

SCHOOL BASED FACTORS INFLUENCING EFFECTIVE  
IMPLEMENTATION OF INCLUSIVE EDUCATION IN PUBLIC  
PRIMARY SCHOOLS IN KIKUYU DISTRICT, KENYA

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**Salome Wanjiru Wachira**

A Research Project Submitted in Partial Fulfillment of the Requirements  
of Master of Education Degree in Curriculum Studies University Of  
Nairobi

2012

**DECLARATION**

I declare that this research project is my original work. It has not been submitted for any award in any university.

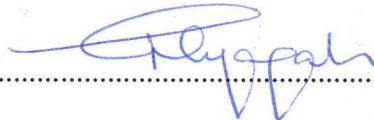
*AIY~*

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**Salome W. Wachira**

Reg No. *E55179018/2009*

This research project has been submitted for examination with our approval as university supervisors



.....

**Dr. Grace Nyagah**

Senior Lecturer and Chairperson

Department and Educational Administration and Planning

university of Nairobi

**Mrs. Lucy Njagi**

Lecturer

Department of Educational Administration and Planning

University of Nairobi

## **DEDICATION**

With love and appreciation, I dedicate this project to my dear husband, Mr. Wachira Kinyua and our children Millicent and Samuel.

## ACKNOWLEDGEMENT

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Finally and most of all, I am internally grateful to my Heavenly Father for giving me life, strength and internal guidance to accomplish this task.

To God be the Glory ... He makes all things beautiful at his time ... (Ecc13:11) iv

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## LIST OF ABBREVIATIONS AND ACRONYMS

EARC (s)	Education Assessment Resources Centre (s)
EFA	Education For All
FPE	Free Primary Education Individualized
IEP	Education Programme
LRE	Least Restrictive Environment
MoEST	Ministry of Education Science and Technology
MoE	Ministry of Education
PWD	Persons with Disabilities
REI	Regular Education Initiative
SNE	Special Needs Education/ Special Needs in Educational
TTC	Teacher Training College
UK	United Kingdom
UNESCO	United Nations Educational Scientific and Cultural Organization
UNCEF	United Nations Children's Fund
UPE	Universal Primary Educational
WHO	World Health Organization

## ABSTRACT

This study sought to investigate school based factors influencing effective implementation of inclusive education in public primary schools in Kikuyu district, Kenya. It was conducted in 10 out of 56 public primary schools in Kikuyu district.

The research used Ex-post facto research design to conduct investigation. Using a simple random sampling method the researcher sampled 10 schools' headteachers and 46 public primary schools teachers to conduct the study. Primary data were mainly collected using headteachers and teachers questionnaires that were pretested to ensure reliability and validity. Data collected were analyzed using a combination of statistical computations. These included frequencies, percentages, mean and mode. The analyzed data were interpreted and presented using frequency tables and texts for clarity.

The study identifies the qualification and knowledge of teachers influence effective implementation of inclusive Education. The available support services in the inclusive education schools and availability of teaching and learning resources were looked into in addition, the study wanted to assess the methods of instructions favourable for the implementation of inclusive Education as well as the nature of the differentiated curriculum content used in the inclusive education. The main findings of the study were that the physical facilities in the public primary schools were not adequate and appropriate to accommodate learners with special needs. The schools' physical environment lacked assistive devices like ramp and clutches. It also found that teachers and headteachers professional competence levels may be an impediment to inclusive learning in public primary schools. The study recommended that teachers should change their methods of approach which could be as a result of training in inclusive learning. The MoE should provide teaching/learning materials in public primary schools to encourage inclusive set-up.

The government should restructure teachers' Training Colleges so as to include areas of specialization in special needs in education curriculum. The MoE and the T.S.C should come up with modalities to recruit more trained teachers in order to address the issue of shortage of teachers in public primary schools. The Kenya Institute of Education should review the time allocated for content delivery if implementation of inclusive education is to be successful. The research study suggested future areas of study on teachers' perceptions towards implementation of Inclusive Education. The study also recommends further study to be replicated to other regions of the country.

## CHAPTER ONE

### INTRODUCTION

#### **1.1 Background of the study**

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. This philosophy was emphasized by The Universal Declaration of Human Rights in 1948 where it was declared that education is a fundamental right for all children regardless of individual differences. This right was further emphasized and affirmed as a plan of action in the World Conference of Special Needs Education held in Salamanca, Spain, (United Nations Educational Scientific and Cultural Organization [UNESCO], 1994). The Salamanca statement firmly called on the international community to endorse the approach of inclusive schools by implementing practical and strategic changes in the schools.

The member states agreed on the education of all children including those with disabilities in the schools near their homes. The guiding principle of inclusive education is that ordinary schools should accommodate all children regardless of physical, intellectual, social, emotional, linguistic and other conditions. Vitello and Mithaug (1998) state that inclusion fosters institutional strategies to increase the participation and learning of children who are perceived to be vulnerable within the existing educational arrangement.

Ndurumo (1993) states that the concept of disability has undergone significant changes. Initially the special needs learners were placed in special schools. This was determined by people who thought that such children were not capable of learning the same concepts as their non-disabled peers. Then there was a concept of integration. This meant educating children with disabilities together with their non disabled peers. However, no environmental or instructional modifications were adapted to accommodate their different learning styles therefore the educational goals of the learners were not achieved. Inclusive Education modifies the school learning environment. According to IE principle, every school should be able to cater for every learner including those with ranging abilities and disabilities (Warnock, 2005). This is done by mobilizing appropriate human, physical and material resources for the transformation of such regular schools. Inclusion basically creates a child friendly school which operates with the interest of the learner by creating a safe and healthy environment endowed with trained teachers, adequate resources and appropriate physical, emotional and social conditions for learning. It also provides dignity and personal empowerment (<http://www.unicef.org/education>).

In many countries around the world, IE has been supported to prohibit discrimination in education under the human rights law (Gallagher, 2003). In the United State of America, around 96 per cent of children with disabilities are presently educated within mainstream schools, and almost half spend the

majority of their school day in general inclusive classrooms as opposed to being withdrawn for segregated lessons (United States Department of Education, 2005). This picture demonstrates a progressive increase in the number of children with Special Educational Needs being included in mainstream settings over the past twenty years. Furthermore, 'Public Law 108-4462 individuals with disabilities Education improvement Act of 2004', continues to advocate for the inclusion of children with Special Needs Education (SNE) within mainstream education settings. This law not only advocates accessibility to a high quality for children with special educational needs, it also promotes accountability for results; enhanced parental involvement and the use of proven practices and resources (Block & Obrusnikova, 2007). In the Philippines, the ultimate goal of special education is the integration of learners with SNE into the 'regular school system' and eventually in to the community.

Korea, Malaysia, Sri Lanka, China, Indonesia and Thailand were among some of the first Asian countries to introduce individual learning programmes to support children with Special Needs Education. In addition, Thailand accepted Sign language as a legitimate language and produced one of the earliest Sign dictionaries. In china classes, mainly for slow learners, affiliated to ordinary schools were began alongside the first in-service teacher training programmes to provide support for children with mild learning difficulties. According to Education for All report (2008), wide-ranging policies have been put in place in

many countries to reduce some of the barriers to schooling, access to education for all remains wanting. Being fair and just refers, not so much on how the majority of the people attains or are accorded their rights, but rather to a conscious and deliberate attention to the extent to which the minority are also accorded and enabled to pursue their rights to education.

The world education forum held in 2000 in Dakar Senegal, recognized education as an important basic right for all people that can be used to facilitate education for all policy in Kenya. In the Dakar meeting, 164 governments together with partner institutions adopted a framework for action focusing on the achievement of six Education for All goals pertaining to the expansion of inclusive learning and the achievement of universal opportunities for all youth and adults, the achievement of gender parity and gender equality in education and the improvement in education quality and equity. The forum also confirmed that education can play a pivotal role in overcoming exclusion of the convention on the rights of persons with disabilities adapted by the United Nations General Assembly in 2006 Article 24 which covers education, ensuring that persons with special needs are not excluded from the general education system on the basis of their handicapping conditions and that children with special needs are not excluded from free and compulsory primary education (United Nations, 2006)

However, children with special needs continue to be discriminated within the education systems on the basis of access, provision of human and material resources and negative attitudes of those entrusted in the implementation of education policies. This ignores Article 2 of United Nations Convention on the Rights of the children, 'that a child shall not be discriminated irrespective of race, skin colour, sex, language, religion, political or other opinions, national, ethnic or social origin, disability birth or status. '(UNCRC).

This creates a gap, hence there has been a need to have a deeper concern on the approach of educating learners with special needs. The earlier structures of special schools separate from where the children without special needs attended school, has been faulted as discriminative. Many Nations are now increasingly recognizing that the policy of inclusion, where those children with special needs are taught in ordinary schools with various forms of special support, is preferable to segregating them in those special institutions.

In Kenya, the government has been trying to develop towards this global trend of inclusive education as the persons with special needs make a certain percentage of the marginalized population. The government has been trying to assist persons with disability to develop towards realization of full participation in social life, development and equality (MoEST 2001). To co-ordinate and streamline provision of education to children with special needs, the Ministry of Education established

a Special needs Education(SNE) section in 1975. In 1978, a special Education inspector was appointed to be in charge of the SNE section at the MoE and one specialist was posted to the Kenya Institute of Education to guide SNE curriculum development. The introduction of Educational Assessment and Resource Service (EARS) in 1984 was to ensure early identification, assessment, intervention and placement of learners with special needs, thereby greatly improving the growth and quality of SNE services. The sessional paper number 6 (OoK, 1988) emphasized the importance of integrating children with special needs in regular schools. The persons with Disability Act (2003) reinforced that the persons with special needs are put into consideration in all learning institutions and the provision of various services to facilitate learning process for all persons (OoK, 2003).

Kenya is one of the member states of the United Nations and is fully committed to implementing inclusive educations in schools as required by the Salamanca statement. According to a ministry of education report made by the task force on special needs education appraisal exercise of November 2003, the Kenya government has been offering education to four categories of children with special needs in education. These are children with hearing impairments (HI), Visual impairments (VI) mental handicaps, and those with minor difficulties. Educations for these children are offered in special schools (Bedi 2004). The demand for Special Needs Education (SNE) at all levels in Kenya has increased as a result of

the government's commitment to universal primary education through the free primary education declaration in 2003 (Bedi, 2004).

The goal of special education programmes is to provide services for exceptional children in the least restrictive environment as possible. (Stubbs, 2000). This is where a student who has a disability should have the opportunity to be educated with the non disabled peers to the greatest extent appropriate having access to the general education curriculum that their non disabled peers do. These students should be provided with supplementary aids and services necessary to achieve the national educational goals (Kirk, 2003).

The Disability Act in the Kenya constitution implies the government's commitment towards accessibility of SEN learners in all schools. The Ministry of Education (MoE Strategic Plan, 2009-2011) objective No.6 provides for effective inclusion of all SEN learners in schools. The MoE through The Kenya Education Sector Support Programme (KESSP, 2009) in the Basic Education Division, has allocated a regular unit fee of Kshs. 1020 uniform to every learner in the primary school level and an additional Kshs. 2,000 to every special needs learner in a special unit. The KESSP programme provided for grants allocated towards the provision of instructional materials and support services aimed at removing the existing environmental barriers thus making the schools child friendly. This programme, through the creation of a learner-friendly school environment in 2010

also provided an additional Kshs. 20,000 in every school. 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 (UNICEF, 2010). It must be noted however that despite these efforts, Inclusive Education seems to be an unknown concept in the schools both to the head-teachers and the teachers thus prevents the participation of mainly children with disabilities in these programmes (Kamene, 2009). It is therefore important to establish the school-based factors necessary for implementation of inclusive education in the Kenyan primary schools.

### **1.2 Statement of the problem**

The Kenya government started providing Free Primary Education (FPE) in January 2003. This was in recognition of the fact that education is a basic right for all Kenyan children as articulated in the Children's Act of 2001. As a result of the FPE provision, many children with special needs have been enrolled in special schools, and special units within the regular schools (MoEST, SNE study, 2004). This study reported that most children with special needs are mainly educated in special units and very few are integrated in the main schools. This is despite the Ministry of Education altering the goals for special education to focus more on the child oriented objectives as well as the increased funding. Kithuka (2008) undertook a research on factors hindering integration of special children in regular

primary schools in Kitui while Kamene (2009) did research on factors affecting implementation of inclusive education in Yatta district. They found out that despite the Teachers Service Commission ensuring that every primary school has at least one special education teacher to work with other teachers in supporting the SNE learners in the regular classrooms, Inclusive education still seems to be an unknown concept in the primary schools. This research therefore sought to establish the school-based factors influencing the implementation of inclusive education in Kikuyu district and fill this location gap.

### **1.3 Purpose of the study**

The purpose of the study was to investigate on the school based factors influencing affective implementation of inclusive education in public primary schools in Kikuyu district.

### **1.4 Objectives of the study**

The following objectives were used to guide this study:

1. To determine the influence of teachers' qualification on implementation of IE in public primary school in Kikuyu district.
2. To find out what support services and materials are available in schools for effective implementation of IE in public primary schools in kikuyu district.
3. To establish on the availability of teaching and learning resources required for effective implementation of IE in the public primary schools in Kikuyu district.

- iv. To assess the methods of instructions for the implementation of IE in public primary schools in Kikuyu district.
- v. To identify the nature of differentiated curriculum content used in the implementation of IE in the public primary schools in Kikuyu district.

### **1.5 Research Questions**

This study was undertaken to achieve the following research objectives;

1. In what ways do teacher qualifications determine effective implementation of inclusive education in public primary schools?
2. What support services are in the school for effective implementation of inclusive education in public schools?
- iii. To what extent does the availability of teaching and learning resources influence implementation of inclusive education in public primary schools?
- iv. In what ways do methods of instruction improve the effectiveness of inclusive education in public primary schools?
- v. To what extent does a differentiated curriculum influence inclusion in public primary school?

### **1.6 Significance of the study**

The findings of the proposed study may have both theoretical and practical implications for the future of inclusive education in the country. The outcome of this study was expected to help future researchers who may wish to carry out a

further study in the field. It may form a basis of training primary school teachers and the selection of the curriculum for inclusive education in the schools. This could be realized through pre-service training in the primary teacher training colleges, Kenya Institute of Special Education (KISE) and in the public universities. It would also give a guideline to the head teachers on the required resources and support services needed for effective implementation of inclusive education in the schools as they plan and purchase the school equipment.

#### **1.7 Limitations of the study**

There were two limitations in this study. Firstly although inclusive education had been identified as an important component of learning which should be provided at all levels of education, most teachers were quite ignorant about the concept of inclusion and seemed to have no skills to handle special needs learners. I therefore gave a brief discussion of the concept of inclusive education to the teacher respondents and explained to them their role in this research.

The second limitation was the use of ex-post facto research design since the researcher could not manipulate the independent variables and could not ascertain the causative factors. To mitigate the researcher ensured the instruments' items were very clear on the information elicited.

### **1.8 Delimitations of the study**

The study was limited to the public primary schools with special units within the schools in Kikuyu District. The respondents were limited to head teachers and teachers who are the implementers of inclusive education in the primary schools.

### **1.9 Assumptions of the study**

Two assumptions were made on the study;

1. All the respondents would have the required knowledge and they were competent enough to give accurate responses to the questions raised through the questionnaires.
2. The learners' records on assessment and evaluation in the primary schools would be available and updated.

### **1.10 Definition of key terms in the study**

This section contains the definitions of terms as used in this study

**Effectiveness** refers to the ability to accomplish a purpose in order to produce the intended result and objectives.

**Implementation** refers to put into practical effect of an educational system in order to produce the intended result and objectives of the educational system. **Inclusive**

**education** refers to an educational provision that ensures that all children including those with special needs and disabilities receive appropriate educational services within their neighborhood schools.

Influence refers to the capacity to have an effect on something else.

Special needs education refers to an education which provides appropriate modifications in the curriculum, teaching methods and educational resources in order to cater for individual differences in learning (Kirk, 2003).

Special schools refer to the isolated schools for children with particular handicaps.

Special units refer to classrooms located in regular schools but are set aside for educating specific types of disability.

School based factors refer to factors within the school's set up that influence effective implementation of inclusive education.

Support services refers to the additional services required by children with special needs to cope with the disabilities for effective learning in an inclusive setting e.g. speech training therapy, specialized desks among others.

### **1.11 Organization of the study**

In this study chapter one deals with the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations of the study, delimitations of the study, the assumptions of the study and the definitions of the key terms. Chapter two deals with the review of literature of school based factors as the variables that influence implementation of inclusive education well as the information on the concept of inclusive education. It also included the theoretical and conceptual framework of

the study. Chapter three deals with research methodology; giving a detailed account of the research procedures, instruments and the research design to be used. It defined the target population on sampling procedures; illustrating on methods to test for the validity and the reliability of the research instruments to be used in data collection. Chapter four consists of the data analysis and chapter five deals with the data interpretation, recommendations and conclusions.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter on literature review addresses some factors which are very important in the primary school implementation of IE. These included teachers training, required support services and instructional materials, methods of instruction and curriculum content for learners with special needs.

#### 2.2 The concept of inclusive education

According to UNESCO (2001), inclusive education starts from the belief that the right to education is a basic human right and the foundation for a more just society. This has been emphasized in subsequent forums such as the 1989 United Nation's Convention of the Rights of the Child, the 1990 World Conference on Education for All, the 1993 United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities, the 1994 Salamanca Statement that reaffirmed the international commitment to Education for All. This was further endorsed in the 2000 Framework of Action on Special Needs Education, which stated that the spirit of these provisions and recommendations on education for all should guide governments and organizations. Inclusion in education, therefore, involves the process of increasing the participation of learners in, and reducing their exclusion from, the cultures, curricula and communities of local schools (Stubbs, 2002). To facilitate this, learners should be given a wide range of

resources, which include teaching materials, equipment, personnel, curriculum adaptation and modification and teaching approaches. Similar studies have been undertaken on inclusive education but more so in the specific categories of children with special needs such as the visually impaired, the hearing impaired the physically impaired and mentally challenged. Turnbull (2007) states that the needs of exceptional children in education can be met in the inclusive classroom under certain prerequisite conditions. This is where the students are assessed appropriately for relevant reasons to receive the required differentiated curriculum. Inclusion is about the child's right to participate and the schools duty to accept the child. Ainscow (2003) suggests that inclusion rejects the use of special schools or classrooms to separate students with disabilities from students without disabilities. The school is restructured so that all students including those with disabilities learn together.

### **2.2.1 Historical Development of Special Education**

Special needs education has evolved over the years starting with the period of neglect, private tuition. Institutionalization, separation, normalization, deinstitutionalization and inclusion. The neglect period started before the 17th century. People with disabilities were considered socially and physical less capable. People with disabilities were considered socially and physical less capable. Hence, they were not easily accepted and regarded as part and parcel of the family and community. They suffered neglect and rejection. Families and

communities had negative attitude towards disability. Disability according to (Fredrickson and Cline, 2002) was regarded to be caused by witchcraft, curses or punishment from God for wrong done. It was also considered contagious. Consequently, persons with disabilities were isolated and their needs were not adequately provided for by families and communities.

Some people used to throw such children in the bush because women were expected to give birth to healthy babies. Any weakling was not to be given any chance to live for they were considered a burden to the community. Families with children who were handicapped were also discriminated upon. People could not marry from a family with a history of disability in their genealogy (UNESCO, 1994). The negative attitudes of the society towards persons with disabilities have persisted throughout the history of special needs education. Indeed there is problem. It is negative attitude. SNE Bulletin KISE (2003). Due to these attitudes, the earliest names of people with special needs had negative connotations. These names were abusive, derogative and dehumanizing. These societal attitudes have negative bearings on services for children with special needs. This could possibly be one of the reasons inhibiting inclusive education programmes. No wonder implementation still remains a problem.

The 18<sup>th</sup> century, marked the private tuition period for persons with disabilities. Individual and families who saw the potential in children with disabilities started

teaching children with special needs at the family level. St. John of Bervely, a Bishop, taught a person with hearing impairment how to articulate and talk. In 685 AD Didymus devised touch reading materials for the visually handicapped in Alexandria. While by (1597-1620) Juan Martin Pablo Bonet of Germany developed one hand manual alphabet. Other people such as Jacob Bemonilli (1654-1705) from Switzerland, Henry Baker C 1698-1774) from United Kingdom, Johann Conrad Amman (1699-1730) from Holland, Napoleon Bonaparte I (1768- 1780) and many more from France proved though teaching activities that it was possible to educate children with disabilities. This suggests that success requires commitment and strict policy.

The 19<sup>th</sup> century (institutionalization was a service provision method whereby a residential facility was put in place to house children with varied special needs.

The aim was to provide higher-level care and corrective rehabilitation with the objective of returning them to the society after improvement. The education was purely rehabilitative and upheld medical care. However the conditions in the institutions deteriorated later to such a level that they became more of an asylum, where disabled children were abandoned and neglected. They were seen as lesser beings. In Kenya, custodial approach was introduced by churches and service providers who gave special services and education. This started after the Second World War (1914) for those disabled was soldiers.

Like elsewhere the first institutions were meant for rehabilitation. Persons with disabilities who went through such institutions got so much of vocational education and rehabilitation at the expense of academic work. According to Sessional Paper No. 5 of 1968 the deaf and partially impaired persons were subjected to strict speech therapy. It was believed that this way they could be taken out of a silent world. All this were done at the expense of the prescribed school curriculum within regular education system. This could not help something was still missing, possibly an adapted curriculum vitae.

Institutionalization period gave way to the separation period which took place in the early 20<sup>th</sup> century, lasting up to 1960s. It was realized that children with special needs in educational could not learn alongside the non-disabled children due to their special educational needs. As a result, they were segregated and placed in special programmes. Special schools were started as residential institution and grew in number in the first part of the 20<sup>th</sup> century. This separated children with their families and communities. Provisions of service did not meet educational needs. There remained a gap in this system. It was not benefiting the parents of the disabled children nor children with disability themselves. They wondered and asked why some of them who had some skills could not compete favorably within the society after training. To make it worse, when they came back to live in the society from residential schools, they could not fit. A better system was still necessary which would be possibly inclusive education. In that

chronological order, separation period was phased out and replaced by a normalization period which started in early 1960s in Scandinavia and later got popularized in the United States by Wolfenberger.

According to KISE distance learning programme Bullenti (Module 8) the main objectives of normalization were to create and maintain environments that do not impose excessive restriction on persons with disabilities, create an environment that brings persons with disability as close as possible to the society and cultural settings and to guarantee the protection of human and legal rights of persons with disabilities. A number of movements which wanted people with disabilities to be seen as part of the general society came up. This was achieved through; Deinstitutionalization, Regular education initiative, least restrictive, environment, integration, inclusion and community based rehabilitation. Each of the systems had good intentions though stills overwhelming limitations remained un-overcome. Deinstitutionalization advocated that people with disabilities be released from confinement institutions into their local community settings. They felt that children had to be within their own societies not far away from the family.

Some were placed in special classes within the regular schools. In Kenya for example, Aga-khan Unit for the Deaf (1958) was attached to Aga-Khan Primary School. Others were placed in small homes attached to regular schools for

example. St. John F. Kennedy Rehabilitation Centre in Nyabondo (1960) was attached to Nyabondo School. This could still not end the problem. Lowered academic expectations as a result of unfavorable classroom and competition were not eradicated.

Regular Education initiative was the next alternative. This philosophy was introduced in 1986 in the U.S. by Madeleine C. Will, Assistant Secretary of Education. Regular Education initiative policy states that, general education rather than special education should be primarily responsible for education of learners with disabilities UNISE (2002). Although well intended, the question, on how special education as a system of education is distance from general education remained an answered and it was not clear on how much regular education should take over functions of special education. One obstacle was noted here. At this level, provision of Education was not an integration level.

The children with special needs had to pass a test so as to qualify for integration. In some cases integration was for only a few subjects in which a child with special needs was able to do. This was still discriminative Deinstitutionalization and regular education moves tried to bring integration of children with special needs, but failed to iron out the elements of discrimination. Therefore education philosophers were compelled to come up with what they called a "Least Restrictive Environment" philosophy. A learning environment modified to meet

the learning needs within the regular schools. The modification was done such that children with special needs learn without any hindrance.

At every stage in the historical development of special needs education, some efforts of betterment are realized. Integration proponents for example felt that persons with disability be integrated in the society and be provided educational.

Some of the reasons given by proponents for IE include the fact that each child has a right to belong and to share normal experiences with family, neighbouring and peers, each child has a right to a quality education in his or her school, all children can learn and develop; working side by with peers with diverse skills and abilities help all children learn and develop the skills necessary to live and work in the real world, each child has a vital contribution to make to society; schools should strive to communicate the value of diversity.

The Association of Retarded citizens (ARC) noted that inclusion brings benefits to students (Smith, 1998 in KISE, 2007) Students with special needs in education in general classes do better academically and socially than counterparts in noninclusive setting. They have greater success in achieving individualized Educational programmed goals than those in traditional programmes, students with special needs gain self-esteem, acceptance by classmate and social skills. The academic progress of unchallenged students is not slowed down by having challenged peers in the classrooms. Benefits to regular learners include. Reduced

fear of human difference, increased comfort and awareness, growth in social cognition, improvement in self concept, development of personal principles, warm and caring friendships. Parents confirmed improved outcomes for their children without challenges when children with challenges are included in the regular classrooms (KISE, 2007).

### **2.2.2 The Development of Special Education in Kenya**

The foundation of the special needs education programme dates back to 1968 when the government published a sessional paper no. 5 on special education. This laid a policy framework for the children with special education needs (MoEST, 2000). The main objective is to assist the children with special education needs to develop towards realization of full participation in social life and equality (MoEST, 2003).

The population of people with disabilities in Kenya is estimated to be 10% of the total population (MoEST, 2004). About 25% of these are children of school going age. However out of 750, 000 only about 90,000 children have been identified and accessed while only 26,000 are enrolled in education programmes (MoEST, 2004). This shows that a large number of these children are out of school while some dropout of school before completing their primary education (UNESCO, 2005).

Allen and Schwewartz (2001) noted that inclusion of children with special needs into the mainstream ensures equal status with other children who develop

normally. Inclusive programmes consider the uniqueness of every child and address their strengths and needs. Although Free Primary Education (FPE) has opened doors for many children, those with special education need have less access to basic education (ENESCO, 2005). There is need for educational reforms to plan for inclusive education and making school environment friendly to physically challenged (UNESCO, 2007).

### 2.3 School based factors influencing effective implementation of inclusive education

In this study, the researcher is investigating on the school based factors that contribute towards effective implementation of inclusive education in public primary schools. She mainly focuses on teacher training and qualification, support services, teaching and learning resources, methods of instruction and curriculum content in inclusive education implementation.

According to Dean (1996), for inclusive education to succeed, some modification ought to be done to the school environment so as to ensure effective learning takes place. Proponents of inclusive education perspective argue that any restrictive environment is inherently flawed because it is a form of segregation (Schwartz, 2005). Factors like safety and accessibility are critical and should be considered by the school administrators in public and private primary schools when creating learning environments. Safety Environment not only reduces accidents and injuries, but also fosters feelings of security. Children will be more

likely to explore their environment if they feel safe and secure in doing so. Many children with special needs are faced with situations that make them more at risk for accidents and injuries than their typically developing peers.

### **2.3.1 Teacher training and qualifications**

Professional development of teachers is crucial in order to achieve inclusive education. Avramidis (2000); Opdal & Wormnaes (2001); have indicated the importance of professional development in the formation of positive attitudes towards inclusion. This includes both the initial and continuous training which takes place throughout the teacher's career. In order to achieve training of teachers, the practice of in-service seminars and distance learning can be utilized to ensure a wide distribution of teachers with skills in special needs education in all schools. These teachers can then be resource persons to train others in the inclusive education practices (Karugu, 2001). This view is also held by Engelbrecht and Chris (1998), 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. According to Skjorten (2001), teacher education will need to introduce radical changes in order to prepare teachers to be able to meet the challenges 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. Zindi

(2000) has indicated that as far back as 1977, the National Education Research Council in Zimbabwe stressed the integration of special education elements into all teacher education programmes in the country as it was expected that all teachers would at some point during their career, be faced with disabled pupils in their classes. The general opinion is that more integrated methodologies and flexible pathways should gradually replace the rigid separation between mainstream education and special needs education.

(Ainscow, 2003) asserts for the inclusion of a component of special needs education to be included at all levels of teacher training. According to Stubbs (2000), teacher education will need to introduce some changes in order to prepare teachers to be able to meet the challenges of inclusive education.

In Kenya, very few special education teachers are qualified while no recognized facilities exist for early childhood special education in any of the categories in SNE(MoE,2001).Kithuka(2008) and Kamene(2009) in their studies found that there was lack of enough trained teachers while Kamene(2009) found that teachers had inadequate professional training to cater for children with special needs thus lacked confidence.

### 2.3.2 **Support services in inclusive education**

Galgullo(2006), model of inclusion is rooted in the philosophy of educating children with special needs while giving them the support to undergo the same activities and programmes any other non-disabled person would be able to access. This lies in the availability of various related serves providers such as speech language pathologists, occupational therapists, vision teachers, physical therapists and the behavior specialist. These highly trained and skilled professionals may serve on a given student's education team, providing both direct and indirect support. Instead of removing individual students or small groups of students with similar disabilities from class to work on specific therapy objectives, related services providers can support the student within the general education classroom to perform the challenging skills both directly or indirectly For example, general educators reported the preference for pull-in related services so that students with autism who were nonverbal would not miss any of their lessons (Hodkinson, A. & Vickerman P.,2009). Physiotherapists have a knowledge and appreciation of anatomy and physiology, and are experts in analyzing movement. They are particularly focused on aspects of children's movement based on the structure and function of the body and physical approaches to promoting health, preventing injury, treatment, and the rehabilitation and management of particular disability conditions; are central to successful learning and participation. Speech and language therapist can offer essential information in helping children who have speech errors and communication and language development needs. As

part of the statutory assessment of SEN under the Code of Practice (DFEs, 2001a) educational psychologists are able to assist in evaluating children's thinking abilities and assessing individual strengths and weaknesses. Together, the parents, teachers, and educational psychologist can formulate plans to help children learn more effectively, which is crucial to the co-coordinated and multi-disciplinary partnership approaches (Lipsky and Gartner 1992).

Same-age Peers are the most natural source of teaching support derived from any one class room. Since same-age peers without disabilities may see the lesson from a more student-oriented perspective, support from this teaching resource could prove quite beneficial. Likewise, Downing, (2010) found that social interactions fared well with peers providing support.

### **2.3.3 Teaching and learning resources**

Learners with specific disabilities require some specialized educational resources at individual and school level. Learners with visual impairment require white canes and Braille at individual level. At school level they require Braille machines, Braille kit, Braille papers, adapted computers, tactile diagrams and maps, adapted desks and chairs. Those with low vision require eye glasses, magnifying glasses and large print reading materials. Learners with hearing impairment require individual hearing aids and batteries, speech training units, auditory training, sign language dictionaries and books.

Learners with physical disabilities require adapted seats, therapy equipment, sports and recreational facilities, wheelchairs, crutches, adapted functional aids like pens cutlery and computers. Learners with mental handicaps require functional aids and real objects as learning resources. These include recreational and vocational training equipment, sports and recreational therapy equipment, physiotherapy and occupational therapy equipment, music and art therapy equipment, visual auditory tactile and functional training materials (Kirk and Anastasiow 2003).

#### **2.3.4 Effective instruction for all students**

Characteristics of quality instruction can be beneficial to all students, so identifying and utilizing those elements whenever possible for students with disabilities seems the most practical. One recommended practice in education calls for active involvement of students (Greenwood, Horton, & Utley, 2002). Instead of students being passive recipients of instruction from the teacher, participation in learning activities with opportunities to apply information is the preferred objective (McCarthy, 2005). The Individualized Education Programme (IEP) is an instrument to guide in the delivery of special education instructions and support teaching and learning of special needs children. It is a written statement of the educational program designed to meet the child's individual needs. It states reasonable goals for each child and the services the school will

provide. It uses customized instructions as illustrated in Howard's Multiple Intelligence theory in lesson presentation (Gardner, 1983).

Howard believes that each individual has some of the eight intelligences which includes which can be used according to individual learner's strengths in any of them. Well developed verbal skills in reading, writing and telling stories. The mathematical logical intelligence with the ability to think conceptually and a capacity to excel at Math's, logic and problem solving. The musical intelligence with an ability to produce and appreciate rhythm, pitch and makes meaning of sound. The visual- spatial intelligence is where pictures are created in the mind's eye and the learner is good at hands-on work. The bodily kinesthetic intelligence enhances the ability of excellent fine and gross motor skills and handles one's body movement and objects skillfully. The intra personal intelligence has a good understanding of self and own thinking processes. The interpersonal intelligences enhance the learner to socialize shares and communicate well with others. Naturalistic intelligence learner enjoys and understands the natural world and environmental issues.

This multi sensory approach to presentation demonstrates sensitivity to differences and disabilities. A supplement of oral information with written materials and demonstration for students to receive information in multiple ways.

Monitoring presentation speed and ask students in the class to rephrase the information in their own words. This allows for repetition in addition to a different presentation of the content. Adjust the pace of presentation to correspond to the type of material being presented.

### **2.3.5 Curriculum for an inclusive learning**

Johnsen (2001) asserts that, a curriculum, should have a high degree of flexibility in order to adapt to the learning needs of all pupils' level of mastery, learning possibilities and barriers. The curriculum should consider the pupils' experiences and needs; factors such as facilities, objectives, teaching strategies, assessment and evaluation forms and methods, and the appropriate communication mode. School based support curriculum development teams in an inclusive school could comprise of school managers, regular teachers; specialist needs educators, parents, representatives from educational assessment center, health personnel, social workers, local administrators, representatives of the disabled, curriculum developers and technicians. These members of the support team should work holistically, with each sector supporting the other with their varied professional skills (UNESCO, 2001, Stubbs, 2002). This team would also be involved in the making environment adjustments in the class and school and the acquisition of materials and equipments to support the different diversities. The Kenya Institute of Education (KIE) in Kenya has the duty to prepare this kind of curriculum, which should aim at establishing the basic learning needs of all children based on

the national goals of the country, relevant to all children including those with special needs .The KIE provides an adapted curriculum for learners with special needs which includes communication skills, mathematics, activities for daily living, perceptual training, pre-vocational skills and vocational skills.

The curriculum should also consider the examination needs of all learners with special needs education. It should be noted here that, children with special needs, have at times been evaluated unfairly when their examinations have not been adapted or not given enough time to complete their examinations or the examination environment not favorable. This is prevalent, especially for learners who are visually impaired and the physically handicapped especially at the primary level.

#### **2.4 Summary of literature review**

The concept of Inclusive Education ensures that all schools and other centers of learning give a barrier-free learning environment to all children because every child has a right to belong and share normal life experiences with peers in his/her home and school. This involves change and modification in content, structure and strategies. These include physical facilities, curriculum, teacher qualification and experiences as well as availability of teaching/learning matters to suit all learners regardless of their unique characteristics.

The literature reviewed in this study has focused on other studies carried out on some elements of inclusive education. Kithuka (2008) studied the factors affecting implementation of IE policy of children with special needs in primary schools in Kitui North District. Kamene (2009) carried out a study on factors affecting the implementation of IE in primary education in Yatta district. Gichana(2009) carried out a study on teacher-based factors influencing the implementation of inclusive education in Mombasa District. None of these studies addressed the school based factors which influence the implementation of IE in kikuyu district in particular. This study therefore is aimed at providing information to fill this gap.

## **2.5 Theoretical framework**

Vygotsky Theory (1987-1998) of Proximal Development discusses learning and teaching of children with special needs as a shared and/or joint process in a responsive social context. It states that children can perform better when they have proper assistance by adults and capable peers. He advocated the process of "scaffolding". In this context, children with special needs are given support by professional personnel and capable peers. In an inclusive class, dynamic assessment of children is very crucial to identify the strengths and weaknesses of the children with special needs. This will help the teacher use the strengths to alleviate the weaknesses in the process of instructions.

This theory is applicable in this study because once the SNE learners are included in the general school; they will interact and be supported by the teachers and peers

iii the learning process. The improved curriculum and instructions with the appropriate facilities will assist the SNE learners to develop to their highest level of independence. Once all this is done, the challenged learners will be able to realize their full potential since disability is not inability.

### **2.6 Conceptual framework**

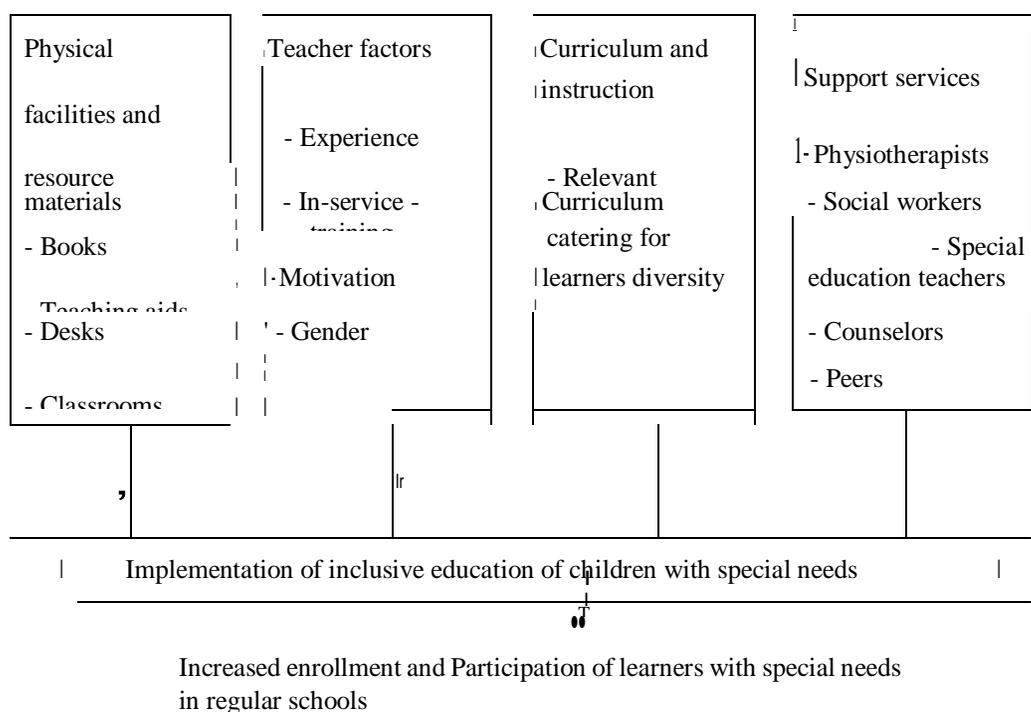
A conceptual framework is a model of presentation that shows the coherence through variables empirical research of how the independent variables impact upon the dependent variables of the research and illustrates the outcome.

The conceptual frame work of this study (Figure 2.1) identifies the variables under study and shows their relationships.

**Figure 2.1**

**Conceptual framework;**

**School Based Factors Influencing Inclusive Education**



Source: Adapted from Kamene (2009)

For this study, the conceptual framework is showing that appropriate adaptations of school curriculum improved delivery methods with the relevant resources and qualified teachers are likely to ensure effective implementation of the inclusive education in the primary schools (Kirk, Gallagher and Annastasiow2003). This will lead to an increased enrolment and participation of SNE learners in regular primary schools.

## **CHAPTER THREE RESEARCH**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter presents a description of the research methodology which was adopted during the study. It defines the research design, target population, sampling procedures and sample size. It gives the research instruments, their reliability, validity and finally data analysis procedures. The research tools and instruments that were used to collect the required data are also discussed.

#### **3.2 Research design**

Ex-post facto research design was used for this study. This is when a researcher begin with a phenomenon and move backward in time to identify causal factors by studying the cause-effect relationship of the variables (Orodho J., 2003). This research design was appropriate for the study since inclusive education, an already on-going policy under implementation in the schools; whose effectiveness the researcher liked to investigate upon by identifying the school based factors influencing its implementation. The researcher did this by establishing the status of physical facilities in the schools; the readiness of teachers in terms of qualifications and experience towards inclusive education; the availability of teaching and learning resources and the teachers' competence to implement the modified SNE curriculum.

### **3.3 Target population**

The target populations were headteachers and teachers from 10 public primary schools with special units in Kikuyu district. It comprised of the 10 head teachers and 112 teachers. The head teachers were seen as useful respondents as they are the coordinators and managers of the learning activities in a school. The teachers are directly involved in the actual implementation of learning processed in the classrooms.

### **3.4 Sample size and sampling procedures**

This section described the procedures used in sampling and gave the sample sizes for the schools, head teachers and teachers. Creswell (2003) defines sampling as a process of selecting the appropriate number of subject for a defined population. The target population of 112 teachers was required, a sample size of 50 teachers from the public primary schools were represented (Krejcie & Morgan, 1970). The sample size therefore was 60 respondents; 10 head teachers and 50 teachers from the targeted primary schools.

Table 3.1

Sample sizes for different population sizes

Respondents	Target population	Sample size
Head teachers	10	10
Teachers	50	46
Total	60	56

### 3.5 Research instruments

Self-developed questionnaires and observation checklist were used in this study. Orodho and Kombo (2003) states that in questionnaires respondents fill in answers in written form and the respondents collect the forms with the completed information. They included two questionnaires (one for the head teachers and the other for the teachers) both with open-ended and close-ended questions. The open-ended question would give qualitative data while the close-ended questions would give quantitative data. Both questionnaires had two sections each; section one elicited demographic information of the respondents and section two elicited information on school-based factors influencing inclusive education. The checklist was used to confirm the information provided by the respondents (Mugenda and Mugenda, 2003). The checklist included items required in an inclusive environment like toys, adapted desks, adapted toilets, water points, spacious classrooms and ramps on doors.

### **3.6 Instrument validity**

Greenwood, Horton and Utly (2002) define validity as the accuracy and meaningfulness of influences which are based on the research results. To test the validity of the instruments, a pilot study was done in one selected primary school which was not included in the final study. Four class teachers and the head teacher would be used as respondents. After piloting, the validity of each question was examined for suitability, clarity and relevance for the study purpose. The checklist validity was assessed by undergoing an analysis by the researcher's supervisors and piloted by two special education teachers as experts (Orodho,2003) in the field of inclusive education. This analysis was show any ambiguity or grammatical errors which needed to be corrected.

### **3.7 Instrument reliability**

Reliability is a measurement of the degree to which a research instrument yields consistent results after repeated trials (Greenwood B., 2002). The researcher used test-retest technique in order to test the reliability of the instruments. The instruments given to similar subjects for the study but not used in the final study. The same instruments were administered to the same group of subjects after two weeks. A comparison between the responses obtained in the two tests was made using Pearson's Correlation Coefficient formulae ( $r$ ) as indicated below.

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

Where  $\sum xy$  = sum of the gross product of the values of each variables

$(\sum x)(\sum y)$  = Product of the sum of X and the sum of Y and N = total number of items. If the reliability of the instrument is above 0.80, it is considered to have a very good reliability.

The pilot study obtained a coefficient correlation of 0.6.

### 3.8 Data collection procedure

The researcher sought permission from the National Council of Science and Technology through an introduction letter from the University of Nairobi. Subsequent clearance to carry out the research was obtained from the District Commissioner (DC) and the District Education Officer (DEO) of Kikuyu District. The researcher then sought permission from the head teachers of the target primary schools. She personally visited each school and administered the questionnaires after explaining to the respondents their expected roles in the research.

### 3.9 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. Quantitative statistics such as frequencies and percentages were used because they could easily be interpreted

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by many people. Qualitative data from open ended questions were organized into themes and narratives and tabulated accordingly. The statistical package for social sciences (SPSS) programme was used in data analysis since the data collected were large. This applied to all the research questions.

## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS, AND INTERPRETATION 4.1**

#### **Introduction**

This chapter presents and discusses the findings of the study. The study was to investigate school based factors influencing implementation of inclusive education in public primary schools in Kikuyu district, Kiambu county, Kenya. The analysis of data collected and its interpretation was in relation to the objectives and research questions of the study. Data presented include the respondents views regarding the teachers qualifications, the availability of support services in the schools, the availability of teaching and learning services, methods of instructions, and the nature of differentiated curriculum used towards the implementation of inclusive education in public primary schools, in Kikuyu district, Kiambu County. The responses were compiled into frequencies and corrected into percentages and presented in cross tabulations.

#### **4.2 Questionnaire return rate**

The researcher targeted 50 public primary school teachers and 10 headteachers for the study and thus administered 60 questionnaires. A total of 46 questionnaires (92.0%) were returned from teachers. In the case of the head teachers, the researcher targeted 10 of the head teachers from public primary schools. All the ten headteachers responded, representing a (100%) return rate. The questionnaire return rate for both teachers and Head Teachers was (93.33%) and therefore,

considered satisfactory for the purpose of the study (Greenwood, 2002). The findings are presented in table 4.1,

**Table 4.1  
Instrument Response Rate**

<b>Respondents</b>	<b>Expected</b>	<b>Returned</b>	<b>Percentage</b>
Teachers	5	4	92.0
Headteachers	0	6	100.0
<b>Total</b>	<b>10</b> <b>60</b>	<b>10</b> <b>56</b>	<b>93.3</b>

### **4.3. Respondents' demographic information**

The data presented in this section focused on the respondents' gender, academic and professional qualifications and teaching experience in years. This sought to answer research question two on available support services which affected the effective and efficient implementation of IE.

#### **4.3.1 Respondents' Gender**

The researcher requested both headteachers and teachers to indicate their gender in questionnaires. Their responses were tabulated as shown on table 4.2,

**Table 4.2**

**Respondents' Gender**

<b>Gender</b>	<b>Headteachers</b>		<b>Teachers</b>	
	<b>F</b>	<b>Percentage</b>	<b>F</b>	<b>Percentage</b>
Female	3	30.0	40	87.0
Male	7	70.0	6	13.0
<b>Total</b>	<b>10</b>	<b>100.0</b>	<b>46</b>	<b>100.0</b>

According to the table majority (70.0%) of the head teachers were male, with 30 percent of the headteachers being female. Female teachers in public primary schools were the majority (87.0%) while the male respondents were represented by (13.0%).

**4.3.2 Respondents' academic qualifications**

Head teachers' and teachers' academic qualification were also sought to find out their efficiency in the implementation of inclusive education in primary schools. This sought to answer research question one of the study. Effective implementation of inclusive education requires qualified head teachers and teachers, this could assist them to successfully implement inclusive education policy enabling pupils with special needs learn best in typical settings with the peers despite their diversified abilities. The teachers and head teachers' academic qualifications are in table 4.3.

**Table 4.3**

**Head teachers' and Teachers' Academic Qualifications**

<u>Qualification</u>	<b>Headteachers</b>		<b>Teachers</b>	
	<b>F</b>	<b>0/0</b>	<b>F</b>	<b>0/0</b>
Masters Degree	1	10.0	2	4.3
Degree		10.0	10	21.7
Diploma	2	20.0	19	41.4
PI certificate	6	60.0	15	32.6
<b>Total</b>	<b>10</b>	<b>100.0</b>	<b>46</b>	<b>100.0</b>

According to the study's objective (1), the researcher sought to investigate the level of the Headteachers and teachers academic and professional qualification. This was clearly indicated by the table 4.3 with the majority of Headteachers (60%) and teachers (32.6%) being PI certificate holders. However, a fairly high percentage (41.4%) of the teachers' respondents had acquired Diploma level of Education while (21.7%) are graduates and 4.3 percent are holders of Masters Degree. It also showed that a relatively low percentage (10%) of the headteachers had acquired Bachelor degree and Master degree. This data helped to identify the challenges encountered in the implementation of inclusive learning.

**4.4 The status of the classrooms**

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. The researcher sought to know whether the classrooms and other structures had been renovated in order to cater for various levels of disabilities e.g. physical handicaps. The statements were tabulated in table 4.4.

**Table 4.4**

**Headteachers' and teachers' comments on the renovations of classrooms**

Statement	Teachers		Head teachers	
	Frequency	%	Frequency	%
YES	1	32.6	4	40.0
NO	5	67.4	6	60.0
<b>Total</b>	<b>46</b>	<b>100.0</b>	<b>10</b>	<b>100.0</b>

From the results majority of the teachers (67.4%) and Headteachers (60%) indicated that the classrooms and other structures had not been renovated and therefore they are not SNE friendly. A fairly lower number of teachers (32.6%) and Headteachers (40%) indicated that the classrooms and other structures are renovated in their schools showing that emphases on structure renovation are to be considered. This intrigued the researcher in her observation to evaluate on the structure conditions and the results from the observation schedule were as in table 4.5.

**Table 4.5**

**Teachers' responses to the availability of barrier free environment**

<b>Response</b>	<b>Frequency Percentage</b>	
Available	4	40.0
Adequate Not Available	6	60.0
Inadequate		
<b>Total</b>	<b>10</b>	<b>100.0</b>

The researcher observed that among the institutions visited, the majority (60%) of the institution, barrier free environment was not available with only (40%) of the institution having barrier free environment. This is a draw back and a handicap in the successful implementation of inclusive education.

**4.5 Learners Accessibility to the Classrooms**

For the learning to take place in the classrooms, measures must be put in place on easing the movements of SNE learners to these classrooms.

**Table 4.6**

**Learners Accessibility to the Classrooms**

<b>Teachers Comments</b>	<b>Frequency</b>	<b>Percentage</b>
YES	2	54.3
NO	5	45.7
<b>Total</b>	<b>46</b>	<b>100.0</b>
	21	



Just above half of teachers' respondents (54.3%) indicated that the SNE learners in their schools are able to access the classrooms in place with ease. Only (45.7%) of the respondents felt that SNE learners access their classrooms with difficulties.

#### **4.6 Provision of desks suitable for SNE learners**

In addition to being in classrooms for the learning to take place amicably, the learners need to be seated on suitable desks

**Table 4.7**

#### **Provision of desks suitable for SNE learners**

<b>Teachers Comments</b>	<b>Frequency Percentage</b>
YES	10 21.7 36 78.3
NO	
<b>Total</b>	<b>46 100.0</b>

Majority of the teacher respondents (78.3%) indicated that the desks were not suitably constructed to cater for SNE's. This was also witnessed by the researcher's observations where in (60%) of the institutions visited, the desks were not suitable for their challenges.

Table 4.8

Have the desks been renovated to cater for SNEs

Comments	Frequency	%
YE	3	30.0
NO	7	70.0
Total	10	100.0

Among the headteachers respondents (70.0%) agreed that their institutions lacked desks which are suitable for the SNEs. This sought to answer the second research Question of the study which was to investigate the support services available for effective implementation of inclusive learning.

#### 4.7 Have the Toilets been designed to Cater for SNE

The research question 2 sought to investigate the support services provided for the SNE. The government and various organizations have come up with strategies to support the construction of various structures in schools in order to facilities SNE.

Table 4.9

Have the Toilets been designed to Cater for SNE

Comments	Teachers		Headteachers	
	Frequency	Percentage	Frequency	Percentage
YES 10 NO 36		21.7	4	40.0
		78.	6	60.0
TOTAL 46		100.0	1	100.0
		3	0	

The study objective three sought to investigate the availability of teaching and learning resources required for effective implementation of inclusive learning. According to the respondents opinions, majority of the teachers' respondents (78.3%) indicated that there are no SNE friendly toilets constructed in their schools. A good percentage (60%) of the Headteachers also agreed that the institutions they head lack toilets specially designed for various handicapped learners

#### 4.8 Challenges faced by SNE teacher relation to teaching materials

According to objectives 3 of the study, the researcher sought to identify some challenges faced by SNE teacher in relation to materials of instruction.

**Table 4.10**

**Challenges faced by SNE teacher relation to teaching materials**

<b>Response</b>	<b>Teachers</b>		<b>Headteachers</b>	
	<b>Frequency</b>	<b>0/0</b>	<b>Frequency</b>	<b>0/0</b>
Adequate materials				
Inadequate materials	39	84.8	6	60.0
Enough funds				
Shortage of funds	7	15.2	4	40.0
<b>Total</b>	<b>46</b>	<b>100.0</b>	<b>10</b>	<b>100.0</b>

Majority of teachers (84.8%) and Headteachers (60%) responded by indicating that the materials available in their institutions are inadequate for handling inclusive learning shortage of funds was also quoted by (15.2%) of the teachers and (40%) of the Headteachers.

**4.9 Teachers Response on the School's provision of Materials designed for SNE learners**

To make inclusive learning a success, it would require the schools to be equipped with specially designed materials and equipments and equipments for use by the available SNE learners. Objective (3) of the study was to establish the availability of teaching and learning resources required for effective implementation of inclusive education in the public primary schools.

**Table 4.11**

**Teachers Response on the School's provision of Materials designed for SNE learners**

<b>Teachers' Response</b>	<b>Frequency</b>	<b>Percentage</b>
YES	20	43.5
NO	2	56.5
<b>Total</b>	<b>46</b> 6	<b>100.0</b>

A fairly high percentage (56.5%) indicated that the facilities in the schools were not designed for SNE learners while (43.5%) felt that there were materials in their respective schools specially designed for the challenged learners.

The researcher had also observed that assistive devices which included clutches, ramps, Braille, Abacus, toys, speech and visual aids were not available.

**4.10 Teachers Responses on SNE Training**

Though all the teachers are trained and have the teaching experiese and skills the study sought to investigate the number of teachers trained to handle SNE's.

Table 4.12

Teachers Responses on SNE Training

Response	Frequency	Percentage
YES	20	43.5
NO	26	56.5
Total	46	100.0

Objective (1) of the study was to unearth the qualification of teachers handling the SNE's for efficient implementation of inclusive learning. According to the respondents (56.5%) of the teachers were not trained in special education while (43.5%) have a training in SNE.

Table 4.13

Teachers' Professional Qualification **in** Relation to SNE

Response	Frequency	Percentage
Certificate level	14	30.4
Diploma Level	19	41.3
Degree level	12	26.1
Others	1	2.2
Total	46	100.0

Research question (1) of the study sought to investigate the teachers' qualification

in a bid to ensure effective implementation of inclusive Education.

From the results, (41.3%) of the respondents are trained Diploma in Education holders, (30.4%) are PI certificate level holders while those trained in Bachelor of Education Degree and Masters of Education Degree lies at (26.1 %) and (2.2%) respectively.

Table 4.14

Areas that need some training in relation to SNE

Response	Frequency	Percentage
Mentally Retarded	22	47.8
Physically impaired	12	26.1
Visually impaired	7	15.2
Hearing impaired	5	10.9
Total	46	100.0

According to the study research question (4) areas of SNE and instruction methods that require a face lift were sought. The respondents felt that mental challenges (47.8%), Physically challenged (26.1 %), Visually impaired (15.2%) as well as Hearing impaired (10.9%) require more experts to be trained.



**Table 4.15**

**The number of pupils enrolled with special needs in Education**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
1-10	24	52.2
11-20	14	30.4
21-30	5	10.9
None	3	6.5
<b>Total</b>	<b>46</b>	<b>100.0</b>

Objective (4) sought to assess the methods of instructions necessary for the implementation of inclusive Education in public primary schools in Kikuyu District Kiambu County. This will at great rate be influenced by the number of learners with special needs in the classroom. Teachers responded that (52.2%) of the classrooms had enrolled less than 10 learners. Some teachers (30.4%) had more than 10 learners but less than 20 while (10.9%) had none.

**4.11 Presence of some children with Special needs who could be enrolled in school**

**but for some reasons have not**

The study sought to investigate whether there are some children with special needs who require to be enrolled in schools but they have not been enrolled.

**Table 4.16**

**Presence of some children with Special needs who could be enrolled in school but for some reasons have not**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
YES	28	60.9
NO	18	39.1
<b>Total</b>	<b>49</b>	<b>100.0</b>

According to the teachers majority (60.9%) indicate that they know of children with special needs who ought to be in school but for some reasons have not been enrolled. A fairly low percentage of teachers (39.1%) responded that they were not aware of special needs children who needed to be enrolled in schools.

**Table 4.17**

**Problems that emanate from SNE learners in Relation to Reading**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Slow	2	56.5
Poor	6	37.0
Low attention	17	6.5
<b>Total</b>	<b>46</b> 3	<b>100.0</b>

A fairly high percentage (56.5%) of the teachers' respondents indicated that the SNE learners are slow at grasping reading skills. Some teachers (37.0%) felt that

SNE learners are poor in reading while (6.5%) felt that the learners pay low attention to reading skills.

**Table 4.18**  
**Problems of Writing**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Poor attention	25	54.4
Slow	19	41.3
Unsystematic	2	4.3
<b>Total</b>	<b>46</b>	<b>100.0</b>

Among the teacher respondents, (54.4%) indicated that the learners with special needs portrays poor attention when it comes to writing skills. However (41.3%) indicated that the learners are slow in formalizing writing skills while a low (4.3%) indicated that the SNE learners' mode of writing is unsystematic.

**Table 4.19**  
**Problems depicted to response**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Poor sound articulation	28	60.9
Poor coordination due to Deformity	4	18.3
<b>Total</b>	<b>6</b>	<b>100.0</b>

Majority of the teachers (60.9%) indicated that most SNE learners in their stations have poor sound articulation when responding to talk. Others (39.1 %) indicated that their learners also coordinated poorly to their response due to prevailing deformity.

#### 4.12 Other problems and experiences with the SNE learners

In order to indentify the way to promote learning, the study sought to investigate common problems encountered during teaching or learning of SNE; objective (5).

Table 4.20

Other problems and experiences with the SNE learners

Response	Frequency	Percentage
Interpretation	26	56.5
Hygiene and nutritional disorder	20	43.5
Total	46	100.0

According to the teachers' respondents, learners in the inclusive set-up faces some challenges to do with interpretation (56.5%) others (43.5%) have hygienic and nutritional related disorders.

**Table 4.21**

**Opinion of Teachers on whether SNE learners can cope with current primary schools curriculum.**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
YES	22	47.8
NO	24	52.2
<b>Total</b>	<b>46</b>	<b>100.0</b>

A fairly large percentage of teachers (52.2%) indicated that the SNE learners cannot / Do not cope with the other students in their inclusive institutions.

A lower percentage of teachers (47.8%) felt that all learners in the inclusive set-up institution will cope with each other irrespective of their disabilities. This was to answer research question (5). This encourages the SNE learners and motivates their stay, and learning from together.

**Table 4.22**

**Relevance of the Present Curriculum to SNE learners in inclusive Schools.**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Very Relevant	9	19.6
Relevant	19	41.3
Fairly Relevant	11	23.9
Not Relevant	7	15.2
<b>Total</b>	<b>46</b>	<b>100.0</b>

In order to ascertain the relevance of inclusive Education the study sought to investigate the level of relevance of inclusive Education according to the teachers' views. The respondents gave their views. Many teachers (41.3%) felt that inclusive learning is relevant while (19.6%) indicated it as very relevant. However, (23.9%) of the respondents indicated it is fairly relevant while (15.2%) felt it is not relevant.

**Table 4.23**

**Suggestions on how to enhance inclusive learning in schools**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Equipping schools with materials favoring SNEs	23	50.0
Creating awareness	17	37.0
Providing inclusive syllabus	4	8.7
Training more teachers	2	4.3
<b>Total</b>	<b>46</b>	<b>100.0</b>

The study welcomed suggestions from the implementers on how to enhance inclusive learning in schools. This helped to answer objective (5) and research question (5). Half of the respondents (50%) indicated that schools needed to be equipped with materials friendly to the users (SNE's). Some respondents (37%) also felt that creating awareness should be empowered and practiced regularly. However, a low percentage (8.7%) indicated an inclusive syllabus to be set in place while (4.3%) felt that more teachers needed to be recruited and trained in

special Education. However, the respondents felt that more funding should be provided by the government to cater for the demands of inclusive Education.

#### **4.13 Headteachers Professional Qualification**

The Objective (1) of the study required the researcher to investigate on the professional qualification of the teachers required for efficient implementation of inclusive learning.

The findings were tabulated in the table below

**Table 4.24**

#### **Headteachers Professional Qualification**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
PI certificate	1	10.0
ATs		60.0
Diploma	6	10.0
PGDE	1	10.0
Graduate		10.
<b>Total</b>	<b>10</b>	<b>100.0</b>

Majority of the Headteachers (60%) are holders of ATS professional status while 10% each are PI certificate, Diploma, PGDE and Bachelor Degree graduates. **4.14 Availability of Teaching /learning Materials**

The study's objective (2) required the Headteachers respondents to identify the availability of materials which could ascertain! effective implementation of inclusive learning.

**Table 4.25**

**Availability of Teaching /learning Materials**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
YES	6	60.0
NO	4	40.0
<b>Total</b>	<b>10</b>	<b>100.0</b>

According to the table, majority (60%) of the headteachers indicated that teaching/learning materials for inclusive learning are available. However, (40%) of the headteachers commented that they have not provided adequate teaching/learning materials.

**4.15 Measures that should be put in place for effective implementation of SNE**

In the Research question (3) of the Study, the researcher sought to enquire the materials that should be provided in order to ensure effective implementation of SNE in the normal schools set-up. The Headteachers responded by making the following suggestions

**Table 4.26**

**Measures that should be put in place for effective implementation of SNE**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Modification of present materials to suit SNE learners	7	70.0
Government funding to consider inclusive set-up		30.0
<b>Total</b>	<b>10</b>	<b>100.0</b>

Majority of the respondents (70.0%) indicated that the available materials should be modified and hence improvised in order to suit the effective implementation of inclusive learning in schools.

#### 4.16 The number of teachers trained to handle SNE in the schools.

In order to investigate the implementation of the curriculum, the study sought to investigate the number of teachers trained in handling SNE in the inclusive set-up. The results were tabulated as follows,

Table 4.27

The number of teachers trained to handle SNE in the schools.

Response range	Frequency	Percentage
1-2	9	90.0
3-4	1	10.0
5-6		
Total	10	100.0

The response confirmed that a high majority (90.0%) of headteachers agreed to have between one and two teachers in their institutions trained in special Education. Only a minority of (10%) of the headteachers responded to having 3-4 teachers trained in SNE in their institutions.

**Table 4.28**

**Suggestions in relation to what should be done to facilitate effective inclusive**

**learning in schools**

<b>Response</b>	<b>Frequency Percentage</b>	
Supply more SNE friendly facilities	5	50.0
Renovate the classrooms		
Create awareness	5	50.0
Make classrooms more accommodative		
<b>Total</b>	<b>10</b>	<b>100.0</b>

According to the respondents comments equal number of headteachers (50%) commented that more facilities friendly to the challenged learners should be provided. Classrooms need also to be renovated and modified to cater for learners with disabilities. This may include the structures like desks and ramps, depending on the nature of the learners' handicaps. The society need to be informed and motivated to admit the SNE children into the nearby inclusive schools.

**4.17 Headteachers' suggestions towards recruitment of SNE teachers**

In the objective (1) of the study, the researcher sought to enquire how availability of qualified SNE teachers will influence effective implementation of the inclusive learning.

The respondents gave various suggestions on how to acquire enough knowledgeable SNE tutors.

**Table 4.29**

**Headteachers' suggestions towards recruitment of SNE teachers**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Recruitment of SNE teachers to be done regularly	5	50.0
Continuous employment of trained teachers	3	30.0
In servicing programmes for teachers already trained In other cadres of teaching regularly	2	20.0
<b>Total</b>	<b>10</b>	<b>100.0</b>

A fairly good percentage of the headteachers indicated that there should be regular recruitment and training of teachers enough to handle SNE. However, (30%) of the headteachers responded that there should be regular employment of the teachers who have sponsored themselves to train in special Education and have graduated but have not been employed by the government. A low percentage (20%) indicated that in order to acquire equilibrium in the SNE teaching force, there should be continuous in-servicing of the teachers in the field but trained to handle other cadres of learners, but now to be retrained to handle SNE learners in the inclusive set up.

**Table 4.30**

**The community Support as suggested by the Headteachers**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
To provide the necessary basic amenities	9	90.0
Promote awareness and facilities handling SNEs	1	10.0
<b>Total</b>	<b>10</b>	<b>100.0</b>

According to the objective (2) of the research support services in the inclusive schools set-up will go a long way in assisting the inclusion of SNE's. Majority of the headteachers (90.0%) indicated that the parents should be involved in the provision of basic amenities in order to ensure effective implementation of inclusive learning. The other (10%) of the headteacher also suggested that the parents and entire community should be involved in promoting awareness, and handling of challenged children hence ensure that they are enrolled in the primary school's set-up.

**4.18 The Headteachers' comments on how the SNE teachers should be involved.**

According to the study, research question 6 was to investigate the extent to which teachers being the curriculum implementers should be involved.

**Table 4.31**

**The Headteachers' comments on how the SNE teachers should be involved.**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Motivate the teachers for optimal delivery	4	40.0
professional guidance	4	40.0
Improvisation of materials and equipments to fit SNE	2	20.0
<b>Total</b>	<b>10</b>	<b>100.0</b>

According to the respondents, (40.0%) of the headteachers were for the idea that teachers handling SNE need to be motivated in order to attain maximum output. This may also encourage more teachers to train in the special Education courses. Of the remaining headteachers, (40.0%), indicated that the teachers needed to be given professional guidance on how to handle SNE learners in the inclusive setup. The remaining (20%) of the headteacher respondents indicated that the implementers should engage in the improvisation of the materials and equipments to promote SNE in the inclusive schools set-up.

**Table 4.32**

**Suggestions on what should be done to create awareness of inclusive learning**

<b>Response</b>	<b>Frequency Percentage</b>	
Organizing public barazas	7	70.0
Create awareness through creating charts, posters, billboards		10.0
Seminars	1	10.0
Sensitizing all stakeholders on inclusive learning		10.0
<b>Total</b>	<b>10</b>	<b>100.0</b>

1

According to the research question (2) of the study the researcher was investigating the support services which could promote effective implementation of inclusive learning. Majority (70.0%) of the respondents indicated that educating the community through public barazas will be very effective in encouraging the community on how to treat the specially challenged children. This will also encourage the parents who leave their handicapped children chained at home to embrace taking them to primary schools where they will learn through the inclusive set-up

This will also help to demystify some traditional myths and beliefs which make parents fear to expose their challenged children. A small percentage of the respondents (10%) indicated awareness should also be created through advertisement using charts, posters and billboards erected in different public areas. Others (10%) each indicated that seminars and sensitizing stakeholders on

inclusive education.

#### 4.19 Researchers' observations on the availability of facilities

The researcher made her personal observation on the availability of facilities to create a barrier free environment in the public schools visited in the study area.

The findings were tabulated as follows;

**Table 4.33**

#### Researchers' observations on the availability of facilities

Facility	Available		Not available		State/ functionality			
	F	0/0	F	0/0	Adequate		Inadequate	
					F	0/0	F	0/0
Adapted Toilets	3	30	7	70.0				
Ramps on doorways	2	20.0	8	80.0				
Adaptive desks	7	70	3	30.0	7	70.0	3	30.0
Walkers/Crutches	1	10.0	9	90.0				
Spacious classrooms	8	80.0	2	20.0				
Wheel chairs	0		10	100.0	-			
Swings	7	70.0	3	30.0	-			

From the table above, the researcher made observations on the availability and functionality of various facilities that create a barrier free environment and cater for the SNE learners' mobility in public schools, in Kikuyu district.

In an effort to identify the availability of assistive devices and support services,

(objective 2), the researcher in her observation tried to identify the availability of walkers/clutches available in the schools. From the result tabulated in the table above, (90%) of the schools did not have assistive devices which could help the SNE physically challenged learners in walking. A small number of schools (10%) facilitate the physically challenged learners enrolled with the assistive devices. It was clear that inclusive learning was discouraged by lack of assistive devices.

A high percentage (70%) of the visited schools had adaptive desks that were in proper and functional state with only a smaller number of the schools (30%) that lacked adaptive desks. This did not pose a major problem since even the available desks were renovated to sort the SNE learners' mobility. The researcher also sought to investigate if the available toilets were adaptive to the SNE learners. From the findings only a small number of schools had the available toilets adaptive to SNE learners. This posed a great challenge for the adaption of SNE learners into an inclusive school set-up.

Majority of schools visited (80%) lacked ramps which are expected to facilitate the movement of SNE learners. This may pose a challenge to movement hence discourage the enrolment of physically challenged learners. This tried to answer research question 3 which was to identify the availability of resources which influenced implementation of inclusive learning. This shows that mobility of SNE learners was hindered and is discouraging to SNE learners' enrolment.

Research objective 3 of the study tried to investigate the availability of teaching and learning resources required for effective implementation of IE in the public

primary schools in Kikuyu district, Kiambu County, Central Kenya. From the results tabulated above, majority (80%) of the studied schools had ample and spacious classrooms favourable for the introduction of IE. Only a small minority (20%) of the schools did not have spacious classrooms which would encourage the introduction of effective inclusive Education. This enabled easier mobility of SNE learners thus does not pose a major challenge. It is expected to encourage more SNE learners in these schools.

#### **4.20 Researchers' observation on the availability of teaching and learning materials**

The research question (4) sought to investigate to what extent the availability of teaching and learning resources influence implementation of inclusive education in public schools. To enhance learning and retention, learning and teaching materials need to be availed in any school set-up. The researcher on her observation sought to identify the availability of teaching and learning materials in public primary schools, in Kikuyu district. The findings were tabulated as below;

**Table 4.34**

**Researchers' observation on the availability of teaching and learning materials**

	Available		Not Available		state/functionality			
	F	%	F	%	Adequate		Inadequate	
<b>Resources</b>	F	0/0	F	0/0	F	0/0	F	%
Counting abacus	5	50.0	5	50.0				
Shape/texture of Matching board	1	10.0	9	90.0				
Shapes and colour Blocks	2	20.0	8	80.0				
Clock face models	10	100.0	-		7	70.0	3	30.0
Wooden television								
Sign language manual				10	100.0	-		
Lacing/button frames	3	30.0	7	70.0		10.0	9	90.0
Threading bead and number sets	4	40.0	6	60.0	2	20.0	8	80.0

Effective implementation and use of Abacus as teaching aids in primary schools helps in the development of learners' perceptual motor and sensorimotor skills. The results indicated that half of the schools (50%) encouraged the use of Abacus while the other half did not have them. The findings also showed that none of the available abacus in the schools were in proper working condition hence they hinder effective and efficient implementation of inclusive learning.

Teaching aids are motivating, fosters learning process and facilitates retention of knowledge and insights. Research objective (4) tried to investigate the availability and adequacy of shape/ texture matching boards and shapes /colour blocks within the inclusive schools' set-up. Majority of the visited schools (80%) and (90%) indicated absence and inadequacy of both shape/texture matching boards and shapes / colour blocks respectively.

The researcher requested teacher respondents to indicate the various facilities and teaching/learning materials available in their schools to assist in the implementation of inclusive learning.

#### **4.21 The presence of Water points**

Water being a precious commodity required for a smooth survival of human kind, it's a necessity in the inclusive school set-up. The researcher sought to identify its availability in public primary schools in Kikuyu District.

**Table 4.35**  
**The presence of Water points**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Available Not	7	70.0
available		30.0
<b>Total</b>	<b>10</b>	<b>100.0</b>
	3	

Majority of the schools (70.0%) had installed water reservoirs and systems. This is to ensure support of and ease in activities which are carried out within the school. Only in some few schools (30%) where water systems have not been put in place.

**Table 4.36**

**Availability of adequate Textbooks**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Appropriate	8	80.0
Inappropriate		20.0
<b>Total</b>	<b>10</b>	<b>100.0</b>

Textbooks form one very important part of the teaching/learning resources (objective 3). However, in majority of schools (80%) appropriate textbooks are available; hence this encourages and facilitates effective implementation of IE.

**4.22 Availability of Blackboards**

Blackboards and whiteboards forms an integral part of teaching/learning resources in every institution of learning

**Table 4.37**

**Availability of Blackboards**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Available Not	10	100.0
available	0	0.0
<b>Total</b>	<b>10</b>	<b>100.0</b>

In all the schools (100%) visited for the research study, this very important teaching/learning aid was available. This means it will facilitate effective implementation of IE to all the learners in the school set-up

**4.23 Availability of Braille**

Braille is very important equipment in the learning and communication of blind learners.

However, other forms of handicaps may not require the Braille machine. **Table 4.38**

**Availability of Braille**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Available Not	3	30.0
available	7	70.0
<b>Total</b>	<b>10</b>	<b>100.0</b>

Majority of the schools (70%) did not have the Braille machine while in (30%) of the schools the Braille were available. This may translate that among the challenged children, very few schooling facilities may support the effective

learning of the Blind children. Research Question 5 tried to investigate the materials and curriculum that could influence the implementation of IE in the schools.

#### 4.24 Presence of Toys in the schools

For young learners to develop they must be involved in playing. The toys should be save and help in the development of their body and mind

**Table 4.39**

#### **Presence of Toys in the schools**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Available Not	4	40.
Available	6	60
<b>Total</b>	<b>10</b>	<b>100.0</b>

Objective (3) tried to identify the availability of appropriate learning aids which encourages effective learning. The researcher observed that among the schools in Kikuyu District (60%) of the schools lacked appropriate toys which could enhance inclusive learning with only (40%) of the schools had enough and appropriate toys.

#### 4.25 Availability of hearing aids

Inclusive education policy encourages Education for all in an inclusive set-up learners with Hearing disorder should also benefit from inclusive notch in effective implementation of inclusive education.

**Table 4.40**

**Availability of hearing aids**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Available Not	2	20.0
Available		80.0
<b>Total</b>	<b>10</b>	<b>100.0</b>
	8	

Majority of the schools (80%) did not have Hearing aids for Hearing impaired learners. Only a small percentage of the schools (20%) had the hearing aids required for effective hearing for hearing impaired learners. This may discourage the enrolment and retention of auditory impaired learners.

**4.26 Speech aids**

One of the integral methods of communication is through speech. Some learners with speech difficulties may have difficulties in communication and also learning. The researcher investigated the schools which has speech aids to ensure effective implementation of inclusive learning.

**Table 4.41**

**Speech aids**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Available	1	10.0
Not available	9	90.0
<b>Total</b>	<b>10</b>	<b>100.0</b>

Only 10% of the schools has speech aids. This was to answer research question 3 on the availability of efficient learning and teaching aids required for effective implementation of IE. The government and the entire stake holders need also to be encouraged to participate in the provision of suitable materials in order to enhance the efficiency of inclusive learning in public primary schools in Kikuyu district, Kiambu County, Kenya.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter provides a brief summary of the study, conclusion and recommendations of the study. The chapter also offers suggestions for further study.

#### **5.2 Summary of the study**

The purpose of this study was to indentify the school based factors influencing implementation of inclusive education in public primary schools in Kikuyu District, Kiambu County, Kenya. This was done by examining various variables that may affect the effective implementation of inclusive learning in public primary schools. These variables included the qualifications of teachers in these schools, availability of teaching/learning resources, methods of instruction as well as the curriculum content used in the inclusive schools set up, which formed the research objectives.

#### **5.3 Summary of key findings**

To help realize the research objectives, five research questions were formulated; On the first objective, the researcher sought to investigate the influence of the teachers' qualifications in the effective implementation of inclusive Education (IE) in the primary schools.

The study established that the majority of the Headteachers (70.0%) hold is ATS IV level of qualification while ten percent are trained Diploma and Bachelor of Education Degree holders. Among the teachers respondents the majorities (45.7%) are trained Diploma in Education level while PI certificate holders stand at (32.7%). Bachelor of Education graduates stand at (21.7%) of the respondents. Among these trained teacher respondents (54.3%) are not trained in any field related to special education. Only (43.5%) of the respondents has basic training in special Education. This may imply that there is a gap when it comes to availability of experts who can handle inclusive Education professionally and efficiently. Training of teachers in skills to handle SNE need to be emphasized.

The respondents suggested various areas of special Education that should be emphasized during training and retraining. These include learning/mental disabilities (47.8%), physical impairment (26.1%), Hearing/visual impaired (15.2%) as well as Emotional and Behavioural impairment (10.9%). This will facilitate the efforts to ensure efficient inclusive Education in Kenya.

On the second objective the researcher wanted to establish the available support services required in the inclusive school set-up. Among the headteachers respondents' comments, lack of funds at (50%) was one of the major challenges while lack of awareness programmes (40%) and poor materials (10%) followed. Majority (70%) of the respondents indicated that the available structures, desks,

classrooms and toilets have not been renovated to attain disability friendly status in the inclusive schools. Lack of instructional materials (60%) to handle and train SNE's respondents. This shows that the efficient implementation has been compromised. This may require the Kenyan government, non-governmental organizations as well as well wishers to help in funding the renovation.

The third objective required the researcher to investigate establishment of teaching and learning resources required for the effective implementation of inclusive Education. However, (60%) of the respondents quoted inadequate availability of teaching/learning resources and materials. This was also hammered by the researchers' observations in the visited institutions where 90% of the institutions the teaching/learning materials were inadequate and inappropriate. The respondents suggested modalities which could ensure most of the materials are available in an inclusive school set-up. Majority (70%) of the respondents indicated that within the schools, the available materials should be renovated and modified in order to suit SNE learners. The other (30%) of the respondents indicated that the Kenya Government should set funding through programmes like FPE which may purchase SNE friendly materials and equipments and thus promote inclusive learning.

Objective four required to have an assessment of the methods of instructions necessary for the implementation of inclusive learning program. In order to succeed, the implementers need to be equipped with the necessary materials and

also skills to handle and train SNE learners. This was quoted by (90%), while all respondents(100%) suggested that more special Education teachers should be recruited and trained. The current regular teachers need to be trained through inservice (INSET) programmes so as to enrich the elements required for a successful and efficient inclusive Education.

The last objective (5) was to identify the nature of curriculum to be used by the inclusive Education set up owing to the innovations in the policy; curriculum experts at the K.I.E and other stake holders have come up with a full fledged Department of Special Education which has been mandated to organize and structure SNE program. Institutions of Higher learning have also in conjunction with K.I.E been mandated to train SNE teachers with new courses friendly to the policy of inclusive learning.

Higher education and training for teachers have been used and viewed as a strategy for stimulating the generation of desired structures and maximizing output for development dimensions.

#### **5.4 Conclusions**

The achieved its objectives in investigating school based factors influencing education in public primary schools, in Lari district. The factors included, the qualification of teachers, availability of support services, physical facilities, learning/teaching materials as well as the appropriate methods necessary in the

implementation of Inclusive Education. The findings led to the conclusion that the teachers in the inclusive schools needs to be encouraged and motivated to train in techniques of handling SNE learners. Secondly, the teaching/learning materials were inadequate and in other schools unavailable. This was a challenge to special needs learners which also discourages them from school.

The OoK should need to allocate more funds to schools in order to facilitate the construction and renovations in inclusive education schools, buy assistive devices as well as motivate SNE teachers. The findings also revealed that most of the teachers lack proper skills and knowledge to handle SNE learners. The MoE together with KISE should organize for in-service programmes to retrain and enlighten SNE teachers. The study also revealed that support services are inadequate to support the programme proper coordination is also lacking. However, the level of financing SNE in public primary schools is inadequate. This has led to poor infrastructure, inadequate teaching and learning facilities thus influencing effective and efficient implementation of inclusive Education.

### **5.5 Recommendations of the study**

In the light of the findings, the following recommendations were made,

1. The MoE should consider increasing the provision of teaching and learning resources in public primary schools to ensure that pupils with special needs are adequately and appropriately catered for. This will help in the provision of

functional and assistive devices to facilitate the teaching and learning in the inclusive schools.

11. The government should consider immediate restructuring of physical environment in schools aiming at making them barrier free and disability friendly. This will ease accessibility to educational opportunities for learners with special needs.
111. The government through the T.S.C. should recruit more teachers qualified in SNE to teach in the inclusive Education schools. The MoE should also mobilize all teachers in public primary schools to undergo INSET training, seminars, workshops and symposia. This will constantly offer professional development which will improve the handling skills, instructional methodologies and competence in providing supportive devices to meet the special needs of all learners.
- iv. The government should endeavour to source funds from donors, well wishers and NGO's to diversify provision of appropriate facilities. This will supplement funds released from the government kitty which is not sufficient to put in place adapted facilities, appropriate learning resources and functional devices for special needs in Education.
- v. The KISE and all other educational stakeholders need to organize immediate awareness campaigns across the country sensitizing people on the issues of the rights of children and empowering the challenged and disadvantaged children. This can be done by inviting role models of specially challenged

people who have succeeded in various fields, technocrats and experts in special needs education.

vi. In a bid to constantly produce teachers with SNE knowledge, the government should restructure teacher education in primary schools Teachers Training Colleges so as to include SNE curriculum courses. The MoE should also organize a pilot study in some districts, sponsor primary teachers to attend inset training and later evaluate the importance.

### **5.5 Suggestions for further study**

The researcher proposes further research in the following areas,

1. Further study should also be carried out in order to investigate the impacts of inclusive learning on learners' performance in primary schools.
2. To establish whether all the special needs of children are catered for, their talents nurtured and developed to the higher institutional levels of Education.
111. An evaluation of how government funding is affecting the implementation of inclusive learning in public schools.

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APPENDIX I INTRODUCTORY

LETTER TO THE HEAD TEACHER

University of Nairobi

P.O. Box 92, Kikuyu.

The Head Teacher

..... School

P.O. Box .....

Kikuyu.

Dear Sir/ Madam,

Re: Permission to collect data in your school

I am a postgraduate student in the University of Nairobi, pursuing degree in curriculum studies. Am researching on school based factors influencing the implementation of inclusive education in the primary schools in Kikuyu district. Your school has been selected to participate in the research. You are requested to respond to the questionnaire items as honestly as possible and to the best of your knowledge. This research is purely for academic purposes and the information will not be used anywhere else beyond the study.

Yours Faithfully,

Salome Wanjiru Wachira

## APPENDIX II

### QUESTIONNAIRE FOR TEACHERS

This questionnaire is aimed at gathering information on the school based factors influencing the implementation of inclusive education in public primary schools in Kikuyu District. The questionnaire is divided into 2 sections. Section I requires your demographic information. Section II is divided into sub-sections soliciting information on the implementation of inclusive education.

#### Section 1: Demographic information of teachers

1. What is your sex Male ( ) Female ( )
2. What is your age bracket Below 20 ( ) 21 - 30 ( ) 31 - 40 ( ) Over 41 ( )
3. How long have you been a teacher? \_\_\_\_\_years.
4. What is your highest academic qualification KCSE  Degree ( ) Masters Degree ( )
5. What is your professional qualification P 1/2/3 ( ) Diploma ( )

#### Section 2

Please answer these questions as precisely as possible.

##### Part A: Physical facilities

6. Does your school have classes specifically renovated to accommodate pupils with special educational needs? Yes ( ) No ( )
7. Are the pupils able to access the classrooms with ease? Yes ( ) No ( )
8. Has the school provided desks specifically designed for use by pupils with special educational needs? Yes ( ) No ( )

9. Have the toilets been renovated to cater for special educational needs?

Yes ( )

No ( )

**Part B: Teaching and learning materials**

10. Explain the challenges you face in relation to teaching materials for SNE

11. (a) Does the school provide teaching materials specifically designed for children with special needs in education? Yes ( ) No( )

Please specify \_\_\_\_\_

(b) How would you rate your school in terms of availability and adequacy of teaching and learning materials for children with special needs?

Poorly equipped ( ) Averagely equipped ( ) Well equipped ( )

**Part C: Teachers qualifications and training needs**

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

13. What professional qualifications do you possess **In** relation to special Education?

(a) Certificate level ( ) (b) Diploma level ( ) (c) Degree level ( ) (c)

Any other please specify \_\_\_\_\_

14. What areas of special education do you feel need to be trained in? Please state them. \_\_\_\_\_

15. How many pupils with special needs are enrolled in your class? \_\_\_\_\_

16. (a) From your knowledge do you know any children with special needs who would be enrolled in your school for one reason or another and they are not enrolled?

Yes ( ) No ( )

(b) If yes, state the reasons why you think they are not enrolled

#### Part D: Curriculum for SNE learner's

17. What are the main problems depicted by children with special needs in relation to teaching/learning on:

- (i) Reading
- (ii) Writing
- (iii) Listening
- (iv) Response
- (v) Others

18. (a) In your own opinion, can learners with special needs cope with the present primary school curriculum? Yes ( ) No ( )

19. (b) How relevant is the present curriculum to learners with special needs in inclusive schools? Very relevant ( ) Relevant ( ) Fairly relevant ( ) Not relevant ( )

#### Part E: Suggestions on implementation of inclusive education

20. Suggest two ways through which inclusive education can be enhanced in your school. \_\_\_\_\_ c

## APPENDIX III QUESTIONNAIRE

### FOR HEAD TEACHERS

This questionnaire is aimed at gathering information on the challenges facing the implementation of inclusive education in public primary schools in Kikuyu district. The questionnaire is divided into two sections for section one contains questions soliciting demographic information. Section two is divided into five parts each containing questions aimed at soliciting information to answer the research questions and therefore achieve the objectives of the study.

#### Section I

##### Demographic information of the head teachers

1. What is your gender?                      Male ( )              Female ( )
2. What is your age bracket?  
Below 25 ( )              26 - 30 ( ) 31 - 40 ( ) Over 41 ( )
3. How long have you been a head teacher? years
4. What is your highest academic qualifications?  
K.C.S.E. ( ) 'O'level ( ) 'A'level ( ) Graduate ( )
5. Indicate your highest professional qualifications  
PI/2/3 ( ) SI( ) ATS ( ) Diploma ( ) PGDE ( )  
Graduate Teacher ( ) M Ed ( )  
Any other specify

## Section n

This section requires you to answer the questions provided in relation to issues related to the implementation of inclusive education in the school. Please answer the questions as truthfully as possible.

### Part A: Physical facilities

6. Does your school have enough classes to cater for all the enrolled pupils?

Yes ( ) No ( )

7a) Have the classrooms and other buildings been renovated for easy access by

learners with special educational needs? Yes ( ) No ( )

b. Please explain

8. Have desks been renovated for use by the learners with special educational need:

Yes ( ) No ( )

9. Are there toilets specifically designed for learners with special educational

needs? Yes ( ) No ( )

### Part B: Teaching and learning materials

10 Are there teaching/learning materialist for use by teachers in the provision of special education? Yes ( ) No ( )

11. Has your school provided reading materials for those learners with special educational needs? Yes ( ) No ( )

12. What measures do you suggest that suggest that should be put in place ensure that those pupils special needs access learning materials with ease?

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**Part C: Teachers' Qualifications**

13. Have the teachers been trained in handling children with special needs?

Yes ( )

No ( )

14. Have you requested for teachers trained in special needs education?

Yes ( )

No ( )

15. How many of the teachers in your school are trained in special education?

**Part D: Suggestions on the implementation of inclusive educational 17.**

What suggestions do you have in relation to:

i) Facilities for inclusive education?

i) Teaching and learning materials

iii) Preparation of schools in readiness for higher enrollment of children with special needs with regard to:

a) Retraining of teachers

b) Recruitment of more teachers

c) Employment of specially trained teachers

iv) Support services

What support services do you suggest would be provided to ease the implementation of inclusive education?

a) By the ministry of Education, Science and Technology

b) By the community

c) By teacher

Creation of awareness on inclusive education. What do you suggest should be done to create awareness on inclusive education?

**Thank you for your participation**

**APPENDIX IV**  
**OBSERVATION SCHEDULE**

The following were areas which the researcher observed on the ground. This is with the aim to establish the availability of barrier-free facilities in the public primary schools to facilitate effective inclusive education.

Facility	!Available	Not available	State/ Functionality
<b>Barrier- Free environment</b>			
Adapted Toilets			
Ramps on doorways			
Adapted desks			
Walkers / crutches			
Spacious classrooms			
Wheel chairs			
Swings			
<b>Teaching and Learning materials</b>			
Counting abacus			
Shape/texture matching board			
Shapes and colour blocks			
Clock face models			
Wooden television			
Sign language manual			
Lacing/button frames			
Threading/bead number sets			



APPENDIX VI LETTER OF  
AUTHORIZATION

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 154-020-221347L  
)-41349 284)20-310871, 22-3123,  
2219420 f,ax: 254.020.318245, 318249  
When replying please quote  
Secret:ry@ACST1.co.ke

P.O. Box 30623-00100  
NAIROBI-KENYA Website:  
[www.ncst.go.ke](http://www.ncst.go.ke)

Our Ref: NCST/RCH/14/012/505

Date: 14<sup>th</sup> May 2012

Salome Wanjiru Wachira  
University of Nairobi  
P.O.Box 30197-00100  
Nairobi.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*School based factors influencing implementation of inclusive education in public primary schools in Kikuyu District, Kenya*," I am pleased to inform you that you have been authorized to undertake research in Kikuyu District for a period ending 30<sup>th</sup> September, 2012.

You are advised to report to the District Commissioner and the District Education Officer, Kikuyu District before embarking on the research project.

On completion of the research, you are expected to submit two hard copies and one soft copy in pdf of the research report/thesis to our office . . . "

Dn.M.K.~

DEPUTY COUNCIL SECRETARY

Copy to:

The District Commissioner The  
District Education Officer  
Kikuyu District.

The National Council for

Science and Technology  
P.O. Box 30623-00100  
Nairobi

the President of Kenya