

**INSTITUTIONAL FACTORS INFLUENCING
IMPLEMENTATION OF INCLUSIVE EDUCATION
IN PUBLIC SECONDARY SCHOOLS IN MAKADARA
SUB COUNTY, KENYA**

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DECLARATION

This research project is my original work and has not been presented
for a degree in any other university.

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DEDICATION

I dedicate this project report to my parents Monica Opiyo and Henry

Opiyo my beloved children Victor Weke and Winnie Weke.

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LIST OF ABBREVIATIONS AND ACRONYMS

BoM	Board of Management
CWD	Children with Disabilities
EFA	Education for All
ICEVI	International Council for Education of people with Visual Impairments
IDEA	Individuals with Disabilities Education Act
IE	Inclusive Education
IEP	Individualized Educational Plan
LRE	Least Restrictive Environment
KEMI	Kenya Education Management Institute
NISE	National Institute of Special Education
SNE	Special Needs in Education
TSC	Teachers Service Commission
UNESCO	United Nations, Educational, Scientific and Cultural Organization

ABSTRACT

Inclusive Education (IE) is a philosophy based in the principle that every school should be able to cater for all children including those with special needs. The purpose of this study was to investigate institutional factors influencing implementation of inclusive education in public secondary schools in Makadara sub-county. Objectives of the study were: to determine the influence of; school physical facilities, teachers' attitude, teachers' professional qualifications as well as assess the influence of availability of teaching and learning resources on inclusive education in public secondary schools. The study used a descriptive survey research design where the target population comprised of a principal, 48 teachers and 1200 students. Simple random sampling was applied to sample 120 students all 48 teachers were sampled. Quantitative data were analyzed using descriptive and inferential statistics such as frequencies, percentages and multiple regression while data was presented using tables, pie charts and bar graphs. From the study it was established that; physical facilities had no significant effect on implementation of inclusive education $p=0.151$, teachers' attitude had significant effect on implementation of inclusive education $p=0.002$, teachers' professional qualifications had significant effect on implementation of inclusive education $p=0.005$ and shortage of teaching and learning resources had significant effect on implementation of inclusive education $p=0.000$. It was concluded that for implementation inclusive education to be successful, the learning environment must be restructured so as to be accessible to all learners; and teachers ought to have a positive attitude towards learners with special needs. This study recommends that: The Ministry of Education should organize for ways through which physical facilities should be availed in public secondary schools the facilities should also be adaptive to the children with special needs; there should be public sensitization about inclusive education by all stakeholders so that the learners should reap the benefits of inclusive education; the government should restructure teacher education in teachers training colleges so as to include special Needs Education course in the curriculum and education planners and technocrats should evaluate and assess the teaching and learning resources available and make more accurate estimates and allocations to the various requirements in the implementation of Inclusive Education.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

A report by UNESCO (2000) states that there is a belief that 5 percent of children enrolled in schools have different special learning needs. Inclusion of children with special learning needs in regular classrooms benefits both learners with severe disabilities and the normal learners since it provides a wide range of abilities to learn from (Warnock, 2005). The right of people with disabilities requires implementation of inclusive education. The inclusive education principle requires conformity of the school environment to the diverse needs of learners irrespective of their different learning disabilities (UNCRPD, 2007). The ultimate aim of inclusive education is not to remove variances but to enable all students learn within an educational community that authorizes and values personality (Lipsky, 1993).

Constitution of Kenya (2010) and Vision 2030 mandate Kenyan education sector to provide relevant and quality universal basic education that is accessible to all Kenyans. The mandate shows that Kenya is in agreement with the two internationally mandated goals which are The Jomtien education declaration of 1990 and The Dakar Framework for Action of 2000. In Jomtien, it was declared that consistent measures be taken to

reduce disparities and called for active commitment to reach the underserved groups including the poor, remote rural populations, ethnic, racial and linguistic minorities, refugees and migrants and those affected by conflicts. The Dakar Framework for Action reaffirmed the commitment to identify, target and respond to the needs and circumstances of the poorest and the most marginalized.

Inclusion in education is perceived as a process of addressing and responding to the diversity of all learners by increasing their participation in learning and reducing discrimination, exclusion and inequality within and from education (UNESCO, 2005). This calls for reforming and restructuring of school environment so as to ensure that all learners have access to a wide range of educational and social opportunities. The need to reform and restructure school environment has led to sluggish progress in the implementation of inclusive education, particularly in developing countries where resources are more inadequate compared to developed countries (UNICEF, 2011). Inclusion advocates indicated that separate curriculum and the use of special schools to provide education to learners with difficulties further promote exclusion, segregation of children who can learn normally and those who cannot (Ainscow, 1994). Inclusive schools do more than to endure diversity but they welcome it, celebrate it and view diversity not as a challenge to be resolved but as a chance to be

utilized to provide education of good quality (Asian Development Bank, 2010).

In the USA, around 96 percent of children with disabilities are presently educated within main classes in schools and almost half spend majority of their school day in general inclusive classrooms as opposed to being in segregated lessons. This demonstrates a progressive increase in the number of children with SNE being included in mainstream setting over past 20 years (US Department of Education, 2005). In Japan, education is offered to learners with special education needs through inclusion and institutionalization. Learners with severe disabilities receive education in Special Needs Education schools while learners with mild disabilities are taught in regular schools (Opdal, 2001). Instruction in the schools for special needs education and special education classes is offered utilizing specially created textbooks, teaching staff who have professional knowledge and experience and disability-friendly facilities and equipment based on the concept of special education programme and small class organizations (Opdal, 2001).

African nations have adopted inclusive education policies in the field of education. Emphasis has been given on policy options from integration to inclusive schools that serve all children with SNE into mainstream

schooling as a step in the process towards inclusion (Arbeiter 2002). In South Africa the new dispensation since 1994 demands drastic reforms in education. New education policies provides framework for inclusive education. This implies that barriers to learning have been reduced. The physical facilities have been adapted to accommodate learners with SNE in regular classrooms (Oliver, 2007).

In Kenya, according to MoEST (2015), National Special Needs Education Policy statement stipulates that the ministry of education have recognized and reinforced inclusive education as one of the means for children with special education to access education. The ministry has provided for funds for adaptation of infrastructure, equipment and facilities in learning institutions, reviewed the curriculum as well as training of teachers in SNE. The ministry has also allocated a regular unit fee of Kshs.1020 uniform to every learner and an additional Kshs. 2,000 to every special needs learner in a special unit.

In Botswana, the vast majority of centers of learning are physically inaccessible to many learners, especially to those who have physical disabilities Mukhopadhyay (2009). In Kenya studies by Wachira (2012) found that there are very few teaching and learning for use by children with specials needs. Naikoloyieu (2014) the physical facilities in regular

schools were not renovated to accommodate learners with disability. Wanderi (2015) established that some teachers have negative attitudes toward inclusion and inclusive instructional practices. The focus of teachers' negativity toward inclusive education varies. Studies by Avramidis & Norwich (2002) indicated that female teachers have a positive attitude for inclusion of disabled children in ordinary schools, unlike male teachers. This is possibly since females as mothers are more compassionate to disabled children (Avramidis & Norwich, 2002). Horne and Timmons's (2009) found that teachers had negative attitudes toward inclusion because they felt that continually having to make modifications and accommodations to meet inclusive education programs requirements made teaching students with disabilities time consuming.

Teacher training level is amongst the setbacks hindering implementing of inclusive education. In Australia, many pre-service teachers were only exposed to inclusive education as a preliminary subject which was incorporated in their teacher education curriculum (Forlin 2011). Studies by Kamene (2009) in Kitui found out that most of the teaching staff did not have enough qualifications of special needs education. Lack of adequate resources for inclusive learning poses a great challenge to learners with varied disabilities who require a variety of resources to meet their needs. Sharma (2008), in her study of 603 pre-service teachers within

Australia, Canada, Hong Kong, and Singapore, found that a lack of resources emerged as the most highly ranked concern for participants. Wachira (2012) in his studies in Kikuyu found out that learning resources were available to the “normal learner” and she recommended that there is need to have more learning resources that would assist the SNE learners.

The special needs learners are benefiting due to the improved accessibility to the school facilities like ramps constructed on doorways, construction of handrails on corridors and accessible toilets and leveling off the field although the idea of inclusive education has not been fully embraced by principals and teachers in regular public secondary schools (UNICEF, 2015). It is therefore important to establish the institutional factors necessary for implementation of inclusive education in the Kenyan secondary schools.

1.2 Statement of the Problem

The Disability Act of 2003 enacted by Kenya emphasizes the need to provide quality education to learners with disabilities within the regular education institutions. On 24th March, 2015, the then Cabinet Secretary in the Ministry of Education proposed that Kenyan education should be modified so as to reach the excluded children (MOEST, 2015). His statement emphasized the need to implement inclusive education as supported by The Basic Education Act of 2013. The progress made after

the Act towards Education for All (EFA) in Kenya is having dramatic effects but the absence of disabled children from this initiative has in the last few years been clearly demonstrated (Rieser, 2014). Although there has been a flagship for including people with disabilities in education for all since 2001, inclusion of students with special needs has been largely ineffective (Rieser, 2014).

In Makadara Sub-County, only one secondary school out of eleven public secondary schools enrolls learners with disabilities but very few in numbers. This indicates that very few children with disabilities are admitted to regular schools secondary schools and the schools in Makadara might not have enough physical facilities, trained teachers, teaching and learning materials and the principals and teachers might have an attitude that does not support implementation of inclusive education. This study therefore sought to investigate institutional factors influencing implementation of Inclusive Education in public secondary schools in Makadara Sub-County, Kenya.

1.3 Purpose of the Study

The purpose of the study was to investigate institutional factors influencing implementation of inclusive education in public secondary schools in Makadara Sub-County, Kenya.

1.4 Research Objectives

The study was guided by the following objectives:

- i) To assess the influence of school physical facilities on implementation of inclusive education in public secondary schools in Makadara Sub-County.
- ii) To establish the influence of teachers' attitudes on implementation of inclusive education in public secondary schools in Makadara Sub-County.
- iii) To determine the influence of teachers' professional qualifications on the implementation of inclusive education in public secondary schools in Makadara Sub-County.
- iv) To examine the influence of availability of teaching and learning resources on inclusive education in public secondary schools in Makadara Sub-County.

1.5 Research Questions

The study was guided by the following questions:

- i) In what ways do school physical facilities influence the implementation of inclusive education in public secondary schools in Makadara Sub-County?
- ii) To what extent do teachers' attitudes influence the implementation of inclusive education in public secondary schools in Makadara Sub-County?

- iii) How do teachers' professional qualifications influence implementation of inclusive education in Makadara Sub-County?
- iv) To what extent does availability of teaching and learning resources influence implementation of inclusive education in Makadara Sub-County?

1.6 Significance of the Study

The findings may provide essential information to education planners and policy makers on how to improve curriculum to accommodate all learners with special education needs. The planners may find this study valuable in assessing the resources available both human and non-human and therefore set more realistic goals and objectives in making more accurate estimates and allocations to various requirements in the implementation of inclusive education. The principals and other stakeholders may find the study findings useful to educate the community on the needs to take their challenged children to the local schools in the neighborhood. It may also provide useful information to the MoE policy makers and educational planners to whether access and enrollment of children with special education needs is enhanced in public secondary schools of Makadara Sub-County. The outcome of this study might also help future researchers who may wish to carry out a further study in the field.

1.7 Limitations of the Study

The major limitation of the study was although inclusive education has been identified as an important component of learning which should be provided at all levels of education, the principal and most teachers were quite ignorant about the concept of inclusion and seemed to have no skills to handle special needs learners. The researcher gave a brief discussion of the concept of inclusive education to the principal and teachers and explained to them their role in the research. The students were also not willing to give information about their school physical facilities and teachers attitude but the researcher assured them of confidentiality.

1.8 Delimitation of the Study

The study was conducted in Aquinas boys' secondary school in Makadara sub-county which is the only public secondary school that offers inclusive education in the sub-county. Private secondary schools were not included since the conditions are different as compared to public secondary school. Due to the scope of the study, the study only focused on inclusion of special needs learners in regular schools. Implementation of inclusive education is influenced by several factors but the researcher investigated the influence of school physical facilities, teacher attitudes, teacher professional qualification and availability of teaching and learning resources on inclusive education implementation because according to previous studies they are the main institutional factors hindering

implementation of inclusive education. The researcher targeted the principal, teachers and students of one secondary school in Makadara Sub-County. The respondents were limited to the principal and teachers who are the implementers of inclusive education in the secondary schools and students who are the beneficiary of inclusive education.

1.9 Basic Assumption of the Study

The assumptions for this study were as follows:

1. That the regular public secondary schools practicing inclusive education follow the Kenya Institute of Curriculum Development (KICD) syllabus.
2. The secondary school under the study is familiar with the current policy guidelines on inclusive education

1.10 Definition of Significant Terms

The following are definitions of significant terms as used in the study.

Disability refers to 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.

Implementation of inclusive education refers to a process of increasing enrollment and retention of learners with special educational needs into mainstream school classrooms

Inclusion refers to a process by which learners, especially those who experience barriers to learning and development, have access to and participate in the general school system.

Inclusive education refers to a learning environment that promotes full personal, academic and professional development of all learners regardless of race, class, gender, disability, religion, culture, sexual preference, learning styles and language.

Inclusive school refers to learning institution that normally admits learners with special needs and those without any disability.

Institutional factors refers to factors within the institution that influence effective implementation of inclusive education

Integration refers to a process of placing disabled people of all ages and/or learners with special educational needs in mainstream education.

School Physical facilities refer to the school buildings, laboratories, classrooms, libraries, toilet facilities, offices and other material and infrastructure that would likely motivate students towards learning.

Teachers' Attitude refers to multidimensional trait comprised of three components cognition (belief, knowledge), affect (emotional) and behavior (overt action).

Teachers' professional qualification refers to competences of teachers that enable them to engage with learners with special needs.

Teaching and learning resources refers to any tool that helps teachers and students learn. They include textbooks, flashcards, posters, models, software online courses, maps and atlases.

1.11 Organization of the Study

The study is presented in five chapters. Chapter one covers introduction which includes the background to the study, statement of the problem, purpose of the study, research objectives, research questions, significance of the study, limitation and delimitation of the study, assumptions of the study, definition of significant terms and organization of the study. Chapter two is literature review which covers introduction, reviewed literature driven by the objectives, summary of related literature, theoretical framework and the conceptual framework. Chapter three is on research methodology which covers research design, target population, sample size and sampling procedures, research instruments, validity and reliability of research instruments, data collection procedure, data analysis and ethical considerations. Chapter four covers data presentation, interpretation and discussion of findings. Chapter five covers the summary of the study, conclusions and recommendations. Suggestions for further research are also presented.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents introduction, concept of inclusive education, influence of teachers' attitudes on implementation of inclusive education, influence of school physical facilities on inclusive education implementation, influence of teachers' qualification on inclusive education implementation, influence of teaching and learning resources on the implementation of inclusive education, theoretical frame work, conceptual framework, and summary of the reviewed literature.

2.2 Concept of Inclusive Education

The issue of equity in the provision of quality education has been the major international force steering and accelerating the movement towards a more inclusive educational system and the way inclusion is defined. Education has been viewed to be the best weapon to alleviate poverty and curb income disparities. This can only bear fruits if all the citizens go through the same curriculum. It is widely acknowledged that children with disabilities continue to experience different forms of exclusion which vary depending on their disability, domicile and the culture or class to which they belong (UNICEF, 2013). The Kenyan Education Policy framework as is stated in the constitution supports equal access and inclusion of persons with special needs and disabilities in education and training programmes

at all levels. It also states that all schools to ensure children with special needs and disabilities are provided for without discrimination (Republic of Kenya, 2010a).

UNESCO (2008) defines Inclusive Education as a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. Inclusive education is a guiding philosophy enacted through inclusive policy/practice that requires a comprehensive school restructuring. The restructuring is done in order to accommodate diversity and individual differences as well as similarities (Stubbs, 2002). It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the state to educate all children (Manzi, 2011).

Inclusive education refers to stepping from the medical model to the social model. In the medical model, the problem lies in the child who is expected to cure him/herself under counsel of numerous specialists within special centres to be able to learn in an ordinary school (Green 2001). In social model, it is perceived that the problem lies in the environment and community services have to cater for all people, including people with

disabilities (Manzi, 2011). In the inclusive education environment, ordinary teachers and ordinary schools are expected to unconditionally offer training opportunities to heterogeneous people including people with disabilities (Ainscow, 2003).

2.3 School Physical Facilities and Implementation of Inclusive Education

According to Ainscow (2003), schools need to be restructured in order to respond effectively to the needs of all learners. The inclusive school ought to be proactive relative to the range of needs of all children rather than reactive as an integrated education has been (Kisanji, 2008). School physical facilities refer to the school buildings, classrooms, libraries, laboratories, toilet facilities and other materials and infrastructure that would likely motivate students towards learning (Hallak, 1990). Such physical structures should be adequate and properly located free of any risks of users or to those around them to enhance effective school learning environment which promote educational performance (MOEST, 2001).

School physical facilities provide the basic teaching and learning environment. The learning environment including classrooms and other school facilities also has an impact on learning outcomes. Availability, quality and appropriateness of the school physical facilities are quite important to achieving effectiveness in instructional delivery and

supervision in the school system (Ajayi & Ayodele, 2001). For inclusive education implementation to be successful the learning environment must be restructured so as to be accessible to all learners (UNESCO,2010). Physical facilities such as ramps, accessible toilets, staircases with protected refuge, smooth and slip proof floors for learners with wheelchairs, pavements, desks are basic requirements in the implementation of inclusive education (Ajayi & Ayodele, 2001).

Toilets and bathrooms used by learners with special needs should have added bars to help children to hold on while toileting. Ramps on entries and exits of all facilities like classrooms, dormitories and play grounds; all classrooms should be well lit and well ventilated for physically challenged, the school buildings ought to big enough to let use of wheel chairs; school should provide in-built hearing mechanisms and feedback mirrors for hearing challenged among others (Karugu, 2001). Sharma, (2008) noted that The Ministry of Human Resource Development (MHRD) infrastructural facilities in most of the schools in India could not support inclusive teaching-learning processes.

The school reform should focus on a unified system that provides an environment in which all students have an equal opportunity to reach their maximum potential. Rule 6 of 22 under the United Nations(UN) Standard

Rules on the Equalization of Opportunities for Persons with Disabilities (2003) clearly defines inclusive education as the vehicle for equalizing opportunities noting that countries should ensure the education of people with disabilities is an integral part of the education system (UNESCO, 1994).

In Botswana the vast majority of centers of learning are physically inaccessible to many learners, especially to those who have physical disabilities Mukhopadhyay (2009). In Kenya studies by Kithuka (2008) established that physical facilities were not enough, classrooms were congested and toilets were constricted and had no seats making it difficult for SNE learners to use them.

2.4 Teachers' Attitude and Implementation of Inclusive Education

Successful implementation of any curriculum is dependent on the educators/teachers being positive about it. For inclusion to succeed all teachers must believe that all children can learn to high standards of achievement, be willing to work collaboratively with other professionals and parents and most importantly respect and appreciate diversity (Avramidis 2010). Avramidis (2010), reviewed a large body of research and found out that teachers' attitudes has a strong influence on the implementation of inclusive education. He also reported that teachers'

attitudes towards inclusion is strongly influenced by nature and severity of the disabling condition presented to them coupled with the availability of physical facilities and teaching and learning resources. Moran (2007) said that teachers' attitudes towards integration are anticipated to affect the degree to which children with special education needs (SNE) become not only physically incorporated but important members of regular classes gaining academically, socially, and emotionally from the encounter.

Berry (2010) asserted that a teacher who believes that inclusion is unfair to typically achieving students may act in some ways that negatively affect students with disabilities in that classroom. Berry continues to note that the presence or absence of positive attitudes and a sense of commitment to principles of inclusion can tip teachers toward making or avoiding efforts to effectively teach students with disabilities. Teachers who have favorable attitudes toward inclusion generally believe that students with disabilities belong in general education classrooms, that they can learn there. Teacher attitudes have been identified to be highly correlated to fruitful inclusive education (Avramidis & Norwich, 2002). Teachers who possess optimistic and open attitudes towards establishing an environment of inclusion for all students in the classroom, regardless of variances or disabilities, were found to have be more effective in implementing inclusive practices (Avramidis, Bayliss, & Burden, 2000).

Sustaining an optimistic attitude towards inclusive education was more significant than competence or abilities Pearce (2009). This was reinforced in a study conducted by Dukmak, (2013) who established that a positive attitude towards inclusive education was even more crucial as compared to school resourcing, since it was the teacher who had to execute the inclusive practices. Pearce (2009) also indicated the significance of pre-service teacher training, adding that increased positive attitudes were possessed by those teachers who had been prepared in their pre-service teacher training to teach all children, in relation to those that had not been prepared and trained to teach a diverse classroom.

Johnson (2006) in a study described and analyzed the perceptions held by regular education teachers toward the placement of students with learning disabilities in their classrooms. Key findings of this study were that class size should be reduced to support inclusion and that teachers are basically enthusiastic about participating in inclusion. Ali, Mustapha and Jelas (2006) carried out a research on the attitude and alleged experience of normal and special education teachers of primary and secondary schools towards inclusive education in Malaysia. The main finding established that, in general, experienced teachers have optimistic attitudes towards inclusive education. They argued that inclusive education improves social

communication and inclusion amongst the students and hence it reduces pessimistic stereotypes on special needs students. The findings also established that cooperation between the ordinary and the special education teachers is crucial and that there ought to be a flawless policy on the implementation of inclusive education.

Kamene (2012) in Yatta district found that most teachers perceive that these learners will make their class' mean score go down and so they preferred a class without challenged learners. Teachers also feel less motivated as their counterpart in special units are given an extra allowance for taking care of learners with special needs in education.

2.5 Teachers' Professional Qualification and Implementation of Inclusive Education

Teacher professional qualification refers to teacher competency. Competences of teachers enable them to engage with socio-cultural diversity in classroom and school community (Carroll, 2003). In inclusive education the teacher ought to have fresh intangible thinking, the capability to know the individual and societal importance of specialized activities for children with disabilities and be responsible for the quality established (Forlin 2011). MoEST (2004) reported that training on inclusion is to be incorporated in pre-service courses and offered as in-service provision. Teachers train in SNE so as to provide expertise aimed

at adjusting to the surroundings; identify, assess and provide initial intermediation for improvement and rehabilitation; promote alertness of requirements of the disabled, promote measures to prevent challenges in order to limit the incidences of those challenges.

This view is also held by Engelbrecht and Chris (2008), who feel that pre-service training of teachers still tend to focus on separate service delivery for learners with special needs and is not viewed as an integral part of the general teacher education curriculum. Skjorten (2001) asserted that teacher education will require to establish fundamental alterations so as to prepare teachers to have the ability to curb the shortcomings of inclusive education. Another way to ensure training of teacher in special needs education would be to incorporate special needs education in all teacher-training programmes. In order to achieve training of teachers, the practice of in-service seminars can be utilized to guarantee a wide dissemination of teachers with expertise in special needs education in all schools (Stubbs 2000). These teachers can then be resource people to educate others in the inclusive education practices (Karugu, 2001).

Forlin 2011) reported that teachers play an essential role in quality education and that the quality of education system cannot exceed the quality of its teachers. Muranja (2012) concurs that the quality of the

teacher contributes more to learner achievement than any other factor including class size, class composition or background. The need for high quality teacher equipped to meet the needs of all learners becomes evident to provide not only equal opportunities but also education for an inclusive society. Scruggs (2001) stated that it is the knowledge, beliefs and values of the teacher that is brought to bear in creating an effective learning environment for pupils making the teacher a critical influence on inclusive education and the development of inclusive school.

Concentration on initial teacher education would provide the best means to create a new generation of teachers who will ensure the successful implementation of inclusive policies and practices. As a result of their pivotal role in education system, teachers need confidence in their ability and the knowledge and skills in inclusive education in order to meet the challenges that they will encounter in the present school climate (Carroll, 2003). Teachers should therefore possess pedagogical skills as well as specialist knowledge of their subject, have access to effective early career support programme at the start of their career. For teachers to remain relevant in their teaching career, teachers need to have sufficient incentives throughout their career to review their learning needs and to acquire new knowledge, skills and competences.

Yeo (2014) reported that in Singapore all teachers know what inclusion entails and what it requires. There is use of shadow teachers who help special education children assimilate into mainstream by improving their behaviour and interaction with other teachers and pupils. The shadow teachers provide guidance and feedback as well as fostering independence. Yeo, (2014) also reported that due to the absence of legislation mandating inclusive practices, requests from children with special education needs are subject to approval on a case by case basis. According to National Institute of Special Education (NISE) Bulletin Volume II (2012), instruction in Japanese regular classrooms is offered through the use of special needs education support assistants and the teaching staff who have professional knowledge and experience.

Kenya has a less number of teachers with skills to teach in an inclusive classrooms and there are also limited facilities to cater for children with special needs (MoE,2001). Kithuka (2008) established that there was inadequate qualified teachers while Kamene (2009) established that teachers did not have enough skills to take care of children with special needs hence they were not confident.

2.6 Availability of Teaching and Learning Resources and Implementation of Inclusive Education

It is the responsibility of the principals to ensure that there is adequate teaching and learning resources to implement the inclusive education. Acquisition, allocation, distribution and maintenance of such resources are some of the major tasks of the principal. Teaching and learning resources refer to any tool that helps teachers and students learn. They include textbooks, workbooks, worksheets, manipulative (blocks, beads), flashcards, posters, models, software online courses, maps and atlases. Learners with visual disability need white canes and Braille at personal level. They also require, speech training units, auditory training, sign language dictionaries and books. Learners with mental disability need well-designed aids and real objects as learning resources.

They comprise of entertaining and job-related training apparatus, sports and recreational therapy tools, physiotherapy and occupational therapy equipment, music and art therapy apparatus, visual auditory tangible and functional teaching materials (Kirk and Anastasiow 2003). They aid in teaching and learning because the pupils are able to see and often feel what the teacher teaches. They stimulate ideas; demand an active response from the learners and provide enjoyment. The lesson becomes more lively and grasping and understanding the major concepts becomes easier.

According to Asikhia (2010), enough instructional materials affect the quality of learning that can take place in a learning institution. Good quality materials can encourage attention, sustain attentiveness and make learning more meaningful. Educational outcome in schools is meticulously associated with employment and sufficiency of teaching and learning materials in various means. Schools that have inadequate instructional materials are unlikely to post good results (Okobia, 2011). Teaching and learning resources are basic instructional tools whose absence or inadequacy leads to an ineffective or abstract instructional process. The scarcity of teaching and learning resources (TLR) will keep education system from responding more fully to new demands. In order to raise the quality of education and its efficiency, better learning materials are needed. According to Ladbrook (2009), learning is a complex activity that involves interplay of students' motivation, physical facilities, learning resources, skills of teaching and curriculum demands. Teaching and Learning Resources (TLR) include: maps, books, tape recorders, radios, pens, erasers (Atkinson, 2000).

In Japan, instruction in the schools for learners with special needs in education and special needs classrooms is offered utilizing specially created textbooks and disability-friendly facilities (Opdal, 2001). In South Africa provision of teaching and learning materials representing the real

experiences of people whose different learning styles and needs had made experience barriers to learning and discrimination was done by materials development teams. The materials developed had to be in line with inclusive education policy contained in the White Paper 6, include a balance of inclusive education theory and practice (Ladbrook, 2009). The study by Lowe (2009) on effective teaching and learning resources in South Africa found that lack of relevant teaching material caused dismal pupils' performance. Teaching and learning activities can be obtained through cultivating pupils' creativity and motivation by a way of linking a classroom with natural and social environment.

Mulwa (2004) in a study on factors influencing pupil academic performance at KCPE examination in Mutonguni division in Kitui Sub-County noted that lack of revision books in schools was a great disadvantage to the pupils, as inadequate revision by pupils would definitely result in poor performance at the KCPE examination. She noted that schools which had more resources performed better than those with fewer resources.

2.7. Summary of Literature Review

Inclusive education is not a new agenda as far as provision of education to learners with special education needs is concerned. A lot of studies have been conducted concerning it. Rule no. 6 of The United Nations Standard

Rule on the equalization of opportunities for all children including those with special education needs support provision of quality education to learners with disabilities in integrated school setting.

Wanjiru (2012) studied school based factors influencing effective implementation of inclusive education in public primary schools in Kikuyu district. Moraa (2013) studied school based factors influencing integration of special needs education in public primary schools in Masaba North District. Owuor (2014) studied determinants of inclusion of learners with special needs in public primary schools in Kisumu municipality, Kisumu county. Kadima (2006) carried out a study of factors affecting the implementation of Inclusive education in normal primary schools in Busia District and found inadequacy of physical facilities and teachers attitude was negative towards implementation of Inclusive Education . Kamene (2009) carried out the same study at Yatta found inadequacy of teaching and learning resources most of the schools in the study did not adapt the physical facilities to accommodate learners with learning disability, Muranja (2012) institutional factors affecting implementation of special education in Kajiado central District found most of the headteachers had negative attitudes toward disabled learners in her study she also found out inadequate resources both human and material. None of these studies addressed institutional factors influencing implementation of inclusive education in public secondary schools in Makadara sub-county.

2.8 Theoretical Framework

The study is anchored on the Bronfenbrenner's Ecological Theory which elaborates the direct and indirect impacts on a child's life by referring to various levels of surroundings or contexts that affect person's development (Bronfenbrenner, 1979). Bronfenbrenner claims that there are several environmental factors that impact on an individual's growth and development: the micro-system, the meso-system, the exo-system, the macro-system and the chrono-system (Landsberg, 2005). The system of education represents teachers, school physical facilities, teaching and learning resources and/or curriculum. If all the systems work well in synergy all learners in school, even those experiencing barriers will benefit.

The Ecological theory is based on the interdependence between different organisms and their environment, with every part of the environment being significant to guarantee existence of the whole system (Donald, Lazarus & Lolwana, 2009). The theory supports Vygotsky's Socio-cultural theory, which emphasizes on socially significant activity as a crucial impact on an individual's consciousness. Vygotsky believed that people study through networking with their social surrounding and through the leadership of a more skilled people. An ecological systems view of inclusive education suggests that children with or without

disabilities develop in a complex social and that it is necessary to observe interactions at multilevel contexts and examine changes over time at all levels (Xu & Filler 2008).

2.9 Conceptual Framework

The conceptual framework in Figure 2.1 shows the relationship between independent and dependent variables.

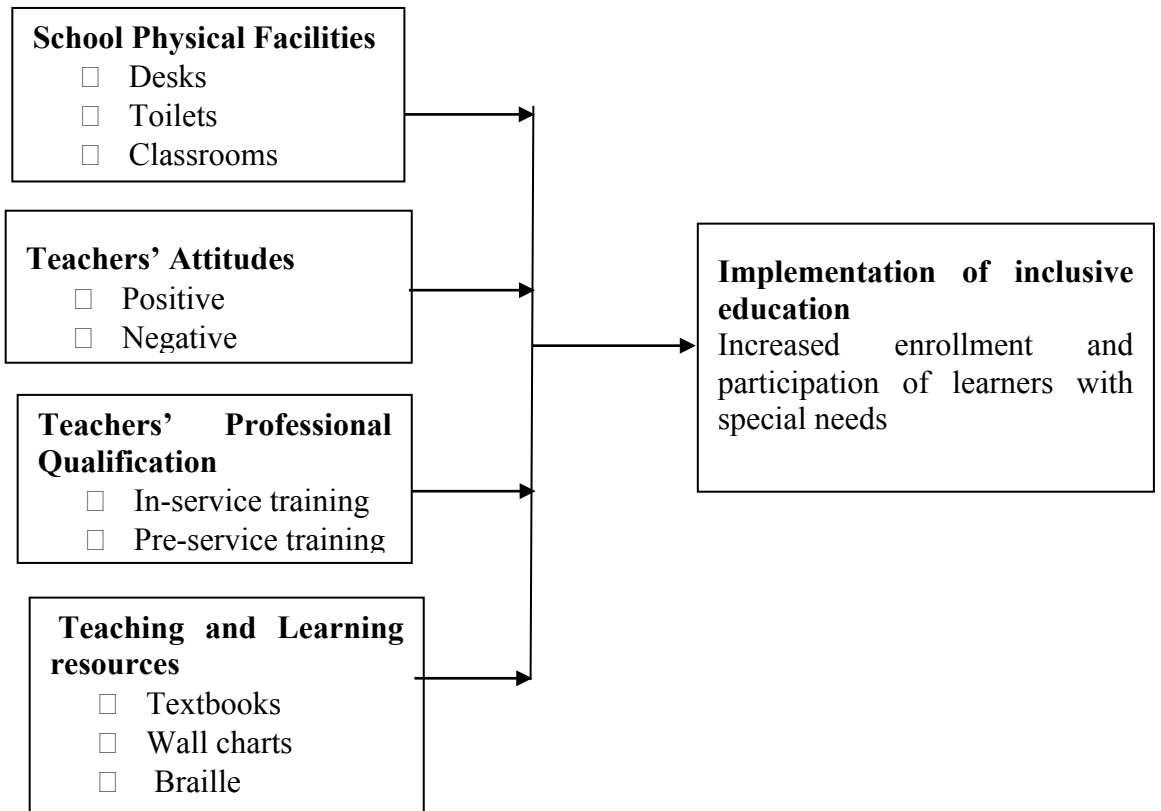


Figure 2.1: Relationship between independent and dependent variables

Figure 2.1 shows that school physical facilities, teachers' attitudes towards inclusion, teachers' professional qualifications and availability of teaching and learning resources through the teaching and learning process affect implementation of inclusive education. The four independent variables, complement each other and work in synergy to realize successful implementation of inclusive education. However if regular schools do not improve the institutional factors then learners with special needs would remain excluded hence marginalized from education. This will hinder Kenya from achieving EFA.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the following sub-sections: introduction to the research methodology, research design, target population, sample size and sampling procedure, research instrument and data collection procedure and data analysis techniques.

3.2 Research Design

The researcher used descriptive survey research design in the study. This design provides a picture of a situation as it naturally happens. According to Cooper and Schindler (2012), the design may be used to justify the current practice and also develop theories. Descriptive survey research design allows the researcher to gather information, summarize, present and interpret data the way they are (Mugenda and Mugenda 2008). This research design was appropriate for the study because by identifying the institutional factors influencing the implementation of inclusive education. The researcher was able establish the status of physical facilities, teachers attitude, the professional qualification of the teachers, influence of availability of learning and teaching materials.

3.3 Target Population

The target population of the study were the teachers, principals and students of secondary schools in Makadara Sub-County. There are 11

secondary schools in Makadara Sub-County, Nairobi County Kenya. However there is only one public secondary school in the sub-county that enrolls both regular and learners with disabilities thus the researcher target population was the principal, 48 teachers and 1200 students (Sub-county director of education office, 2017).

3.4 Sample Size and Sampling Procedures

Sampling is done in order to lower costs, increase the speed of data collection, greater accuracy of results and availability of population elements (Cooper & Schindler, 2012). According to Mugenda and Mugenda (2008), 10 to 30 % of the population is adequate, though the larger the sample size the better. Simple random sampling was employed to select students whereby 10% of the students were selected thus 120 students were sampled. The researcher grouped the students into twelve groups, wrote some numbers on a piece of paper, asked to students to pick them and then selected 10 students from each group who picked even numbers. When the target population is small, the whole population is sampled thus the researcher sampled all the teachers and the principal.

Table 3.1: Sample Size

Target group	Target population	Sample size	Percentage
Principal	1	1	100%
Teachers	48	48	100%
Students	1200	120	10%
Total	1249	169	-

Source: Sub-county Director of Education Office, Makadara sub-county (2017)

3.5 Research Instruments

A researcher needs to develop instruments with which to collect data. Orodho, (2008) asserted that in research instrumentation refers to the tools used to collect data from the respondents. The researcher used questionnaires to collect data from students, teachers and principal. Questionnaires are more convenient since the respondents can fill them at their own preferred time. The teachers' and principal questionnaire comprised of demographic information and school characteristics like availability and adequacy of teaching and learning resources. Students' questionnaire included; age, gender, form/class, type of disability and school characteristics such as accessibility, availability and adequacy of teaching and learning resources. The researcher also used observation checklist to record the condition and availability of school physical facilities and teaching learning

resources. This allowed the researcher to get first hand information concerning availability and condition of the resources.

3.5.1 Validity of the Instruments

Validity indicates the degree to which an instrument measures what it is supposed to measure. That is the extent to which differences found in the measuring instrument reflect true differences among those who have been tested Kothari (2004). Through piloting, the instruments were pre-tested in order to allow the researcher to improve their validity as well as familiarize with data collection process. About 10 to 20 percent of the sample size is recommended, Mugenda and Mugenda (2008). 10% of 48 which is 5 teachers participated in the pilot study. 10% of 120 which is 12 students participated in the pilot study. The teachers and students in pilot study also participated in the actual data collection since the scope of the study was limited. The benefits of carrying out a pilot study is that it can offer prior caution with regards to flaws in the instrument in an anticipated study (Simon, 2011).

3.5.2 Reliability of the Instruments

Reliability is the extent of the degree to which a research instrument produces steady outcomes when repetitive attempts are done (Wiersma &

Jurs, 2005). In order to ensure high degree of reliability the researcher used test-retest method. This was carried out by giving out the same research instruments twice to the same pilot group at an interval of one week. Then the correlation coefficient of the scores from two sets of scores was calculated using Pearson's Product Moment Formula. The formula was appropriate for the questionnaire since it gives consistent results.

$$r = \frac{\frac{\sum xy}{N} - \frac{\sum x \sum y}{N^2}}{\sqrt{\left(\frac{\sum x^2}{N} - \left(\frac{\sum x}{N}\right)^2\right) \left(\frac{\sum y^2}{N} - \left(\frac{\sum y}{N}\right)^2\right)}}$$

Where:

Where r = person correlation co-efficient

\sum = summation symbol

$\sum x$ = the sum of score in x distribution

$\sum y$ = the sum of score in y distribution.

$\sum x^2$ = the sum of square scores in x distribution

$\sum xy$ = the sum of products of spilled x and y scores.

n = the total number of subjects.

The correlation coefficient obtained was 0.738 for teachers' questionnaire, 0.711 for students' questionnaire and 0.733 for principals questionnaire.

This means the research instruments could be relied upon for this study. A correlation coefficient of between 0.7 to 1 is considered reliable (Mugenda and Mugenda 2008).

To test the reliability of the observation check list, the researcher used the split-half technique. The checklists were split into two sub sets (the sets which have odd numbers and even numbers). By using this method, the researcher aimed at determining the co-efficient of internal consistency and the reliability co-efficient. The researcher used Spearman Brown Prophecy formula:

$$Re = \frac{2xr \text{ half-test}}{1+r \text{ half-test}}$$

Where Re = reliability of the original test

r = reliability of the coefficient resulting from correlating the scores of the odd items with the scores of the even items. A coefficient of 0.75 was obtained which according to (Gay, 2003) was considered adequate.

3.6 Data Collection Procedure

After approval of the research proposal by departmental supervisors the researcher sought permission from the National Commission for Science, Technology and Innovation after being cleared by the University of Nairobi. The researcher visited the target school, sought permission from the principal then explained to the respondents their role in the research.

The researcher then administered questionnaires and booked an appointment to re-visit the schools after two weeks so as to give respondents time to give respond to the questionnaires and also for the researcher to have time to fill the observation checklist. The researcher collected the questionnaires after they were filled.

3.7 Data Analysis Techniques

After field work, the questionnaires were cross examined to ascertain their accuracy, completeness and uniformity. The collected data were then be coded and then organized into different categories. Qualitative data were analyzed thematically by classifying them into themes from which opinions from respondents were coded and tabulated in frequency distribution. Quantitative data were analyzed using descriptive statistics supported by tables, graphs, frequency distribution and percentages. Statistical Package for Social Science (SPSS) was used for data analysis. The Statistical package offers extensive data handling capabilities and numerous statistics analysis procedures that can analyze small to large data statistics. A multiple regression was used to measure the quantitative data and was analyzed using SPSS too.

The regression equation is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where Y is the dependent variable (inclusive education), β_0 is the regression constant, $\beta_1, \beta_2, \beta_3$ and β_4 are the coefficients of independent variables, X1 is physical facilities, X2 is teachers attitude, X3 is teachers professional qualification, and X4 is availability of teaching and learning materials.

3.8: Ethical Considerations

These are issues that need to be considered when conducting research Mugenda and Mugenda (2008). They include informed consent, confidentiality, protecting interviewees from any repercussions of their comments reported (Babbie, 2009). The participants in the research were informed that the information they provided will be securely stored against access by other persons other than the researcher and used for academic purposes only. The participants were given opportunity to review the transcript of their interview for information they would not wish to be included.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents data analysis, interpretation and presentation. The purpose of this study was to investigate institutional factors influencing implementation of inclusive education in public secondary schools in Makadara Sub-County, Nairobi County, Kenya. The study was based on the objectives of the study including influence of school physical facilities on the implementation of inclusive education, establish the influence of teachers' attitude on implementation of inclusive education, determine the influence of teachers' professional qualifications on the implementation of inclusive education as well as determining the influence of availability of teaching/learning resources on implementation of inclusive education.

4.2 Response Rate

The respondents involved were the school principal, teachers and students. They returned the questionnaires as tabulated in Table 4.1.

Table 4.1: Instrument Return Rate

Respondents	Sampled size	No. collected	Return rate (%)
Principal	1	1	100
Teachers	48	36	75.0
Students	120	90	75.0
Total	169	127	-

Table 4.1 indicates that the average questionnaire return rate was well above 70 percent which according to Mugenda A. and Mugenda O. (2008) is an acceptable proportion and can be termed adequate for analysis.

4.3 Demographic Information

The demographic data of the principal and teachers focused on their gender, age and year of service in inclusive classrooms. The demographic data of students focused on their gender, class/form and their physical health. This sought to establish whether demographic characteristics of the principal and teachers had an impact on implementation of inclusive education.

4.3.1 Gender of Respondents

In order to establish whether gender affects inclusive education, the researcher requested the respondents to indicate their gender in the questionnaire. Findings are presented in Figure 4.1.

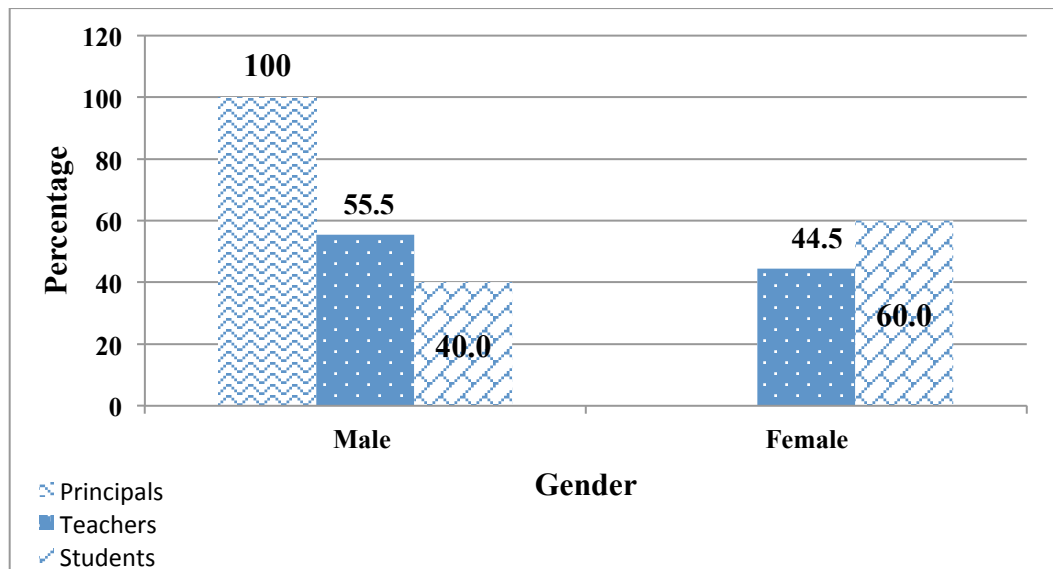


Figure 4.1: Gender of Principals, Teachers and Students

Findings in Figure 4.1 shows that the principal in the target secondary school was a male, majority of the teachers (55.5%) were male and majority of students (60%) were female. This shows that Makadara Sub-County has met the threshold of the current Kenyan Constitution which stipulates that not more than two thirds (67.7%) of any public institution should be drawn from one gender. Therefore equitable representation of teachers by their gender could contribute to implementation of inclusive education. Students of a certain gender may feel that their rights are well understood by teachers drawn from a certain gender especially women since as mothers they are perceived to have a positive attitude towards children with special needs.

The researcher aimed at establishing where age affects principals and teachers ability to teach in inclusive school. She therefore asked the respondents to indicate their age. Findings are presented in Figure 4.2.

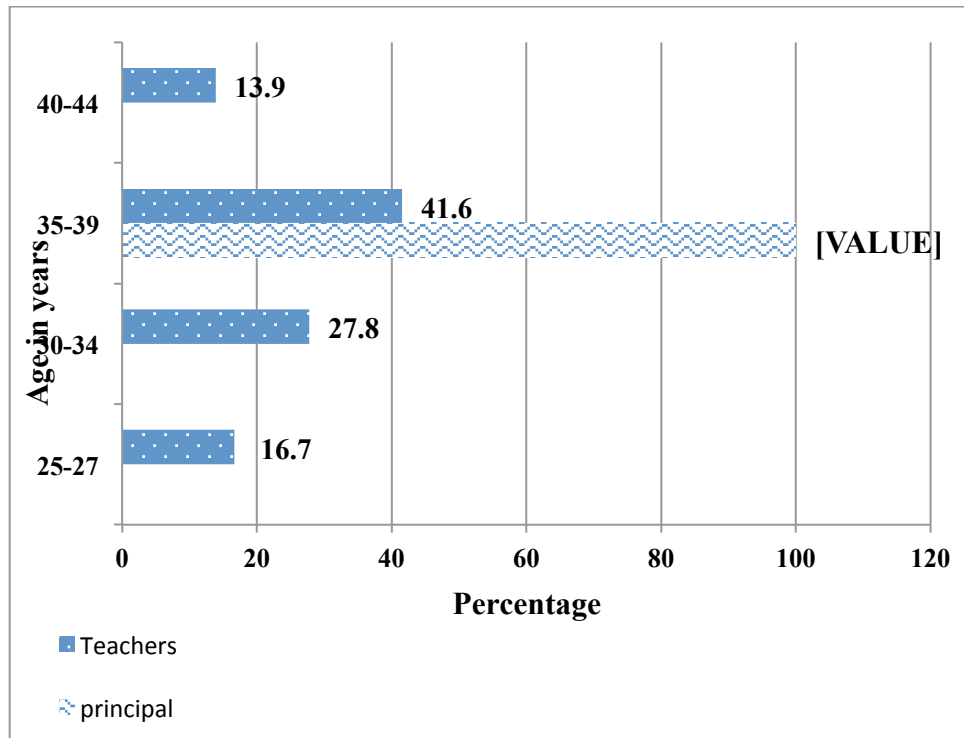


Figure 4.2: Age of Principal and Teachers

Findings in Figure 4.2 shows that the principal and (41.6%) of the teachers were aged between 35-39 years. This shows that the principal and the teachers were young and energetic to handle learners with special needs.

Principals' and teachers' academic qualification were also sought to find whether they were qualified to manage and teach in an inclusive secondary school. Findings are presented in Figure 4.3.

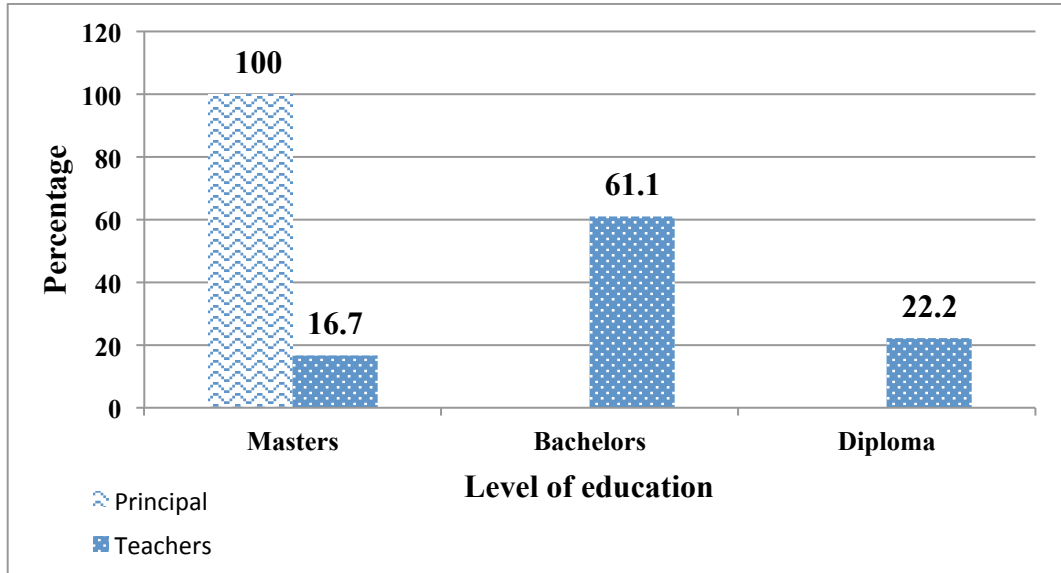


Figure 4.3: Principal' and Teachers' Level of Education

Results in Figure 4.3 indicates the principal had attained masters of education and majority of the teachers (61.1%) had attained bachelors of education degree. This shows that the principals and teachers had attained the minimum qualification of a secondary school teacher which is a diploma. Effective implementation of inclusive education requires qualified principals and teachers, this could assist them to successfully implement inclusive education policy enabling students with special needs learn best in typical settings with the peers despite their diversified abilities.

Years of teaching experience have positive effect on teachers' attitudes with regards to inclusion (Cook et al 2000). The researcher therefore sought to find out teachers' years of service in inclusive classrooms. Findings are presented in Figure 4.4.

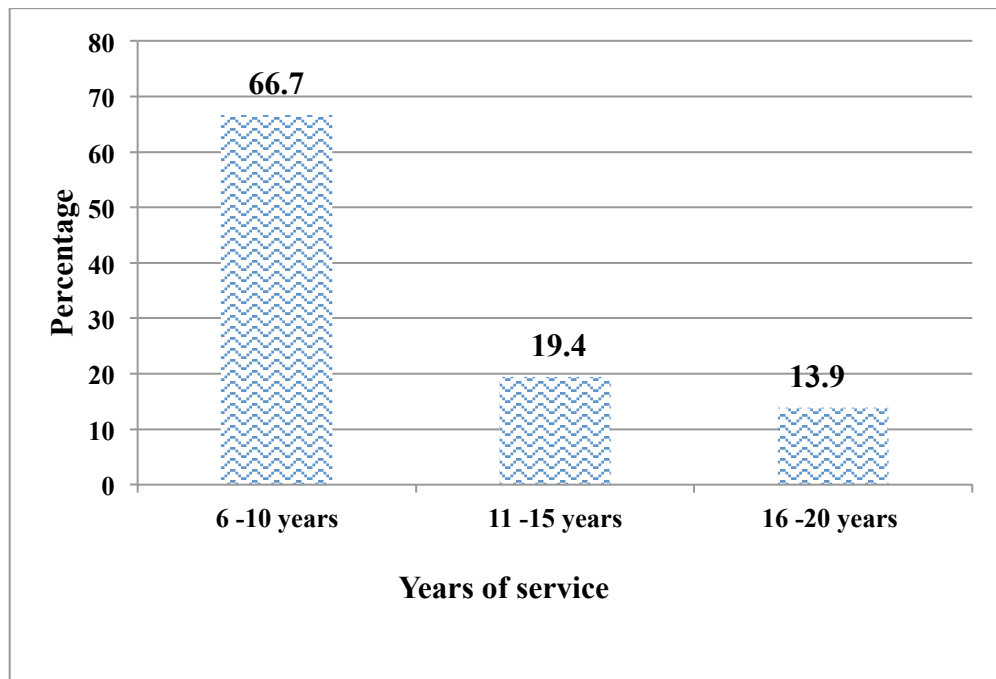


Figure 4.4: Teachers Years of Service in Inclusive Classroom

Findings in Figure 4.4 show that a majority of the teachers (66.7%) had taught in inclusive classroom for between 6-10 years and only (13.9%) had taught in inclusive classroom for between 16-20 years. This implies that the teachers had served in inclusive classroom for a considerable number of years thus in a good position to understand the factors influencing implementation of inclusive education. This is of importance

since less experienced teachers might not be exposed enough to issues of inclusive education. The period of time a person has been in teaching profession determines the level of exposure acquired in implementing the inclusive education. Teachers with more capability are likely to possess positive attitude on inclusion whilst alternatively those with little experience have negative attitudes towards it. Studies by Ali, Mustapha and Jelas (2006) have indicated that regular teachers with experience in teaching disabled children, including the special education teachers, possess positive attitudes.

Students who have been in the school for more years have adequate information on the condition of the school (Muranja 2012). The researcher therefore sought to establish the class level of students. Findings are presented in Figure 4.5.

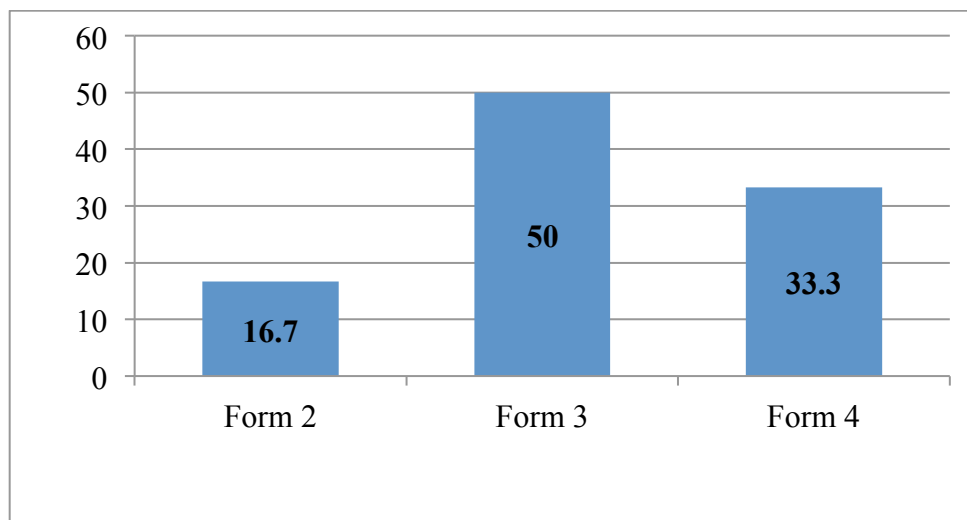


Figure 4.5: Class Level of Students

Results in Figure 4.5 show that half of the students (50%) were in Form three. This means that majority of the students had been in the school for considerable number of years and hence they were in a position to understand the concept of the study.

The study sought to investigate the number of children with special enrolled in the school. The students were asked to indicate their physical health status. Findings are presented in Table 4.2.

Table 4.2: Students physical health status

Responses	Frequency	Percentage
Physically challenged	24	26.7
Physically fit	66	73.3
Total	90	100

Findings show that majority of the students (73.3%) were physically fit. This is an indication that at implementation level, regular classroom principal and teachers were unwilling to enroll and teach students with disabilities. This prompted the researcher to find out the extent to which enrollment of children with special needs has increased for the last years. Findings are presented in Table 4.3.

Table 4.3: Enrollment of Children with Special Needs

Extent	Frequency	Percentage
Very great extent	6	16.7
Great extent	10	27.8
Moderate extent	20	55.5
No extent	-	-
Total	36	100

Findings show that majority of the teachers (55.5%) indicated that enrollment of learners with special needs for the last five years had increased to a moderate extent. This is also an indication that although the government have enhanced efforts to implement inclusive education in regular classrooms, the regular classroom principal and teachers were unwilling to enroll and teach students with disabilities.

4.4 School Physical Facilities and Implementation of Inclusive Education

The first objective was to assess the influence of school physical facilities on implementation of inclusive education in public secondary schools. This is because the status of the schools structures such as classrooms, toilets and pathways is a very important factor that has to be considered when it comes to the delivery of educational services to children with special needs (UNESCO,2010) .

The respondents were asked to tick on the level of adequacy of the school facilities. Descriptive statistics were used for analysis. Findings are presented in Table 4.4.

Table 4.4: Principals’ and Teachers Responses on State of School Physical Facilities

School physical facilities	Very adequate (%)	Adequate (%)	Inadequate (%)	Not available (%)
Level play grounds	13.5	67.5	19.0	0
Ramps	5.4	35.1	59.5	0
Accessible toilets	21.6	29.8	48.6	0
Adapted chairs and desks	16.2	27.0	56.8	0
Slip proof floor for wheel chairs	0	0	0	100
Bathrooms with added bars	0	0	0	100

N=37

The results show that more than half of the respondents (67.5%) indicated that the school had adequate level play grounds, (59.5%) indicated that ramps were inadequate, (48.6%) indicated that the accessible toilets were adequate, (56.8%) indicated that adapted chairs and desks were inadequate and all respondents indicated that the school had neither slip proof floor for wheel chairs nor bathrooms with added bars. This implies that some of the school physical facilities were adapted to implement inclusive

education although there was need to improve some like the bathrooms and floors. Physical structures should be adequate and properly located to enhance effective school learning environment of learners with special needs. The finding is in agreement with (Karugu, 2001) that toilets and bathrooms used by learners with special needs should have added bars to help children while toileting and also have ramps on entry point and exit points of classrooms, dormitories and play grounds

For the learning to take place in the classrooms, measures must be put in place on easing the movements of special needs education learners to these classrooms. The researcher asked the students to either agree or disagree on school physical facilities. Descriptive statistics were used for analysis. Findings are presented in Table 4.5.

Table 4.5: Students Responses on State of School Physical Facilities

Statements on teachers attitude	Agree		Disagree	
	F	%	F	%
My classroom/ school environment is adapted to enable all learners including learners with special education needs to learn and move comfortably	33	36.7	57	63.3
Learners with special needs take part in co-curricular activities	40	44.4	50	55.6
N=90				

Findings in Table 4.5 show that majority of the students (63.3%) disagreed that the classroom/ school environment was modified to assist all learners including learners with special education needs to learn and move comfortably and slightly more than half of the students (55.6%) also disagreed that learners with special needs take part in co-curricular activities. This implies that the classrooms and the school environment was not user friendly to physically challenged students. This concurs with (Hallak, 1990) that adequate school physical facilities which include school buildings, classrooms, libraries, laboratories, toilet facilities and other infrastructure motivate students towards learning.

The researcher further observed the school physical facilities to assess whether they were friendly to learners with special needs. The researcher ticked on the checklist with reference to availability and adequacy of the facilities. Descriptive statistics were used for analysis. Findings are presented in Table 4.6.

Table 4.6: Researcher Observation on School Physical Facilities

School physical facilities	Available (%)	Not available (%)	Adequate (%)	Inadequate (%)
Spacious classrooms	100.0	0	100.0	
Doorways with ramps	100.0	0	0	100.0
Assistive devices	100.0	0	0	100.0
Pavements	100.0	0	0	100.0
Adapted desks	100.0	0	100.0	0
Adapted toilets	0	100.0	-	-
Level play ground	100.0	0	-	-

N=1

The researcher observed that the school had adequate spacious classrooms which encourages enrollment of physically challenged learners and adequate desks and this did not pose a major problem since the desks were in proper and functional state. The school playground was levelled to allow special needs learners to participate in extra co-curriculum activities. Doorways with ramps were inadequate despite their significance in facilitating movement of SNE learners, the assistive devices which help the SNE physically challenged learners in walking were also inadequate and pavements that allow easy movement of wheelchairs were also inadequate. The school had no adapted toilets which posed a great challenge for the adaption of SNE learners into an inclusive school set-up.

4.5 Teachers' Attitude and Implementation of Inclusive Education

The second objective was to assess the influence of teachers' attitude on implementation of inclusive education in public secondary schools. The researcher sought to find out whether teachers' attitude plays a pivotal role in ensuring the success of inclusive education. Teachers and the principal were requested to indicate the extent to which they are in agreement with the statements on inclusive teaching. Descriptive statistics were used for analysis. Findings are presented in Table 4.7.

Table 4.7: Teachers' Attitude

Statements	Very great extent (%)	Great extent (%)	Moderate extent (%)	Low extent (%)
Special schools are suitable for children with special education needs	55.6	25.0	13.9	5.5
Inclusion fosters understanding and acceptance of differences between the learners	72.2	16.7	8.3	2.8
Isolated education for children with special education needs should not be altered	61.1	22.2	11.1	5.6
Inclusive set up affect my syllabus coverage	80.5	13.9	5.6	-

N=36

Findings in Table 4.7 show that teachers agreed to a very great extent that special schools are the most suitable for children with special education

needs to be as indicated by (55.6%); inclusion fosters understanding and acceptance of differences between the learners as indicated by (72.2%); isolated education has been operational and should not be altered as indicated by (61.1%) and inclusive set up affect syllabus coverage as indicated by (80.5%) of the teachers. The principal also agreed to a very great extent that inclusive education is beneficial to both regular and children with special education needs, isolated education has been operative and should not be altered and he also agreed to a great extent that he was willing to permit a skilled personnel in the school so as to maintain inclusion of children with special education needs. This implies that the principal and the teachers were unwilling to enroll and teach students with disabilities which shows that they had a negative attitude towards inclusive education. The finding concurs with Moran (2007) who asserted that teachers' attitudes towards integration affect the extent to which children with special education needs become physically incorporated and important members of normal classes and Avramidis (2010) that teachers' attitudes has a strong influence on the implementation of inclusive education.

Teachers' attitude affects students directly in terms of performance. The researcher sought to find out from the students their opinion on teachers' attitude towards implementation. The students were asked to tick on their

level of agreement on listed statements on teachers' attitude. The data were analyzed in form of percentages and frequencies. Findings are presented in Table 4.8.

Table 4.8: Students' Level of Agreement on Teachers Attitudes

Statements on teachers and students attitude	Agree		Disagree	
	F	%	F	%
Teachers encourages us to socialize with learners with special education needs	55	61.0	35	39.0
In my school teachers assist everyone of us without discrimination	73	81.0	17	19.0
Teachers pay more attention to learners with special needs in education	79	87.8	11	12.2

N=90

Findings in Table 4.8 show that majority of the students (87.8%) felt that teachers pay more attention to learners with special education and (81%) of the students felt that teachers assist all students without discrimination. Findings also show that slightly more than half of the students (61%) indicated that teachers encourages them to socialize with learners with special education needs. This shows that physically fit students are very accommodating to students with special needs and the teachers' pay more attention to learners with special needs to help them understand since many of them are slow learners. The manner in which the teachers behave and reason show their willingness and commitment to teach in an inclusive class. The finding concurs with Berry (2010) that the presence or

absence of positive attitudes and a sense of commitment to principles of inclusion can tip teachers toward making or avoiding efforts to effectively teach students with disabilities.

4.6 Teachers’ Professional Qualifications & Implementation of Inclusive Education

The third objective was to assess the influence of teachers’ professional qualifications on implementation of inclusive education in public secondary schools. Despite the fact that all the teachers are trained and have the teaching expertise and skills, the study sought to investigate the number of teachers trained to handle learners with special needs. Teachers were asked to tick on their professional qualification in relation to special education. Analysis was carried out using descriptive statistics. Findings are presented in Table 4.9.

Table 4.9: Teachers Professional Qualification in Special Education

Professional qualification	Frequency	Percentage
Certificate	9	25.0
Diploma	16	44.4
Degree	5	13.9
No training	6	16.7
Total	36	100.0

Findings in Table 4.9 show that (44.4%) of the teachers had attained a diploma in relation to special education, (25%) had attained certificate, (13.9%) had attained degree in relation to special education and (16.7%) of the teachers had no training on SNE. This show that majority of the teachers had attended training on SNE as a way of updating themselves with the current happenings in the profession. This present finding differs with Kamene (2009) who found out that teachers did not have enough skills to take care of children with special needs hence they were not confident.

In order to achieve training of teachers, in-service seminars can be utilized to guarantee a wide dissemination of skilled teachers in special needs education in all schools. Teachers were asked to tick with a yes or no answer on influence of their professional qualification. Data were analyzed using frequencies and percentage. Findings are presented in Table 4.10.

Table 4.10: Teachers Responses on Influence of their Professional Qualification on Inclusive Education

Statements on teachers' professional qualifications	Yes		No	
	F	%	F	%
The school is currently offering in-servicing to educators on special needs in education with an inclusive setting	27	75.0	9	25.0
The school holds in-servicing workshops on special needs students for the non-teaching staff	20	55.6	16	44.6
I am trained in special education	18	50.0	18	50.0
Teachers pay more attention to learners with special needs in education	30	83.3	6	16.7

N=36

Findings in Table 4.10 show that , a majority of the teachers (75%) said that the school is currently offering in-servicing to educators on special needs in education with an inclusive setting; slightly more than half of the teachers (55.6%) said that the school holds in-servicing workshops on special needs students for the non-teaching staff; half of the teachers (50%) said that they are trained in special education and (83.3%) of the teachers said that they pay more attention to learners with special needs in education.

The principal indicated that; he has neither been trained in any course based on special education nor on how to handle learners with special

education needs and he would like to attend a refresher course based on special needs education. He agreed that teachers in the school need refresher courses on SNE to enable them implement inclusion of learners with special education needs successfully and also indicated that some teachers are not trained on special need education. This shows that there is need for high quality teacher equipped so as to meet the needs of all learners not only for equal opportunities but also education for an inclusive society. The finding is in agreement with Caoll (2003) that teachers need knowledge and skills in inclusive education in order to meet the challenges that they will encounter in the present school climate.

4.7 Availability of Teaching and Learning Resources and Implementation of Inclusive Education

The fourth objective was to assess the influence of availability of teaching and learning resources on implementation of inclusive education in public secondary schools. To make inclusive learning a success, it would require the schools to be equipped with specially designed materials and equipment for use by the available SNE learners. This prompted the researcher to find out from the teachers and principal on the availability these resources. The respondents were asked to tick where the listed resource is available or not. Data analysis was carried out through descriptive statistics. Findings are presented in Table 4.11.

Table 4.11: Availability of Teaching and Learning Resources

Teaching and learning materials	Available		Not available	
	F	%	F	%
Large print text books for low vision	20	54.0	17	46.0
Speech Aids	16	43.2	21	56.8
Visual Aids	12	32.4	25	67.6
Magnifying lenses	8	21.6	29	78.4
Braille writer	10	27.0	27	73.0

N=37

Findings in Table 4.11 show that the school had large print books as indicated by (54%) of the respondents, a few speech aids as indicated by (43.2%), less number of speech Aids as indicated by (32.4%), very few magnifying glasses as indicated by (21.6%) and only very few braille as indicated by (27%) of the respondents. This implies that the schools have shortage of teaching and learning resources for use by special needs students. Lack of resources is identified as undermining the effort of even the best teachers and hinders the implementation of the new ideas. On the other hand, adequate and good quality teaching and learning materials motivates interest, sustain attentiveness and make learning more important. The finding concurs with Asikhia (2010) that enough well prepared instructional materials regulates the quality of learning that can take place in a learning institution, Okobia (2011) who asserted that

educational outcome in schools is meticulously associated to usage and sufficiency of teaching and learning resources in various methods and Lowe (2009) who argued that lack of relevant teaching material cause dismal pupils' performance.

In order to assess the availability of specialized curriculum and resources, the teachers were asked to tick on the listed specialized curriculum and resources to show whether they are available or not. Percentages and frequencies were used for analysis. Findings are presented in Table 4.12.

Table 4.12: Types of Specialized Curriculum and Classroom Resources

Statements on teachers attitude	Available		Not available	
	F	%	F	%
Specialized computer software	5	14.0	31	86.0
Specialized books	18	50.0	18	50.0
Specialized visual materials	13	36.0	23	64.0

N=36

Findings in Table 4.12 show that half of the teachers (50%) said that the school has specialized books, (36%) said that the school has specialized visual materials and (14%) of the teachers said that the school has specialized computer software. The principal indicated that the school does not have enough material teaching and learning resources such as teaching aids thus not able to fully cater for the learners with special

education needs. This implies that the school has made efforts to provide specialized curriculum and classroom resources although they are inadequate thus affecting implementation of inclusive education. The finding concurs with Opdal (2001) that instruction in the schools for learners with special needs in education and special needs classrooms is offered by utilizing specially created textbooks and disability-friendly facilities.

Resource teachers guide teachers in regular schools on how to teach special needs children. The researcher therefore sought to find out from the teachers whether there were resource teachers assigned to the school to assist the learning process of students with learning disabilities. Percentages and frequencies were used for analysis. Findings are presented in Table 4.13.

Table 4.13: Teachers Responses on Availability of Resource

Response	Frequency	Percentage
Yes	36	100.0
No	-	-
Total	36	100

Findings in Table 4.13 show that all teachers said that there are resource teachers assigned to the school to assist the learning process of students with learning disabilities. This shows that the government has tried to

provide resource teachers to public secondary schools that offer inclusive education although they are not enough which hinder implementation of inclusive education. This finding concurs with Karugu (2001) that resource teachers train others in the inclusive education practices for effecting inclusive teaching.

The researcher further asked the teachers to indicate how often the resource teacher meets with other educators. Data were analyzed using percentage and frequency. Findings are presented in Table 4.14.

Table 4.14: Frequency of Meeting Educators

Frequency of meeting educators	Frequency	Percentage
Daily	4	11.1
Weekly	10	27.8
Monthly	6	16.7
Not applicable	16	44.4
Total	36	100.0

Findings show that resources teachers meet with other educators weekly as indicated by (27.8%) of the respondents. This shows that resource teachers meet with other educators at least once per week to train them on the inclusive education practices for effecting inclusive teaching.

Adequate text books foster learning process and facilitates retention of knowledge and insights. The researcher sought from the students whether they had enough text books. They were asked to agree/disagree on the adequacy of text books. Descriptive statistics were used for analysis. Findings are presented in Table 4.15.

Table 4.15: Students Opinion on Teaching and Learning Materials

Level of agreement	Frequency	Percentage
Agree	25	27.8
Disagree	65	72.2
Total	90	100

Results in Table 4.15 show that a majority of the students (72.2%) disagreed that they all have text books and other learning materials and (27.8%) agreed. This shows that the school is faced with a shortage of text books and other learning materials. Good quality materials can encourage attentiveness, sustain attention and make learning more significant. The finding concurs with Ladbrook (2009), that better learning and teaching materials are required so as to increase the value of education and its effectiveness and Asikhia (2010) that adequate well prepared instructional materials regulate the quality of learning that can take place in a learning institution.

To enhance learning, learning and teaching materials need to be available in any school set-up. The researcher on her observation sought to identify the availability of teaching and learning materials in the schools. The researcher ticked on the checklist with reference to availability of the teaching and learning materials. Descriptive statistics were used for analysis. Findings are presented in Table 4.16.

Table 4.16: Researcher Observation on Teaching and Learning Materials

Teaching and Learning Materials	Available %	Not available %	Adequate %	Inadequate %
Big Blackboard	100.0	0	100.0	
Braille	100.0	0	0	100.0
Speech Aids	0	100.0	-	-
Visual Aids	100.0	0	0	100.0
Textbooks	100.0	0	0	1.00
Video tapes	0	100.0	-	-
Magnifying glasses	0	100.0	-	-

N=1

The researcher observed that; the school had adequate big blackboards to enable students see what is written on them, the Braille were not adequate thus posing a challenge to visually impaired students, no speech aids and video tapes which was a challenge to students with hearing impairment, the text books were inadequate thus hindering smooth teaching and

learning process and the school had to magnifying glasses to assist students with visual problems.

The researcher also checked on the availability of various related serves providers such as speech language pathologists, occupational therapists, vision teachers, physical therapists and the behavior specialist. She analyzed the data using descriptive statistics. Findings are presented in Table 4.17.

Table 4.17: Researcher Observation on Support Services

Support Services	Available %	Not available %	Adequate %	Inadequate %
Speech therapists	100.0	0	0	100.00
Itinerant teaching	0	100.0	-	-
Psychological assessments	100.0	0	0	100.0

N=1

The researcher observed that the speech therapists were inadequate, there was no itinerant teaching and psychological assessment was not adequate. Speech and language therapist can offer essential information in helping children who have speech errors and communication and language development needs. Itinerant teaching enables learners to learn more practical issues as compared to theory class work. Physiotherapists are

particularly focused on aspects of children's movement based on the structure and function of the body.

4.8 Inferential Statistics

To establish the relationship between the independent variables and dependent variable the researcher conducted inferential analysis which involved multiple regression analysis.

4.8.1 Coefficient of Determination

The coefficient of determination was carried out to measure how well the statistical model was likely to predict future outcomes. Table 4.18 presents the Model Summary.

Table 4.18: Model Summary.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.964 ^a	.929	.920	.208

a. Predictors: (Constant), Teaching and learning materials, Professional qualification, Physical facilities , Teachers attitude

Adjusted R squared is coefficient of determination which shows the variation in the dependent variable due to changes in the independent variables, from the findings in the Table 4.18, the value of R squared was 0.929 an indication that there was variation of 93% on the implementation of inclusive education due to changes in physical facilities, teachers

attitude, teachers professional qualification and availability of teaching and learning materials at 95% confidence interval. R is the correlation coefficient which shows the relationship between the study variables, from the results shown in the Table 4.18 there was a strong positive relationship between the study variables as shown by 0.964.

4.8.2 Multiple Regression

The researcher further conducted a multiple regression analysis. The main aim of multiple regression is to learn more about the relationship between several independent or predictor variables and a dependent variable. The researcher used SPSS to enter and code responses from the respondent to assist in computing the extent to which a unit changes in a given independent to dependent variable. Table 4.19 presents the multiple regression table.

Table 4.19: Regression of Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.775	.215		-3.602	.001
Physical facilities	.125	.085	.130	1.471	.151
Teachers attitude	.531	.158	.304	3.371	.002
Professional qualification	.500	.170	.256	2.941	.005
Teaching and learning materials	.781	.133	.507	5.887	.000

a. Dependent Variable: Implementation of inclusive education

As per the SPSS generated in Table 4. 19, the equation,

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ becomes:

$$Y = 0.775 + 0.125 X_1 + 0.531 X_2 + 0.500 X_3 + 0.781 X_4$$

From the above regression model, holding physical facilities, teachers' attitude, teachers professional qualification and availability of teaching and learning materials at constant zero inclusive education would be at 0.775. It was established that a unit increase in improved physical facilities would cause an increase in implementation of inclusive education by a factor of 0.125, unit increase in positive teachers attitude would lead to increase in implementation of inclusive education by a factor of 0.531, unit increase in teachers training would lead to increase in implementation of inclusive education by a factor of 0.500 and also a unit increase in availability of teaching and learning materials would lead to increase in implementation of inclusive education by a factors of 0.781.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter focuses on the summary of the study and conclusions. It also presents recommendations for potential actions and suggestions for future research.

5.2 Summary of Study

The purpose of the study was to investigate institutional factors influencing implementation of inclusive education in public secondary schools in Makadara sub-county, Nairobi county, Kenya. The study was guided by the following objectives; to assess the influence of school physical facilities on implementation of inclusive education in public secondary schools in Makadara Sub-County, to establish the influence of teachers' attitudes , to determine the influence of teachers' professional qualifications and to examine the influence of availability of teaching and learning resources on inclusive education in public secondary schools in Makadara Sub-County. The study was guided by Brofenbrenner's Ecological theory. The study adopted descriptive survey research design since it enabled correction of information from respondents without compromising their privacy. Simple random sampling was applied to sample 120 students and all 48 teachers were sampled. Data were

collected using questionnaires, analyzed and presented in frequencies and percentages. Data was presented in relation to the study findings; the principal indicated that masters' of education was his highest academic qualification and bachelors of education for teachers. Majority of teachers had served in inclusive classroom for between 6-10 years and majority of the students were in form three. The findings in each objective are summarized as follows:

5.2.1 Influence of Physical Facilities

In line with objective one; findings established that the school the physical facilities required for inclusive learning although they were not enough. The available physical facilities were accessed and used by learners with special educational needs, the level play grounds were adequate, ramps were inadequate, accessible toilets were adequate, adapted chairs and desks were inadequate and the school had neither slip proof floor for wheel chairs neither nor bathrooms with added bars. Therefore the school physical facilities were to a moderate extent adapted to implement inclusive education. The finding is in agreement with (Karugu, 2001) that that toilets and bathrooms used by learners with special needs should have added bars to help children while toileting. Ramps on entry point and exit points of classrooms, dormitories and play grounds.

5.2.2 Influence of Teachers' Attitude

In line with objective two: the study established that majority of teachers and the principal were unwilling to enroll and teach students with disabilities which shows that they have a negative attitude towards inclusive education. The respondents were of the opinion that children with special needs should only be enrolled in special schools and inclusive set up affect teachers' syllabus coverage. However, some teachers had positive attitude towards inclusive education more attention to learners with special education as by the students. Teachers' attitude has a strong influence on the implementation of inclusive education. This is in agreement with Moran (2007) who said that teachers' attitudes towards integration affect the extent to which children with special education needs become physically incorporated and important members of normal classes and Avramidis (2010) that teachers' attitudes has a strong influence on the implementation of inclusive education.

5.2.3. Influence of Teachers' Professional Qualifications

In line with objective three: findings established that teachers were well educated in relation to special education thus in a good situation to handle children with special needs although the principals were not trained in special needs education. Finding also established that the school is making efforts to equip all teachers with special needs training by holding in-servicing workshops on special needs students for the non-teaching and

teaching staff as indicated by 75% of the respondents. Teachers need knowledge and skills in inclusive education in order to meet the challenges that they will encounter in the present school climate. This is in agreement with Skjorten (2001) that teacher education will call for introduction of fundamental modifications so as to prepare teachers have the ability to face the shortcoming of inclusive education.

5.2.4. Influence of Teaching and Learning Resources

In line with objective four : findings established that shortage of teaching and learning resources had significant ($p < 0.05$) influence implementation of inclusive education whereby the school was not well equipped with teaching and learning resources. Findings also established that school had large print books, a few speech aids, less number of speech Aids, very few magnifying glasses and only very few braille. The school also had specialized curriculum and classrooms and resource teachers met with educators at least once per week. Teaching and learning resources are basic instructional tools whose absence or inadequacy leads to an ineffective or abstract instructional process. Lack of resources is identified as undermining the effort of even the best teachers and hinders the implementation of the new ideas. On the other hand, adequate and good quality teaching and learning materials motivates interest, maintain concentration and make learning more meaningful. The finding is in agreement with Okobia, (2011) who asserted that educational outcome in

schools is meticulously associated to usage and sufficiency of teaching and learning resources in various methods and Lowe (2009) who argued that lack of relevant teaching material cause dismal pupils' performance.

5.3 Conclusion

It was concluded that school physical facilities influence implementation of inclusive education. For inclusive education implementation to be successful the learning environment must be restructured so as to be accessible to all learners thus the need to provide ramps, accessible toilets, staircases with protected refuge, smooth and slip proof floors for learners with wheelchairs, pavements and desks which are the basic requirements in the implementation of inclusive education. The study also established that teachers' attitude has a strong influence on the implementation of inclusive education. Teachers ought to have a positive attitude towards learners with special needs in order to effectively implement inclusive education in public secondary school. Positive attitude involves giving more attention to learners with special needs as majority of them are slow learners and encouraging other regular students to playing with them and comfortably sharing the teaching and learning materials.

It was also concluded that the teachers trained in relation to special education thus in a good position to teach children with special needs.

Teachers need knowledge and skills in inclusive education in order to meet the challenges that they will encounter in the present school climate. In inclusive education the teacher ought to have the capability to identify the individual and societal importance of professionalism for children with disabilities and be responsible for the class established and such expertise can only be gained through training in relation to teaching children with special needs. It was also concluded that teaching/learning materials promote and encourage effective teaching and learning and their shortage in teaching and learning process lead to poor attention span and poor learning which hinder attainment of the planned aims of a lesson. Teaching/learning materials are needed in order to raise the quality of education of learners with special needs.

5.4 Recommendations

The listed recommendations were made in order to effectively implement inclusive education in public secondary schools.

- i. The Ministry of Education should organize for ways through which physical facilities should be availed in public secondary schools. These facilities should also be adaptive to the children with special needs. This can be through adequate provision of funds so that physical facilities can be renovated and made barrier free so as not to hinder movement of such learners.

- ii. Public sensitization about inclusive education should be campaigned for by all stakeholders so that the learners should reap the benefits of inclusive education. This should also eliminate the stigma and negative attitudes associated with disability.
- iii. The government should reorganize teacher education in teachers training colleges so as to include special Needs Education course in the curriculum. The government through the ministry of education should fund training of in-service in SNE to make it mandatory for all teachers to attend.
- iv. The education planners should evaluate and assess the teaching and learning resources available and make more accurate estimates and allocations to the various requirements in the implementation of Inclusive Education.

5.5. Suggestions for Further Study

The researcher suggests listed areas for further study.

- i) A study on institutional factors influencing implementation of inclusive education in public secondary schools should be carried out in other counties for comparison purpose.
- ii) A replica of the study should be carried out incorporating more variables that possibly influence implementation of inclusive education in public secondary schools. These variables also include social factors as well as cultural factors.

iii) An evaluation of how government funding is affecting the implementation of inclusive education should be carried out.

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APPENDICES

APPENDIX I: Introduction Letter

Mary Aoko Opiyo,

P.O.Box 92,

Kikuyu.

The Principal,

Aquinas Boys High School,

Makadara Sub-County,

Nairobi.

Dear sir/madam,

RE: PERMISSION TO COLLECT DATA FROM YOUR SCHOOL.

I am a student pursuing Master's degree in Curriculum Studies at the University of Nairobi, School of Education and I am in the process of conducting a research on **Institutional factors influencing implementation of inclusive education in public secondary schools in Makadara sub-county, Nairobi**. Your school has been selected to participate in this study. Kindly allow me to administer questionnaire to you, the teachers and students. I do assure you that the information you provide will only be used for academic purposes and your identity will be treated with strict confidentiality.

Yours faithfully,

Mary Aoko Opiyo.

APPENDIX II: Questionnaire for Principal

Please tick (✓) in appropriate bracket or fill in the information as your response to all the following questions. Do not write your name or the name of your school anywhere. The information will be completely confidential.

SECTION A. Demographics: Background information of Principals.

- 1. Indicate your gender: Male () Female ()
- 2. What is your age Group: 30-34 years () 36-39 years () 40-4 years ()
45-49 years () 50-54 years () 55+ years ()

SECTION B: School physical facilities and implementation of Inclusive education

- 3. Kindly tick the adequacy of the list facilities in your school.

School physical facilities	Very adequate	Adequate	Inadequate	Not available
Level play grounds				
Ramps				
Accessible toilets				
Adapted chairs and desks				
Slip proof floor for wheel chairs				
Bathrooms with added bars				

SECTION C: Attitudes and Implementation of Inclusive education

- 4. 6. Kindly indicate the extent to which you agree with the listed statements on inclusive teaching.

STATEMENTS	Very great extent	Great extent	Moderate extent	Low extent
Inclusive education is beneficial to both regular and children with special education needs				
Isolated education has been effective and should not be altered				
I am willing to permit a professional individual in my school so as to support inclusion of children with special education needs				

SECTION D: Teachers' professional qualifications and Implementation of Inclusive Education

9. Professional qualification Diploma () Bachelor of Education ()

Master of Education () Doctor of Philosophy ()

10. Have you trained in any course based on special education ?

Yes () No ()

11. Do you think the course prepared you adequately to practice inclusive education in a regular school? Yes () No ()

12. Would you like to attend a refresher course based on special needs education? Yes () No ()

13. Teachers in my school need refresher courses on NSE to enable them implement inclusion of learners with special education needs successfully.

Agree () Disagree ()

14. Have you undergone any specialized training on how to handle learners with special education needs? Yes () No ()

15. Are all your teachers trained on how to handle inclusive education? Yes () No ()

SECTION E: Teaching and Learning resources and Implementation of Inclusive Education

16. Kindly tick the adequacy of the listed teaching and learning facilities in your school.

School physical facilities	Very adequate	Adequate	Inadequate	Not available
Large print text books for low vision				
Speech Aids				
Visual Aids				
Magnifying lenses				
Braille writer				

Thank you for participation

APPENDIX III: Questionnaire for Teacher

Please tick (√) in appropriate bracket or fill in the information as your response to all the following questions. Do not write your name or the name of your school anywhere. The information will be completely confidential.

SECTION A: Demographic Information

1. Indicate your gender: Male () Female ()
2. Which is your age Group: 25-27 years () 30-34 years () 35-39 years ()
40-44 years () 45-49 years () 50-54years () 55+ years ()
3. Years of service as a teacher in an inclusive classroom
Below 5 years..... 6-10 years.....
11-15 years..... 16-20 years.....
4. To what extent has enrollment of learners with special needs increased in the past 5 years? Very great extent [] great extent [] moderate extent [] little extent [] no extent []

SECTION B: School physical facilities and implementation of Inclusive Education

5. Kindly tick the availability of the listed teaching and learning facilities in your school.

School physical facilities	Available	Not available
Level play grounds		
Ramps		
Accessible toilets		
Adapted chairs and desks		
Slip proof floor for wheel chairs		
Bathrooms with added bars		

SECTION C: Attitudes and Implementation of Inclusive Education

6. Kindly indicate the extent to which you agree with the listed statements on inclusive teaching.

STATEMENTS	Very great extent	Great extent	Moderate extent	Low extent
Special schools are suitable for children with special education needs				
Inclusion fosters understanding and acceptance of differences between the learners				
Isolated education for children with special education needs should not be altered				
Inclusive set up affect my syllabus coverage				

SECTION D: Teachers' professional qualification and Inclusive Education

7. Academic qualification Diploma () Bachelor of Education ()

Master of Education () Doctorate..... ()

8. Does your school offer in-servicing to educators on special needs in education with an inclusive setting?

Yes, currently offering in-service () No, not currently () Don't know ()

9. Does your school hold any in-servicing workshops on special needs students for the non-teaching staff?

Yes, workshops are always presented at our school

() No, never () Don't know ()

10. Are you trained in special education? Yes () No ()

11. What professional qualification do you have in relation to special education?

Certificate () Diploma ()

Degree () Any other (Specify).....

SECTION E: Teaching and Learning Resources and implementation of Inclusive Education

12. Kindly tick the adequacy of the listed teaching and learning facilities in your school.

School physical facilities	Very adequate	Adequate	Inadequate	Not available
Large print text books for low vision				
Speech Aids				
Visual Aids				
Magnifying lenses				
Braille writer				

13. What kinds of specialized curriculum and classroom resources do teachers have access to in your school?

Specialize computer software () Specialized books ()

Specialized visual materials () No specialized materials ()

14. Are there resource teachers assigned to your school to assist the learning process of students with learning disabilities?

Yes () No ()

15. How often does the resource teacher meet with other educators?

Daily..... Monthly..... N/A

Weekly..... Never.....

Thank you very much for your co-operation

APPENDIX IV: Questionnaire for Students

Please tick (√) in appropriate bracket or fill in the information as your response to all the following questions. Do not write your name or the name of your school anywhere. The information will be completely confidential.

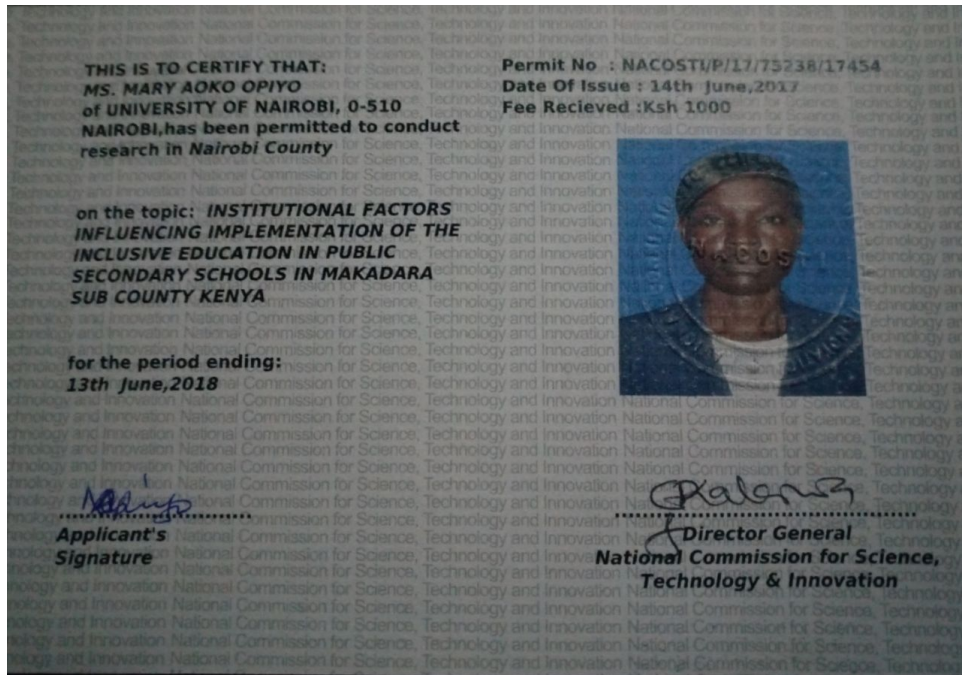
1. Indicate your class/form.....
2. Indicate your gender Male () Female ()
3. How many are you in your class?
4. Do you have any form of disabilities? Yes () No ()
5. Are there learners in your class/school with special needs? Yes () No ()
6. Teachers encourages us to socialize with learners with special education needs. Agree () Disagree ()
7. My classroom/ school environment is adapted to enable all learners including learners with special education needs to learn, play and move comfortably. Agree () Disagree ()
8. In my school teachers assist everyone of us without discrimination.
Agree () Disagree ()
9. Teachers pay more attention to learners with special needs in education
Agree () Disagree ()
10. Learners with special needs take part in co-curricular activities
Agree () Disagree ()

Thank you for your participation

APPENDIX V: Observation Checklist

	Available	Not available	Adequate	Inadequate
School Physical Facilities				
Spacious classrooms				
Doorways with ramps				
Assistive device				
Pavements				
Adapted desks				
Adapted toilets				
Level play ground				
Teaching and learning resources				
Blackboard				
Bailer				
Speech				
Visual				
Textbooks				
Video				
Magnifying				
Support Services				
Speech therapists				
Itinerant teaching				
Psychological assessments				

APPENDIX VI: Research Permit



APPENDIX VII: Authorization Letter

