that school administration provides adapted fields for SWDs and playgrounds for SWDs					
2.	RS appreciate learning with SWDs in the same classroom.					
3.	RS always remind teachers to remind principals of public secondary schools to put in place ramps, adapted toilets, desk, and chairs for SWDs.					
4.	RS always appreciated being in the same discussion groups with SWDs					
5.	The school administration has successfully changed the school infrastructure hence promoting IE education in the school.					
6.	Implementation of IE in your school is progressing well because RS interact socially and academically with SWDs.					
7.	Implementation of IE is successful in your school because RS always assist SWDs in mobility.					

## APPENDIX D

### INTERVIEW SCHEDULE

#### BACKGROUND INFORMATION

Data provided in this section will provide vital information on the current study of the implementation of Inclusive Education.

Please tick or fill in the blank spaces as appropriate.

1. Gender of respondent: (a) Male [ ] (b) Female [ ].
2. Age of respondent: (a) Below 25 [ ] (b) 26-35 [ ] (c) 36-45 [ ] (d) 46-55 [ ]  
(e) Above 55 [ ]
3. Present level of professional qualifications: (a) Untrained [ ] (b) Certificate [ ]  
(c) Diploma [ ] (d) Bachelors [ ] (e) Masters [ ] (f) PhD [ ]
4. Nature of employment: (a) Permanent and Pensionable [ ] (b) Contract  
(c) Part Time (d) BOM Employee
5. Education:
  - a) Are you currently pursuing further studies? (1) Yes [ ] (2) No [ ]
  - b) If yes, which degree are you pursuing?  
(1) Bachelors [ ] (2) Masters [ ] (3) PhD [ ]
  - c) If you are pursuing high degree, which mode of study  
Fulltime [ ]  
(2) Evening [ ]  
(3) Part time [ ]  
(4) Open and distance learning [ ]



## **APPENDIX E**

### **INTERVIEW SCHEDULE FOR SENIOR ASSISTANT DIRECTOR OF EDUCATION**

1. How many extra funds does MOE send to public secondary schools to cater for Students with Disabilities?
2. Has the MOE ensured there are enough Physical resources for implementation of Inclusive Education in public secondary schools in Bungoma County?

## **APPENDIX F**

### **INTERVIEW SCHEDULE FOR COUNTY DIRECTOR OF EDUCATION**

1. How much extra funding does your County receive per student for the students with disabilities for the implementation of IE?
2. Has your county ensured there is enough human resource in the public secondary schools to ensure the implementation of IE?
3. What has the county education Board done to ensure that public secondary schools have physical resources for the implementation of IE?
4. What steps has your county taken to ensure the students with disabilities and those without perceive IE positively?
5. What challenges does your County experience in the effort to implement IE in public secondary schools?

## **APPENDIX G**

### **INTERVIEW SCHEDULE FOR COUNTY EDUCATION OFFICER IN CHARGE OF SPECIAL NEEDS EDUCATION**

1. What is your assessment of the extra funding for implementation of IE by MOE in public secondary schools in terms of adequacy?
2. Does your county have enough human resources to implement the inclusive IE in public secondary schools?
3. Do public secondary schools have sufficient and relevant physical resources to implement IE in your county?
4. Do public secondary schools have provisions for e-learning for learners with visual impairments?
5. What steps has the County taken to ensure students with disabilities influence IE positively?
6. How has the county government ensured that students without disabilities influence SWDs positively in public secondary schools?

## **APPENDIX H**

### **INTERVIEW SCHEDULE FOR PRINCIPALS OF PUBLIC SECONDARY SCHOOLS**

1. Does your school receive adequate extra funding for implementation of IE?
2. How do you assess the human resource personnel in terms of delivery for the implementation of IE in your school?
3. What has your school done in the last five years in terms of physical resources to enhance implementation of IE?
4. Does your school provide for e-learning for students with visual impairments for the smooth implementation of IE ?
5. What has your school done to make the school community perceive learners with disabilities positively in the effort to implement IE?

## **APPENDIX I: OBSERVATION GUIDE**

The Researcher had a Check List of items to be observed as follows:

- i. The population of students in the classrooms.
- ii. The landscape of the school compound whether hilly or flat grounds.
- iii. The designs of the buildings, if story, do they have ramps?
- iv. Pavements, how they have been constructed to promote mobility of Learners with disabilities in the school.
- v. Entrance to various important places like classrooms or toilets if accessible or not.
- vi. Communication designs in the school do they promote inclusive Education?
- vii. Adapted facilities like chairs, tables and cupboards in the classroom.
- viii. Learning equipment in the school like Braille Machine, Talking computers  
Audiometer among others.

**APPENDIX J:  
SPECIAL AND INTEGRATED PUBLIC SECONDARY SCHOOLS IN KENYA:**

<b>County</b>	<b>School</b>	<b>Disability</b>
Taita Taveta	Voi secondary school	HI
	Timbila Boys High school	PI
KWALE	Kwale Girls secondary school	VI
	Kinango Boys High school	HI
	Lukore High school	PI
<b>Mombasa</b>	<b>Mombasa secondary school for PH</b>	<b>PI</b>
<b>Kilifi</b>	<b>Pwani school for the deaf</b>	<b>HI</b>
	Kilifi Township secondary school	VI
	Bahari Girls' secondary school	VI
	Galana High school	PI
	Gede High school	PI
	Ngala Girls' High school	PI
Tana river	Wenje Boys High school	HI
Lamu	Lamu Girls secondary school	VI
	Mpeketoni High school	PI
Nyandarua	Raichiri Mixed secondary school	PI
<b>Nyeri</b>	<b>Rev. Muhoro secondary school</b>	<b>HI</b>
	Kiriti High school	VI
	Gachika High school	PI
	Mathaithi Girls' secondary school	PI
Kirinyaga	Kerugoya Girls' secondary school	VI
<b>Muranga</b>	<b>Muranga secondary school for the deaf</b>	<b>HI</b>
	Nyaga High school	PI

	Mihuti secondary school	PI
	Gathungururu secondary school	PI
<b>Kiambu</b>	<b>Thika High school for the Blind</b>	<b>VI</b>
	<b>Joy Town school for PH</b>	<b>PI</b>
	<b>PCEA Kambui school for the Deaf</b>	<b>HI</b>
	Musa Gitau High school	VI
	Kenyatta Girls' secondary school	PI
<b>Machakos</b>	<b>Machakos school for the deaf</b>	<b>HI</b>
	Matungulu boys sec school	PI
Kitui	Mlulutu high school	VI
	Kitkyau high school	VI
	Wii seco school	PI
	Kyangwithya high school	PI
	Mwingi sec sch	HI
Embu	-	-
<b>Meru</b>	<b>St. Lucy high School for the blind</b>	<b>VI</b>
	Mayori high school	VI
	Kisima sec school	VI
	Ngonyi sec sch	VI
Marsabit	-	-
Isiolo	Isiolo secondary school	VI
Makueni	-	-
Tharaka Nithi	Tharake nithi High	VI
Nairobi	Moi Girls Seco sch	VI
	Upper Hill high scho	VI
	Garoreti high school	PI
	Aquinas High School	VI
	Langata high school	VI
	Kangemi high school	PI
Turkana	Katilu sec boys	VI
	Our lady girls sec sch	VI
	Lodwar high sch	PI
Samburu	Kirisia sec sch	PI
Transnzoia	Kitale academy	VI
<b>West pokot</b>	<b>St Francis kapenguria sec sch for the blind</b>	<b>VI</b>
	Kamito secondary sch	HI
	Holy Rossary	PI
<b>Bomet</b>	<b>St Kizito sec sch for the deaf</b>	<b>HI</b>
Uasin Gishu	-	-
<b>Nakuru</b>	<b>Ngala sec scho for the deaf</b>	<b>HI</b>
	Jomo Kenyatta High	VI
	Nakuru boys high	VI

<b>Kericho</b>	<b>AIC Kedowa school for the deaf</b>	<b>HI</b>
	Kercho tea	VI
	Kipsigis girls sec school	VI
Nandi	Kapsabet sec school for the deaf	HI
	Koyo sec school	PI
Laikipia	-	-
Kajiado	Loitoktok sec sch	VI
Narok	Ole Tipis high school	VI
Baringo	Margat high school	VI
Elgeyo marakwet	Tambach boys high sch	VI
Busia	Albert Ekirapa sec	HI
	<b>St Brigit sch for the deaf</b>	<b>HI</b>
	Bumala mixed sec sch	PI
	St Anne Kisoko	VI
	St Joseph Chakol sec sch	VI
<b>Bungoma</b>	<b>Nalondo sec Sch</b>	<b>PI</b>
	Bungoma high sch	VI
	St. Cecilia Girls high school Misikhu	VI
<b>Kakamega</b>	<b>St Angelas school for the deaf</b>	<b>HI</b>
	<b>Mumias</b>	
	<b>ACK Ematundu sec schl for the deaf</b>	<b>HI</b>
Vihiga	Kapchemugung high school	HI
<b>Kisumu</b>	<b>Kibos sec sch for the blind</b>	<b>VI</b>
	<b>Joyland sec for PH</b>	<b>PI</b>
	Ahero girls sec sch	VI
<b>Kisii</b>	<b>Gianchere sch for deaf</b>	<b>HI</b>
Homa bay	Mbita high school	VI
Siaya	<b>Nico Hauser sch for VI</b>	<b>VI</b>
	<b>Fr. Oudera sch for VI</b>	<b>VI</b>
Nyamira	-	-
<b>Migori</b>	<b>Kuja sec sch for the deaf</b>	<b>HI</b>
	Kebaroti high school	HI
Garissa	NEP girls sec school	HI
	County high school	VI
<b>Wajir</b>	<b>Wajir sec school for deaf</b>	<b>HI</b>
Mandera		

Source: Ministry of Education 2015.

No. of Programme

Key- VI= Visual Impairment

VI=41

HI= Hearing Impairment

HI=25

PI= Physical Impairment

PI=27



## APPENDIX K

### POLICY IMPLEMENTATION GUIDELINES OF INCLUSIVE EDUCATION

#### 2.0 POLICY IMPLEMENTATION GUIDELINES OF INCLUSIVE EDUCATION

##### 2.1 INCLUSIVE EDUCATION

**Objective**

Promote and enhance the provision of inclusive education and training for learners and trainees with disabilities.

**Policy Statement**

MoE shall mainstream and provide for inclusive education and training at all levels of learning.

**Strategies**

Moe shall:

- 2.1.1 Allocate adequate resources to sustain inclusive education.
- 2.1.2 Undertake piloting process for inclusive education and training.
- 2.1.3 Establish and develop an effective communication strategy advocating for and raising awareness on inclusive education and training.
- 2.1.4 Implementation inclusive education and training in all programmes and levels of learning.
- 2.1.5 Strengthen quality assurance and monitoring for effective implementation of inclusive education.
- 2.1.6 Undertake research on inclusive education periodically and set up a data and evidence structure for effective knowledge, learning and improvement.

Strategies/guidelines	Responsible
<p><b><i>2.1.1 Allocate adequate resources to sustain inclusive education</i></b></p> <ul style="list-style-type: none"> <li>a) Conduct needs assessment to gather data and information about inclusive education (cost of educating in inclusive setting, required environmental adjustments, human and learning resources etc) to inform decision on resource allocation.</li> <li>b) Work with the national assembly in providing finances and aligning resources.</li> <li>c) Facilitate the regular institutions of learning to offer quality inclusive education to learners and trainees with disabilities.</li> </ul>	<ul style="list-style-type: none"> <li>• MoE</li> <li>• National Assembly</li> <li>• TSC</li> <li>• KNBS</li> </ul>
<p><b><i>2.1.2 Undertake piloting for inclusive education and training</i></b></p> <ul style="list-style-type: none"> <li>a. Develop national standards on inclusive education.</li> <li>b. Establish the readiness of education and training institutions.</li> <li>c. Systematically identify institutions to conduct the pilot.</li> <li>d. Pilot inclusive education and training in the sampled institutions.</li> <li>e. Review and refine the standards and processes in readiness for scale-up.</li> </ul>	<ul style="list-style-type: none"> <li>• MoE</li> <li>• KICD</li> <li>• KISE</li> <li>• County Governments</li> <li>• TSC</li> </ul>
<p><b><i>2.1.3 Establish and develop an effective communication strategy advocating for and raising awareness on inclusive education and training</i></b></p> <ul style="list-style-type: none"> <li>a. Develop the communication objectives</li> <li>b. Map out the key target audiences for communication and their readiness.</li> <li>c. Identify appropriate modes of communication and the communication activities.</li> </ul>	<ul style="list-style-type: none"> <li>• MoE</li> <li>• Media council of Kenya</li> </ul>

<p>d. Develop specific messaging on inclusive education and training based on target audiences.</p> <p>e. Develop the tools and messaging for achievement of the communication objectives.</p> <p>f. Partner with the media and other stakeholders to communicate on inclusive education</p>	<ul style="list-style-type: none"> <li>• KISE</li> <li>• NCPWD</li> </ul>
<p><b>2.1.4 Implement inclusive education and training in all programmes and levels of learning</b></p>	
<p>a. Amend existing legislative framework to mainstream inclusive education and training.</p> <p>b. Enhance the capacities of institutions to implement inclusive education and training.</p> <p>c. Prepare Information, Education, and Communication materials for the capacity building initiatives.</p> <p>d. Enhance the capacity of implementing agencies, including the families and learners and trainees with disabilities themselves, on inclusive education and training.</p> <p>e. Facilitate the reporting of mainstreaming of inclusive education and training with emphasis on enrolment, placement, retention, learning and completion of learners and trainees with disabilities</p>	<ul style="list-style-type: none"> <li>• MoE</li> <li>• NCPWD</li> <li>• KNEC</li> <li>• Development partners</li> <li>• TSC</li> </ul>
<p><b>2.1.5 Strengthening quality assurance and monitoring for effective implementation of inclusive education</b></p>	
<p>a. Set standards for quality assurance.</p> <p>b. Develop the inclusive education monitoring tools and processes.</p> <p>c. Provide periodic reports and carry out periodic audits on the implementation of inclusive education and training.</p>	<ul style="list-style-type: none"> <li>• MoE</li> <li>• TSC</li> <li>• All institutions of learning</li> </ul>
<p><b>2.1.6 Undertake research on inclusive education periodically and set up a data and evidence structure for effective knowledge, learning and improvement.</b></p>	
<p>a. Develop the inclusive education and training research agenda.</p> <p>b. Conduct periodic, theme-based studies to generate robust relevant evidence.</p> <p>c. Entrench an evidence-based decision-making culture for the improvement of inclusive practice, and utilize the generated evidence for the periodic review of the objectives, policies, strategies and activities</p>	<ul style="list-style-type: none"> <li>MoE</li> <li>• TSC</li> <li>• KISE</li> <li>• KICD</li> <li>• Academia</li> </ul>

APPENDIX L

RESEARCH AUTHORIZATION LETTER



**MASENO UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**

*Office of the Dean*

**Our Ref:** PG/PHD/00024/2010

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

Date: 16<sup>th</sup> February, 2016

**TO WHOM IT MAY CONCERN**

**RE: PROPOSAL APPROVAL FOR WAMALA ALFRED MURUMBA —  
PG/PHD/00024/2010**

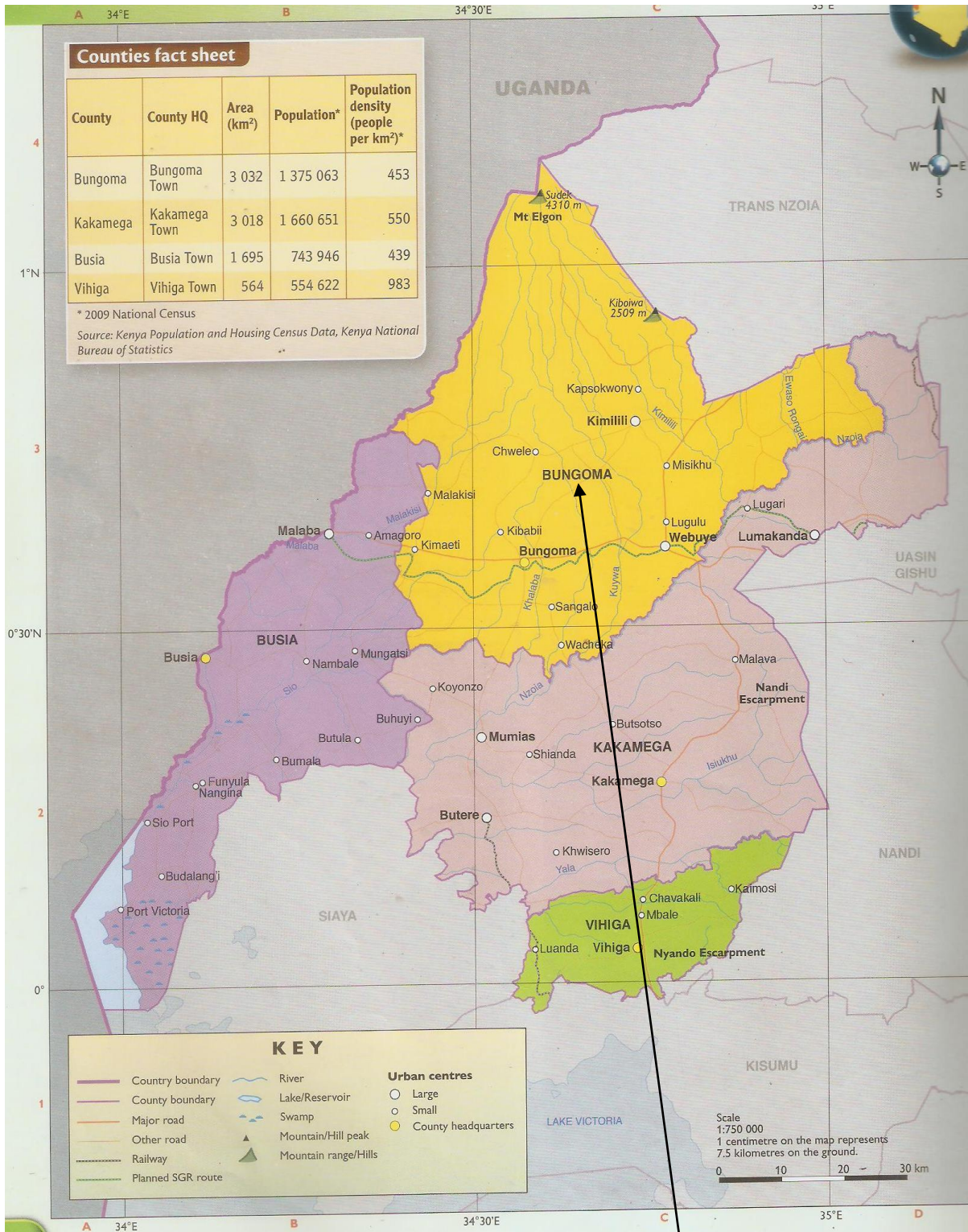
The above named is registered in the Doctor of Philosophy in Special Needs Programme of the School of Education, Maseno University. This is to confirm that his research proposal titled “Determinants of the Implementation of Inclusive Education in Public Secondary Schools in Bungoma County, Kenya” has been approved for conduct of research subject to obtaining all other permissions/clearances that may be required beforehand.

  
Prof. F.O. Owuor  
DEAN, SCHOOL OF GRADUATE STUDIES



# APPENDIX M

## MAP SHOWING LOCATION OF BUNGOMA COUNTY



Bungoma County