ANALYSIS OF FACTORS AFFECTING IMPLEMENTATION OF INCLUSIVE EDUCATION IN REGULAR SECONDARY SCHOOLS IN KILIFI COUNTY, KENYA

BY

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E55/CE/23785/2012

A RESEARCH THESIS SUBMITTED TO THE SCHOOL OF EDUCATION IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF EDUCATION (SPECIAL NEEDS EDUCATION) IN THE SCHOOL OF EDUCATION OF KENYATTA UNIVERSITY.

NOVEMBER 2018
DECLARATION

I declare that this research thesis is my original work and has not been presented in any other university/institution for consideration of any other certification. This research thesis has been complimented by referenced sources duly acknowledged. Where text data (including spoken words), graphics, pictures or tables have been borrowed from other sources, including the internet, these are properly accredited and references cited using current APA system and in accordance with anti-plagiarism regulations.

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DEDICATION

I dedicate this work to my family. Special regards to my beloved wife Alice and sons, Wallace and Kennedy who stood by me and gave me support throughout the writing of this thesis and for the encouragement they gave me to take my studies seriously.
ACKNOWLEDGEMENT

I would like to acknowledge the following people for the assistance they accorded me during writing of this research thesis. My supervisors Dr Chomba Wamunyi and Dr. Jessina Muthee who guided me through all the chapters of this work. This thesis writing would not have materialized without their input. All lecturers in the department of special needs who prepared me to be able to research in this area are also highly acknowledged.
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<td>ADA</td>
<td>American with Disability Act</td>
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<tr>
<td>ADB</td>
<td>African Development Bank</td>
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<tr>
<td>EFA</td>
<td>Education for All</td>
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<tr>
<td>GoK</td>
<td>Government of Kenya</td>
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<tr>
<td>KISE</td>
<td>Kenya Institute of Special Education</td>
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<tr>
<td>LRE</td>
<td>Least Restrictive Environment</td>
</tr>
<tr>
<td>MoE</td>
<td>Ministry of Education</td>
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<td>MoEST</td>
<td>Ministry of Education Science and Technology</td>
</tr>
<tr>
<td>PWD</td>
<td>Persons with Disabilities</td>
</tr>
<tr>
<td>RoK</td>
<td>Republic of Kenya</td>
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<tr>
<td>SEN</td>
<td>Special Education Needs</td>
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<td>SNE</td>
<td>Special Needs Education</td>
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<td>UNESCO</td>
<td>United Nation Educational Scientific and Cultural Organization</td>
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<td>UPE</td>
<td>Universal Primary Education</td>
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<td>USC</td>
<td>United State Code</td>
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ABSTRACT

This study was aimed at carrying out a survey to analyse the factors affecting implementation of inclusive education in regular secondary schools in Kilifi County, Kenya. It was prompted by a previous programme under MoE which trained teachers from selected schools across the country. These teachers were trained to equip them with skills and knowledge to facilitate inclusive education in their schools. However, a general survey has shown that inclusive education has not taken off in Kilifi County. The purpose of this study was therefore to analyse factors affecting implementation of inclusive education in regular secondary schools in Kilifi County. The study came up with four objectives. The first was to establish environmental modification for learners with special needs in the selected schools, the second was to determine the type and adequacy of teaching/learning materials for learners with SNE in these schools, thirdly to investigate challenges teachers were likely to face if required to implement inclusive education and the last was to find out the opinion of teachers and students towards including learners with special needs in their schools. The study was guided by ecological system theory by Urie Bronfenbrenner (1992). It adopted a descriptive survey design whereby a survey in regular secondary schools in Kilifi County was carried out. The target population included 4 principals, 88 teachers and 1960 students from four schools. The sample size was 4 principals, 24 teachers, and 392 students. Purposive sampling was used to select schools and their principals. Stratified sampling was used to select students and simple random sampling was used to select teachers and students within a strata. The instruments used were questionnaires, interviews and observation checklist. Validity of instruments was achieved through consultation with supervisors and through piloting. Piloting allowed improvement of the tools before actual data collection. Quantitative data was analyzed using frequency distribution tables, percentages and means while qualitative data was analysed thematically. Analysed data was presented using tables, bar charts and pie charts. The analysed data indicated that none of the four schools under study was prepared for inclusive education. Teaching/learning resources were inadequate, environment was not barrier free and opinion of students towards inclusive education was negative to an extent. The study recommended teachers to be trained in special needs and students in schools to be sensitized on plight of learners with special needs in order for them to embrace inclusive education. The government should also provide funds or resources to facilitate inclusive education.
CHAPTER ONE
INTRODUCTION AND CONTEXT/BACKGROUND TO THE STUDY

1.0 Introduction

This chapter gives the general background to the study, statement of the problem, purpose of the study, objectives, and research questions emanating from objectives, significance of the study, limitations and delimitations, assumptions, theoretical and conceptual framework. It ends in giving conceptualized definition of terms.

1.1 Background to the Study

Inclusive education is the philosophy of ensuring that schools, centers of learning and educational systems are open to all children. This enables the learners to be included in all aspects of school life. It also means identifying, reducing or removing barriers within and around the school that may hinder learning. For this to happen teachers, schools and systems need to modify the physical and social environment so that they can fully accommodate the diversity of learning needs that learners may present. In the field of education, inclusion involves a process of reforming and restructuring of the school as a whole with the aim of ensuring that all learners can have a whole range of educational and social opportunities offered by the school (Mitler, 2009). ‘All people’ means no one will be discriminated based on whatever parameters that define human beings.

Stainback and Stainback (1996) posited that an inclusive school was a place where everyone belonged, was accepted and supported by his or her peers and other members of the school community. It is a school for all. Globally there have been enormous changes
in public schools since the 1980s. Hallahan and Kauffman (1994) observed that one of the greatest changes is in the amount of diversity in the classroom. Teachers are required to deal with more and more diversity of learners in the classroom. The movement towards inclusive education in the world over is perhaps the greatest factor that has had the greatest impact on this diversity.

Inclusive education is aimed at looking into the rights of children and how the education system can be transformed so as to meet needs of diverse groups of learners. That is, embraces the need to create equal opportunities for children with special needs including disabilities to access education in mainstream environment. It is based on the theory of strengthening the capacity of education systems to provide equitable, high quality and accessible education to all children (UNESCO, 2009). The Salamanca statement and framework for action on special needs education of 1994 reaffirmed the right to education of every individual as enshrined in the 1948 universal declaration of human rights and renewed pledge made by the world community at the 1990 world conference on Education For All (EFA) to ensure the rights for all individuals regardless of individuals differences are upheld.

According to UNESCO (1994) education is recognized as a fundamental right for every child and an opportunity to achieve and maintain acceptable level of learning. Every society should strive to ensure this right is not denied any one by reason of being exceptional.
Engelbretch and Booyson (1999) asserted that an inclusive philosophy is central to the education policies of large developed and developing countries and has emerged as an important aspect of international discussion about how best to respond to learners who experience difficulties in learning institutions. Kenya as a developing country should not be left behind in pursuing such a philosophy.

UNESCO (2001) contends that inclusive education takes the Education for All (EFA) agenda forward. Despite the internalization of the philosophy of inclusive education for a range of historical, cultural, social and financial reasons its implementation has been uneven across the world (UNESCO, 1994). For children with SNE to participate fully in the regular curriculum and achieve academic and social success, educational systems have to make provision for assistive devices and support services and provide the appropriate differentiated curriculum and differentiated assessment methods (UNESCO, 1994), The 1989 convention on the rights of the child acknowledged the special needs of children with disabilities and stated that these children must be guaranteed ‘effective access to education in a manner conducive to achieving the fullest possible social integration and individual development. Inclusive education can assist in pushing this agenda forward.

Education is an important investment that any country must make. Enhancing accessibility to education services is significant to the development of a nation (World Bank, 1993). It is through education that the society can be positively changed to embrace such values as gender equality and inclusiveness, integrity in managing resources, healthy living and other social economic aspects. Education also catalyzes
freedom and democracy within and beyond boarders as an agent of international peace and security (UNICEF, 2000).

The South African Government commitment to EFA goal lead to the development of a policy on inclusive education and training. This policy is entitled, Education white paper 6: Special Needs Education: Building an Inclusive Education and Training System (Department of Education, 2001a).

In Colombia community participation helped change school schedule to suit local requirements (Lugaz, 2008). The Dominican Republic made it compulsory for all stakeholders to be involved in the planning and implementation of inclusive education programs (Da Costa, 2008).

In Zimbabwe there is no specific legislation for inclusive education as shown by Bothma, (2010). However different government policy issues in this country have proved the intention to practice inclusive education for example Zimbabwe Education Act (Education Act, 1996).

According to the Ministry of Education (MOE), (2008) national report on development of education, it is observed that Kenya has embraced inclusive education that provides quality education to all children, youth and adults through targeted support to specific or vulnerable groups moving away from traditional view of inclusive education as providing education to children with special needs only. The report further reveals that in its commitment to international convention and agreements the government of Kenya is committed to providing quality education with particular emphasis to marginalized
groups especially girl child and those with special needs. Following this ratification, the Kenya government has domesticated the same through legislative and policy pronouncements. The legislation includes the constitution of Kenya (2010) among others. In the year 2011 the Ministry of Education using personnel from Kenya Institute of Special Education (KISE) and funding from the African Development Bank (ADB) sponsored teachers from selected secondary schools for a course in inclusive education. The teachers were trained in order to facilitate inclusive education in their respective schools (KISE, 2011). In Kilifi County however, there is little evidence of inclusive education even after teachers undertook this course. This is what prompted to undertake this study to find out challenges of effecting inclusive education in the schools under study.

1.2 Statement of the Problem

Learners with special needs and disabilities are found at all levels of education and training. The new trend in providing education to learners with special needs is through inclusive education practice. Educating learners with special needs in segregated schools has led to various problems to this cohort of learners. Stigmatisation, low transition to higher levels of education and discrimination in job placement are some of the challenges this group encounter. According to Westwood (1997) peers tend to accept children with disability more when they better understand the nature of disability. This is made possible by embracing inclusive education by all. Therefore, all teachers and other personnel working with children with special needs and disabilities should be trained appropriately (KISE, 2011). This will enable them embrace inclusive education with ease.
The Ministry of Education in conjunction with African development bank and using trainers from KISE designed a program to equip teachers from selected secondary schools with necessary knowledge, skills and attitudes to enable them support learners with special needs and disabilities in an inclusive setting. The course was designed to take 9 weeks. The teachers were trained and were expected to support inclusive education back in their schools by applying basic skills they learnt in teaching of learners with special needs and disabilities (KISE, 2011). The most oblivious indicator of inclusive education is presence of learners with disabilities in a regular school. However a general observation has shown that there are few or no learners with special needs in regular secondary schools in Kilifi County. This in spite of teachers undergoing the aforementioned training. There is also limited data on the hindrances to inclusive education in Kilifi County. This in turn has denied many learners with SNE access to education given that the special schools in this county cannot accommodate all of them. There are also learners who would feel segregated in special schools but would gladly embrace education in a regular school setup. In particular those with mild disabilities may prefer inclusive education to special schools. It is in this context that the proposed study was conceptualized to analyze factors affecting implementation of inclusive education in the selected schools.

1.3 Purpose of the Study

The purpose of this study was to analyze the factors affecting implementation of inclusive education in regular secondary schools in Kilifi County, Kenya.
1.4 Objectives of the Study

i. To establish the type of environmental modifications available to facilitate inclusion of learners with special needs in regular secondary schools in Kilifi County.

ii. To determine the type of teaching and learning resources available for learners with special needs in regular secondary schools in Kilifi County.

iii. To investigate challenges teachers are likely to face when implementing inclusive education in regular secondary schools in Kilifi County.

iv. To find out the opinion of teachers and students towards inclusive education in regular secondary schools in Kilifi County.

1.5 Research Questions

i. What environmental modifications are available to facilitate inclusion of learners with special needs in regular secondary schools in Kilifi County?

ii. What type of teaching and learning resources are available for learners with special needs in regular secondary schools in Kilifi County?

iii. What challenges are teachers likely to come across while implementing inclusive education in regular secondary schools in Kilifi County?

iv. What are the opinions of teachers and students towards inclusive education in regular secondary schools in Kilifi County?

1.6 Significance of the Study

The results of this study are useful in several ways. First it will give an insight into what is happening on the ground after a group of teachers from selected schools were trained in inclusive education. This information will be useful to the ADB, the MoE and KISE
trainers, who financed, gave logistical support and trained teachers respectively in this program. The study will provide a ground for a cost-benefit analysis since money and time were spent and benefits anticipated. The findings will also act as a source of information and reference for future studies particularly in higher learning. To the government the results will be useful in policy formulation on inclusive education.

1.7 Limitations and Delimitations of the Study

1.7.1 Limitations

The study limited itself to a few schools in Kilifi County. For a more conclusive result, all schools which had been targeted for inclusive education in Kilifi County would be studied and this would have increased the sample size for a more reliable generalization. This was not possible due to limited time and resources. Only those teachers and students present during the session of data collection were included. Timing was when most students were likely to be in school such as in the middle of the month as opposed to the end of month when many students were likely to be sent home for school fees. The observation checklist as a tool was also limited to what was accessible to the researcher. The researcher first created a good rapport with one of the teachers in order to be able to access most premises.

1.7.2 Delimitations

The study delimited itself to Kilifi County. It also focused on four regular secondary schools within this County. The study also delimited itself to teachers, students and school principals. Parents were not included due to the much logistics that would be involved in accessing them. Most schools were avoided because the data needed would
conveniently be provided by those schools which had earlier been identified for inclusive education by the ministry of education.

**1.8 Assumptions of the Study**

The study assumed the following:

i. Each respondent will give an objective response devoid of influence by the rest.

ii. All students will understand the language level used in the questionnaire.

iii. All respondents will cooperate in an honest manner.

**1.9 Theoretical and Conceptual Framework**

**1.9.1 Theoretical Framework**

The study was based on the ecological system theory by Urie Bronfenbrenner (1992).

The ecological systems theory states that human development is influenced by different types of environmental systems. This theory helps us to understand why we may behave differently when we compare our behavior in the presence of our family and our behavior when we are in school or at work. The theory holds that we encounter different environmental systems throughout our lifespan that may influence our behavior in varying degrees. These systems are categorized as micro-system, meso-system, exo-system, macro-system and chrono-system.

**Microsystems**: This is the direct environment we have in our lives; the family, friends, classmates, teachers, neighbors and other people who have direct contact with us. The attitude of this group of people towards persons with special needs will affect opinions towards inclusive education, advocacy and sensitization of society on the plight of such
persons. Inclusion starts right from home. A micro system which nature positive attitude towards persons with special needs may advocate for inclusive education for such learners.

**Mesosystem:** Is the second level of environmental system. It involves the relationship between the Microsystems in one’s life. Example; between parent and teacher of the child, between immediate family members and neighbors among others. Relationship between parent and the child’s teacher will affect the child’s development. If the relationship is positive the two may work together to sensitize the society and advocate for the learner with special needs. This may positively promote inclusive education since the teacher and the parent are more likely to agree on best education placement for the learner.

**Exosystem:** This includes the economic, political, educational, government and religious systems which affect a person’s development. These may influence funding for provision of resources, assistive devices and environmental modification in schools to facilitate inclusive education. They may also determine the type of curriculum offered to learners with special needs.

**Macrosystem:** This is the fourth level of environmental system. It encompasses the overarching cultural beliefs and values. These can affect opinions, advocacy for learners with special needs as well as sensitization of society on the plight of persons with special needs. They can promote or reduce stigmatization of this group of persons. The end results may determine whether inclusive education succeeds or not.
**Chronosystem:** This is the fifth level which purports that in one’s lifespan, there are transitions and shifts all of which have a dimension of time. It may involve the social historical contexts that may influence a person. Example; divorce may affect not only the couple’s relationship but also their children’s behavior in future. This child’s behavior may affect his/her readiness for integration into the society.

This theory is relevant to this study since the study sort to analyse factors affecting implementation of inclusive education in selected schools. The different systems discussed in the theory will directly or indirectly impact on these factors. The interactions of the microsystems, mesosytems and chronosystems will particularly impact on opinion of society towards inclusive education. This on the other hand will determine how supportive the society will be towards learners with special needs. On the other hand exosystems will influence provision of resources which will also ensure a barrier free environment for learners with special needs.

Muyaa (2002) stated that the provision of inclusive education is a challenge for all countries pursuing a quality education system because apart from well trained and motivated teachers it also requires a large infusion of money to keep the system up to date and relevant. This challenge can be minimized if the exosystem i.e. economy, political, government and religious systems are vibrant.
1.9.2 Conceptual Framework

**Intervening Variables**
- Government policy
- Collaboration and networking
- State of curriculum
- Culture

**Independent Variables**

- **Teacher Factors**
  - Training
  - Opinion
  - Stress
  - Passion

- **Teaching resources**
  - Teaching aids
  - Support materials
  - Adapted pens
  - Adapted computers

- **Environmental modification**
  - Rumps (right gradient)
  - Guide rails
  - Adapted toilets, buses, bathrooms.

- **Community awareness**
  - Opinion towards inclusive education
  - Sensitization
  - Advocacy

**Dependent Variables**

- **Implementation of inclusive education.**
  - High inclusion of learners with special needs in regular schools.
  - High transition rates
  - More persons with SNE in the job market.

**Figure 1.1: Conceptual Framework**

*Source: Researchers own conceptualization of the research problem.*
As indicated in the diagram, for inclusive education to be realized the different systems in which the special education learner exists should work positively together to influence teacher factors such as training, opinion and passion towards inclusive education, teaching resources such as teaching aids, support and learning materials, environmental modification and support services such as assistive devices, rumps, adapted facilities among others. These are independent variables which would influence the dependent variable “implementation of inclusive education”. Other factors which are likely to affect implementation of inclusive education are such as government policy, state of curriculum and culture which form the intervening variables. It is the sum total of these factors which will determine inclusion of learners with special needs in regular schools, their transition rates to higher level of learning and their inclusion in the job market.
1.10 Operational Definition of Terms

**Analysis:** Is a process of inspecting, cleansing, transforming, and modeling data with the goal of discovering useful information, suggesting conclusion and supporting decision making concerning learners with special needs.

**Attitude:** The way you think or feel about someone or something that affects your behavior, e.g. thought or feeling towards inclusive education.

**Challenge:** Difficulties experienced by implementers of inclusive education when they teach learners with special needs in education.

**Disability:** Are physical, sensory, mental or other impairments which impacts adversely on social, economic or environmental participation of a person.

**Effectiveness:** Refers to the extent to which the set goals or objectives of an educational program are accomplished.

**Factors:** Are constituents or elements that bring about certain aspects or results as when implementing inclusive education.

**Implement:** The process of putting a decision or a plan involving learners with special needs in education into effect.

**Inclusion:** Is the realization of an application or execution of a plan, idea, model or design as in carrying out the principles and strategies stipulated in the special needs education policy in order to create equal access to quality and relevant education and training in inclusive institutions.

**Inclusive education:** Access to quality education relevant to needs of all learners
Integration: Means participation of learners with special needs in education in regular schools with their peers who are non-disabled without necessarily making changes in the curricular provision or the learning environment. Kochung (2003).

Least restrictive environment: A case where a child is segregated from normal classroom and separated from family and community the minimum possible

Opinion: A view or judgment formed about something, not necessarily based on fact or knowledge.

Regular school: A school for learners without special needs.

Special education: Any form of additional help wherever it is provided to overcome educational difficulty. (Beveridge, 1999)

Special needs: Is a general term for children who require some form of extra assistance

Support services: Refers to extra systems provided to parents and schools in helping children with special needs in education adopt to the environment and activities in order to overcome barriers to learning and development.
CHAPTER TWO
REVIEW OF RELATED LITERATURE

2.1 Introduction

The related literature reviewed in this chapter was guided by the objectives formulated for the study. The chapter started with a brief literature related to the main concepts. It then moved on to highlight already existing knowledge in relation to the study problem for each objective. The chapter also explored the research gaps by attempting to capture what was still not known about the study problem. It concluded with a summary that provided the key issues, main research gap and actual gaps that the study addressed.

2.2 Literature related to the main concepts

Integration advocated for in global recommendations such as Jomtien Declaration EFA (WCEFA, 1990), the Salamanca statement (UNESCO, 1994) and Dakar framework for Action (2000) called for education to be provided for all learners in the mainstream schools regardless of ability and disability. This in turn would avoid segregation of people on the basis of disability both in school and after school.

According to the Ministry of Education, Science and Technology (MoEST), (2003), the Government of Kenya is responding to principle of inclusive education through the ministry of education in conjunction with Kenya Institute of Curriculum Development [KICD] and Quality Assurance and Standards officers. However more funding and other resources are needed to make inclusive education succeed. In spite of these developments both within and outside Kenya, inclusive education has not succeeded in Kilifi County. This, despite ADB and MOE employing resources towards inclusive Education in the
secondary schools in this sub-county. This indicated a gap between existing theory and practice in this County.

2.3 Conducive Learning Environment for Learners with Special Needs.

Unlike their colleagues without disabilities, PWD require environmental modification and accommodations of various types depending on the nature and severity of the disability. This demands creation of a Least Restrictive Environment for such people. According to the United States Federal law, Least Restrictive Environment (LRE) is the requirement that students with disabilities receive their education to the maximum extent appropriate with non-disabled peers and that special education students are not removed from regular classes, unless, even with supplemental aids and services education in regular classes cannot be achieved satisfactorily.

Kauffman (1995) states that the philosophy of inclusive education is focused on educating all learners in the same classroom. Each learner’s unique needs are to be taken care of through adaptation of equipment and environment, use of specialized instructions as well as involving various personnel as demanded.

Stainback and Stainback (2000) indicates that the Individuals with Disabilities Education Act of 1990 (IDEA), PL 101 – 476 and Individuals with Disabilities Act in USA amendment of 1991 (PL 102 – 119) required that each student with special needs in education had a right to education in the least restrictive environment (LRE)
The United States law came up with a definition of supplemental aids required to assist special education students. It defined it as, “aids services and other supports that are provided in regular education classes or other education related settings to enable children with disabilities to be educated with non-disabled children to the maximum extent appropriate. Examples of supplementary aids and services that might be needed according to this law include but are not limited to a structured learning environment, repeating and simplifying instructions about in–class and homework assignments, supplementing verbal instructions with visual instructions, using behavioral management techniques and adjusting class schedules. Furthermore, modifying test delivery using tape recorders, computer aided instructions, modified textbooks or workbooks, tutoring homework assignment, reducing class size, use of one on one tutorials, classroom aids and note takers, modification of non-academic rooms such as lunchroom, recess and physical education are also important aids and services according to this law.

Hannu, Marja and Heikki (2006) contend that by removing physical and social barriers to learning we could create true inclusive classrooms and societies and speak of Education for All in a holistic sense. They argue that inclusion supports child’s rights to participate in education and it is the schools duty to accept and ensure it.

According to MOEST (2003) on 10th January 2003, the then Minister for education Prof. George Saitoti appointed the Free Primary Education (FPE) Task Force. The Task Force noted that physical facilities in regular schools were not accessible to many learners with special needs in Education (SNE). It noted that learning and assistive devices for learners with SNE were lacking in the institutions. It further observed that such items were
equally important as books and pens. The Task Force therefore recommended that all schools be made barrier free to ease accessibility of learners with SNE. The MOE also established a central body for procurement, disbursement and supply of learning and / or assistive devices.

As regards the general needs of special education environment the Task Force recommended that barrier free environment within the compounds used by children who were deaf, blind, mentally handicapped and physically handicapped be provided and adopted toilets and bathrooms fixed with bars for support during showering and toileting be constructed. Furthermore door steps/stairs cases should be avoided and instead have ramps with recommended gradients to entries and exits of all facilities such as classrooms, dormitories, laboratories and others. All classrooms should also be made spacious, well lit and well ventilated. This study sort to establish whether recommendations of MOEST (2003) task force to have schools made barrier free has been implemented in the schools under study.

Ministry of Education (2009), Republic of Kenya (2005) and Government of Kenya (2005) observe that currently, the learning environment including the location of institutions, buildings, amenities and furniture pose accessibility challenge to learners with special needs and disabilities in Kenya. They further advice that the physical environment where children with special needs operate should allow them to access education with minimum hindrance. They have identified schools, social amenities (e.g. churches and mosques), public transport (such as buses and “matatus”) and public utilities (e.g. toilets, libraries and lifts) as not being barrier free. These provisions were
meant to assist in attaining a least restrictive environment (LRE) in schools which is a pre-requisite in attainment of inclusive education.

Despite various studies identifying many barriers preventing schools from embracing learners with special needs no research has been undertaken to establish the type of barriers present in schools in Kilifi County. This study sort to establish this.

2.3 Teaching and Learning Resources in Inclusive Education

The quality and adequacy of resources such as physical facilities, equipment, teaching and learning materials all have a direct bearing on quality of education as they determine how effectively a curriculum is implemented, (Republic of Kenya 1999). Inclusive education calls for extra resources and support services in the inclusive schools in order to make it a success. According to UNESCO (1994), The Salamanca declaration reaffirmed the commitment of the world community (including developing countries) to give the highest budgeting priority towards inclusive education, in order to include all children regardless of individual differences and disabilities.

Lakhani (2006) noted that the philosophy of inclusive education was a worldwide advocacy of provision of education to children with special needs in the mainstream schools, regardless of their abilities. The way to inclusiveness was tough and challenging especially for most of the developing countries which are constrained by poor economy, the major constrains being serious shortage of resources such as lack of enough schools, facilities, qualified personnel, learning materials and lack of support from various stockholders.
According to Muuya (2002) the provision of inclusive education is a challenge for all countries establishing and maintaining a quality education system which requires not only well trained and motivated teachers and administrators, but also a large infusion of money to keep the system up to date and relevant to rapidly changing societies and economies.

UNESCO (2000) pointed out that the inadequacy of resources available to meet the basic needs in education was a pervasive theme. She contended that achieving EFA would require additional financial support by countries and donors of about US $ 8 billion per year. UNESCO (2007) points out that to meet the challenges of Education for All (EFA) goals, somewhere between 15 and 35 million new teachers are required globally by 2015. According to UNESCO (2008) in Africa, south of Sahara alone, it was estimated that approximately 4 million additional teachers would be needed to fill both new posts and vacancies to ensure a complete course of primary schooling for all children. This need was partly due to attrition caused by effects of HIV/AIDS and teacher migration to other sectors of the economy. This demand for teachers will obliviously require huge budgetary allocation.

In the United Kingdom (Mittler, 2009) states that “there is very little coordination in the implementation process by the central government and large variation in the amount and quality of support given to pupils and teachers”, furthermore, this is a perfectly Kenyan situation replicated as is realized in the teachers training which is not changing to meet the needs of the new system. In other words theory and practice are not moving hand in hand in Kenya.
In Botswana, special education is funded entirely by the government. Whereas special education was previously a unit of the primary education department, it has become a department on its own right and this qualifies it to receive a bigger share of the total expenditure on education (UNESCO 1995, pp54).

This was a very positive move towards provision of resources to cater for learners with special needs; however it will be more prudent to allocate more funds to regular schools to make them more accommodative to learners of this category. Presently governments are making a pad grim shift from funding and expanding special schools in favor of inclusive schools.

In Kenya the ADB is also assisting in funding inclusive education in selected schools. Report from Republic of Kenya (2005) points out that to achieve Universal Primary Education (U.P.E) 2005 and EFA goals by 2015, the government of Kenya introduced the free primary education (FPE) in June 2003, which resulted in an increased enrolment of children in formal public primary schools. She adds that due to this the facilities were overstretched leading to overcrowding in schools which created more barriers for learners with SNE. She asserts further that over time, there had been a major backlog of infrastructure provision and shortage of permanent classrooms particularly in poor communities.

According to East African Standard (31st July 2003, cited in Ogollah, 2008) the task force to determine SNE in Kenya established that public schools were never provided with
materials or finances to enable them meet the needs of children with SNE. This corresponds with republic of Kenya (2005) and MOE (2009) assertion that implementation of inclusive education in Kenya was compounded by inadequate teaching and learning materials.

In 1988 the Government of Kenya introduced structural adjustment programs (SAPS) as advised by the World Bank and International Monetary Fund (IMF) which came in with cost-sharing policy in the provision of social services including education (ROK 1999, PP 258). Under this policy the government role became increasingly limited to provision of teachers’ salaries which took up to 90% of recurrent expenditure for education. Parents were therefore left to meet the rest of the cost. This cost sharing did not spare special education as its implementation swept across the board.

The master plan on education and training (MPET) 1997 – 2010, (ROK, 1998 pp 163) came to the conclusion that the policy of cost sharing had been a contributory factor for falling enrolments and failure in schools. This placed the government at a dilemma whereby it had to contain the cost of the system within what was available and still required to ease the burden on parents.

The Koech commission recommended that cost sharing for PWD be abolished and instead free and quality education be provided by the government to this category of learners (ROK 1999pp 102). The issue of funding and provision of resources and support services in inclusive education has thus encountered constraints due to scarcity of finances. It is in this context that the ADB came in and funded training of teachers in
inclusive education and also provided assistive devices in the schools under study. The reviewed literature has shown that teaching and learning resources are a limiting factor in implementation of inclusive education. This study also sorts to find out whether teaching and learning resources in schools in Kilifi County were enough to meet the needs of learners with special needs and hence able to support inclusive education.

2.4 Challenges Facing Teachers in Implementing Inclusive Education

It is reported that the most important element for successful inclusion is attitude of the teachers. A major challenge facing teachers in inclusive education is opinion and values they harbor towards inclusive education and / or persons with disabilities. Survey studies indicate that general classroom teachers who express negative views towards inclusion often feel ill-prepared and unsupported in that effort. Research has consistently shown that teachers’ perceptions and attitudes are key to successful inclusive practice (Avranadis and Norwich, 2002, Forlin, 2007). Positive attitude of teachers towards inclusive education is therefore important if teachers are to support this policy.

Implementation of inclusive education is faced with several challenges among them being inadequate information on CSN and limited equipment and assessment skills (KISE, 2007). These three factors are important to a teacher who has passion for an all-inclusive classroom. It calls for retraining of teachers and upgrading communication systems in schools so that teachers can have unlimited access to information.

A study conducted by Ware et al. (2011) for the National Council for Special Education (NCSE) in Ireland has shown that teachers require adequate training both in initial
teacher education and continuous professional development to meet the requirements of learners with disabilities in mainstream schools. They further recommended that continuous professional development should be available in the form of online training opportunities, so that teachers can take the courses when they are relevant for their own teaching. Workshops, seminars and in-service training courses especially during school holidays should be encouraged and supported particularly by the Ministry of Education and the Teachers Service Commission (TSC). This calls for a better coordinated networking between teachers, MoE and TSC Personnel.

UNESCO has developed a resource pack designed to prepare mainstream teachers to restructure their schools and classrooms along inclusive lines with the aim of reaching out to all learners (Ainscow, 1994). This UNESCO resource pack aims at building on the existing strengths to enable teachers to reach out more successfully to all learners.

According to Moodley (2009) inclusive education is not static but rather is a process which involves variations and modifications within the classroom, school and the education system at large to make learning more welcoming, child friendly and of benefit to more people.

Therefore inclusive education must be as dynamic as possible if all categories of special needs are to be catered for in an inclusive setting. This will in turn demand dynamic and passionate teachers who have undergone the necessary training in special needs education. Within the classroom the teachers should move from general to specific
attention of learners a move that can be achieved through preparation of an Individualized Education Programme (IEP).

Most of the instructional materials in use in regular classes are developed without considering those learners with special educational needs and hence these should be adopted to meet their needs. On teaching strategies, Bailey (1983) noted that teachers tend to spend more time planning the curricular activities and less time in planning the teaching strategies for use to facilitate learning. He further observed that teaching learners of diverse needs need innovation on the correct practices to use. Hence the teacher of learners with special needs is required to spare as much time planning teaching strategy as in curricular activities. The curriculum is a bit rigid to cater for the needs of all pupils and due to this teachers have to design ways to respond to these needs (KISE, 2007). Therefore teachers in inclusive schools have a heavier task of designing strategies to cater for both the regular and those learners with special needs.

According to Hergarty (1984), the majority of teachers in these inclusive schools have little knowledge about special needs. This contributes to eroding their willingness and confidence in dealing with this category of pupils. General education teachers have limited opportunities to receive training from the specialists for example in colleges and tertiary institutions that would allow them to implement curricular more effectively. This on the other hand is likely to affect their readiness to embrace inclusive education.

Agbenyega (2007) established that teachers’ abilities and attitudes are major limitations to inclusive education. The study found that training of staff at all levels was often not
adequate. Where there was training, it often tended to be fragmented, uncoordinated and inadequate. Landsberg (2005) asserts that for inclusive teaching teachers need systematic and intensive training, either as part of their initial training, or as a well-planned in-service training by competent and experienced people.

Therefore, challenges facing teachers are both internal such as attitudes, motivation, skills and professional training as well as external such as lack of enough resources, lack of support from administrators among others. Given the different challenges that have been identified by the various studies discussed in this section which teachers encounter this study also sort to determine the challenges teachers are likely to come across in implementing inclusive education in the schools under study.

2.5 Opinion towards Persons with Disabilities and Inclusive Education

Opinion refers to beliefs or views of a group of people about something. It is a feeling or thought about something rather than facts (Oxford Advanced Learners Dictionary, 8th Edition). Attitudes on the other hand are a complex collection of beliefs, feelings, values and dispositions which characterize the way we think and feel about certain people or situations. It is a mindset. Opinions are greatly influenced by attitudes. Inclusive education relies on knowledge, skills, understanding, resources and attitude.

Discrimination and negative attitudes towards people with special needs continue in the world, they have their history in the era of communism when people were valued on the basis of what they contributed to the development of the state. These opinions hinder development of an all-inclusive classroom (UNICEF, 2011). The words used to refer to
those with special needs perpetuate negative stereotypes in the society. Such terms include; abnormal, lunatic, deaf, mongoloid, cripple, hop-a-log, dummy and others where focus is on the need other than the person. Inclusion tackles discrimination by challenging widely held attitudes enabling celebration of diversity (MoE, 2009).

Miles (2002) found that the attitude of society towards children with disabilities was not considerate and had led to many such students not being enrolled in regular public schools. The main reason for this is ignorance that has led to superstitious beliefs towards persons with special needs.

Reid and Button (1995) analyzed students with disabilities narratives of their personal experiences with education in segregated schools and found that these students experienced a feeling of isolation, victimization, betrayal, oppression, being misunderstood and unappreciated. It was against their wish to be segregated and such learners view the school as a prison. Albinger (1995) interviewed students with disabilities and found that these students viewed having to leave the general classroom to receive specialized services as a stigmatizing experience. As a result, they fabricated stories to justify their remaining outside school. When they receive education in the regular classes such learners are likely to feel as part of the larger human society and hence the feeling of isolation and stigmatization will be reduced.

While studying the attitudes of literate and non-literate persons, Akhtar (1994) noted that most literate respondents believed that children with disabilities could lead a successful life. The non–literate however believed that disability was a curse and that children with
disabilities were a burden to society. Teachers being an elite group and ones in position to change opinions of society need to clearly demonstrate positive opinion towards persons with special needs.

The UNESCO survey (1986) on teachers view on integrated education pointed out those countries where teachers favor education for all children in ordinary classroom had a law requiring that. Teachers are key implementers of any education policy and their perceptions are viewed vital towards success or failure of any policy. A study on inclusive education in Latin America established the barriers towards inclusive education as; teachers’ low expectation of learners from low social-economic background and unwillingness of teachers to meet the diverse needs of learners. This was attributed to lack of training in a heterogeneous approach (Hakapaino, Savolaine, Kokkalah, Alasuutari, 2000). This is likely to influence the perception of teachers towards inclusive education.

Teachers may also categorize learners based on the type of disability again due to unwillingness or lack of training to enable them meet diverse needs of learners. Teachers are more positively disposed to learners with physical or sensory disability and less for learners with emotional and behavioral problems (Farrel, 2000: Lindsay, 2007).

A research synthesis (1958-1995) in USA on teachers’ perception of inclusion by Scruggs and Mastropieri (1996) indicate that teachers positive attitude depended strongly on the following factors; experience with the learners who are perceived as challenged, teacher education, availability of support materials, class size and workload. Research
over the years has shown that beliefs and attitude change are a major component of successful inclusive education. These will shape the opinion of teachers for or against inclusive education. In a recent study with high school teachers Van Reusan, Shoho and Barker (2001) found that positive teachers’ attitude about including and teaching students with disabilities in general education classroom was related to levels of special education training and experience in working with students with disabilities. This means that training in special education can change teachers’ perception towards inclusive education.

Tyler, Richards, Goldstein and Shilit (1997) in USA found significant differences between general and special educators, General educators disagreed with the placement of students with mental and behavioral or emotional disabilities in the general classroom. This could be due to lack of training and exposure in these types of special needs.

Butod (2009) conducted a survey study to learn more about the attitudes and training Greek teachers undergo to prepare themselves for inclusive education. The study identified training, curriculum modifications as well as collaboration of relevant parties as essential for inclusion to be a success. Change of teachers’ attitude can be effected through training using an inclusive curriculum.

Sage and Burrello (1994) quoted that beliefs and attitudes of administrators towards inclusive education is a key factor influencing their behavior towards learners with special needs. The attitude of administrators is likely to be replicated in the teachers and school community at large. School administrators who embrace inclusive education
communicate the same to teachers and learners. Curtis (1985) suggests that female teachers are more supportive of inclusion than male teachers. Generally female teachers have a motherly instinct and this can explain this difference in attitude.

Haworth (1987) noted that the non–handicapped can project deep feelings of inadequacy onto the hand capped and regard them as causing fear and anxiety, the roots of prejudice. On the other hand the persons with disability may develop a guilt complex, view his/her handicap as a punishment and turn aggressive against the environment. He further observed that lack of prior interaction with children with handicap and lack of information about disability may make people especially children feel uncomfortable in the presence of a person with a disability which makes them avoid contact. Given such feelings towards the handicapped opinion towards their inclusion in regular schools is likely to be influenced negatively. This study sort to establish whether attitude towards disabilities influenced opinion towards inclusive education in the selected schools.

Hergarty (1981) found out that pupils generally accept those with special education needs though they were often ascribed “out group status”. They therefore tended to form friendship with peers who have special needs in education (SNE). The relationship with mainstream pupils tended to be the unequal ones of helping and caring.

This attitude of helping and caring may appear beneficial on the face value because it may create labels that become reasons for directing resources to this group. However Rix (2009) noted that although classification procedures and the related labels are the gatekeepers to resources, they nevertheless act as a self-fulfilling prophesy of
underachievement. Thus although it is often suggested that the label is required to ensure appropriate support, the issue is complicated (Hollen, Wegger, 2011; Norwitch, 2008). On one hand the helping and caring attitude and the labeling process justifies the allocation of extra resources and ensures that reasonable adjustments are made while on the other hand labeling may lead to social segregation and the development of a spoiled identity.

Meleskey and Waldron (2002) found one negative attitude towards inclusion which was that the students in the classroom without disabilities noticed the difference between themselves and their peers with special needs and rejected them by labeling and / or calling them demeaning names. This is an indicator that their opinion towards inclusion was leaning to the negative.

Research has shown that parents attitude towards their children with disabilities can shape the opinion of society towards inclusive education. However, their attitudes have been shown to be more favorable when they are allowed to give input in decision making process (Lewis, Chard and Scott, 1994). They also need to be availed forums where they can interact with other parents of children with special needs which is another step towards changing their opinion. Vague understanding of the purpose and the benefits of inclusion of exceptional children on the part of the parents can be a major reason for holding negative attitude towards inclusion (Green and Shinn, 1995).

Panda and Bartel (1992) found that positive open attitudes and realistic perceptions lead to greater interaction and enhanced social and emotional developments. Contact between
these pupils and their peers leads to the correction of stereotypes and emergency of more accepting attitudes. This would in turn create positive opinion towards inclusion of pupils with special needs in general classroom. The OPM/IPSOS MORI research in Britain asked persons with disabilities (PWD) directly whose attitudes they would most desire to see a change. Three in ten (29%) said that they would like to see a change in general public attitude. Nearly a quarter 23% of the selected persons identified government staff as a group whose attitude they would like to see changed towards the positive. This was followed closely to health and social care sector (23%). Given such attitudes the opinion of these groups of people towards inclusion is also bound to be negative. Thus negative attitudes towards PWD cut across the society, conversely opinion towards inclusive education are bound to cut across the society. Attitude is therefore likely to influence the opinion of teachers towards inclusive education. This study further sort to find out the attitude of teachers and students towards learners with special needs in the schools under study and how this influence their opinion towards inclusive education.

2.6 Summary of Literature Review

In view of literature reviewed above it is evident that many studies involving inclusive education have been done. There is much literature concerning environmental modifications needed to facilitate inclusive education, also various studies have analysed the situation of teaching and learning resources in various countries and also challenges teachers face in implementing inclusive education. Studies about attitudes have also been carried out by various researchers. From the reviewed literature certain gaps have emerged which justify this study. These gaps are:
i. Despite various studies identifying many barriers preventing schools from embracing inclusive education no research has been undertaken to establish the type of barriers present in schools in Kilifi County. This study sort to establish this.

ii. The reviewed literature has shown that teaching and learning resources are a limiting factor in implementation of inclusive education. This study also sort to find out whether teaching and learning resources in schools in Kilifi County were enough to meet the needs of learners with special needs and hence able to support inclusive education.

iii. Given the different challenges that have been identified by the various studies discussed in this section which teachers encounter this study also sort to determine the challenges teachers are likely to come across in implementing inclusive education in the schools under study.

iv. Many studies concerning attitudes towards persons with special needs have been carried out as discussed in the reviewed literature. However, in Kilifi County studies have not been carried out exhaustively to find out attitude of teachers and learners towards persons with special needs and how this affect their opinion towards inclusive education. This study further sort to establish this.
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction
This chapter presented methodological details appropriate to the study. It addressed the research design, location of the study, target population, sampling techniques and sample size, the research instruments, piloting of the study, data collection techniques, data analysis techniques and ethical considerations.

3.2 Research Design and Locale
This study employed a descriptive survey design. It adopted both qualitative and quantitative methods. According to Nsubuga (2000) a Survey design is a detailed description of existing phenomena with the intention of employing the data to justify conditions and practices in order to make plans for improving them. Mugenda and Mugenda (1999) notes that a survey design is useful in gaining insight on the general picture of a situation while focusing only on a sample of the population under study. This research design was preferred for this study because the researcher planned to carry out a survey in the regular secondary schools in Kilifi County focusing on administrators and samples of teachers and learners to determine the attitudes, challenges facing teachers, presence or absence of suitable environment for learners with SNE and resources available to cater for Special Education Needs in these schools.

3.2.1 Variables
In this study the independent variables were teacher factors, teaching resources, environmental modification and support services as well as community awareness. The
dependent variable was inclusion of learners with special needs in regular secondary schools, which would lead to high transition rate and better employment opportunities for such learners. Intervening variables were such as government policy, collaboration and networking, state of curriculum and culture.

3.2.2 Location of the Study

This study was conducted in Kilifi County, Coast Region of Kenya. It concentrated on four regular Secondary Schools which were targeted for inclusive education. These were Galana, Gede, Ngala and Kakoneni Girls Secondary Schools. This Location was preferred because it was within easy reach of the researcher who was a resident of the Sub-County. The schools were selected because the MOE in partnership with ADB had focused on them to pilot inclusive education by training teachers and providing assistive devices. However no inclusion seems to have taken place.

3.3 Target Population

The target population consisted of Principals, teachers and students in the four regular secondary schools which were targeted for inclusive education in Kilifi County. A total of four Principals, 88 teachers and 1960 students i.e. 2052 respondents were targeted as the basis of the study.
### Table 3.1: Target Population

<table>
<thead>
<tr>
<th>School</th>
<th>Principals</th>
<th>Teachers</th>
<th>Students</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galana</td>
<td>1</td>
<td>22</td>
<td>490</td>
<td>513</td>
</tr>
<tr>
<td>Gede</td>
<td>1</td>
<td>22</td>
<td>550</td>
<td>573</td>
</tr>
<tr>
<td>Kakoneni</td>
<td>1</td>
<td>22</td>
<td>450</td>
<td>473</td>
</tr>
<tr>
<td>Ngala</td>
<td>1</td>
<td>22</td>
<td>470</td>
<td>493</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
<td><strong>88</strong></td>
<td><strong>1960</strong></td>
<td><strong>2052</strong></td>
</tr>
</tbody>
</table>

### 3.4 Sampling Techniques and Sample Size Determination

#### 3.4.1 Sampling Techniques

Three sampling techniques were used. These were purposive, stratified and simple random sampling. According to Saundras *et al.*, purposive sampling is a technique in which the researcher relies on his own judgment when choosing members of a population to participate in a study. Simple random sampling on the other hand is a probability where each member of a population is equally likely to be chosen as part of the sample. This is according to Gravetter and Forzano (2011). Stratified sampling is a method of sampling that involves division of a population into smaller groups known as strata. Kilifi County was purposively selected because it had several regular secondary schools which were targeted for inclusive education. The four schools, two for girls and two for boys and their principals were also purposively selected because they were convenient for this study. From each of the four schools all the teachers who underwent a training course in Inclusive education were purposively selected as they would provide important information for the study. Simple random sampling was used to select the rest of the teachers. Stratified random sampling was used in selecting students with the strata based on classes (i.e. forms 1, 2, 3 and 4). From each class level (stratum), simple random
sampling was used to select a sample of learners. When selecting the regular teachers and students the 20% sample size rule was used because the populations involved were small.

### 3.4.2 Sample Size

The sample size consisted of a total of 410 respondents as shown in table 3.2

<table>
<thead>
<tr>
<th>School</th>
<th>Principals</th>
<th>Teachers</th>
<th>Students</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galana</td>
<td>1</td>
<td>6</td>
<td>98</td>
<td>105</td>
</tr>
<tr>
<td>Gede</td>
<td>1</td>
<td>6</td>
<td>110</td>
<td>117</td>
</tr>
<tr>
<td>Kakoneni</td>
<td>1</td>
<td>6</td>
<td>90</td>
<td>97</td>
</tr>
<tr>
<td>Ngala</td>
<td>1</td>
<td>6</td>
<td>94</td>
<td>101</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
<td><strong>24</strong></td>
<td><strong>392</strong></td>
<td><strong>410</strong></td>
</tr>
</tbody>
</table>

### 3.5 Research Instruments

#### 3.5.1 Types of Instruments

The instruments were selected based on the objectives of the study. They included questionnaires, interview schedule and observation checklist. Two types of questionnaires were used; one for teachers and the other for students. A questionnaire has the ability to collect a large amount of information in a reasonably short time. It also allows great uniformity in the way questions are asked ensuring greater comparability in the process (Orodho2009). In addition when properly administered, questionnaires are the best instruments for obtaining information from widespread sources or large groups simultaneously Mills (2000). The questionnaires used in this study consisted of both short answer and structured questions. Both the questionnaires for teachers and students
consisted of two sections. The first section asked questions on the background information and the other section asked questions based on the objectives of the study. A set of clearly stated questions were asked to each principal. The researcher recorded each response in a notebook. This information was used to supplement that collected using questionnaires. The observation checklist helped to supplement further the data collected using the other tools. The questionnaires and interview schedule generated data across all the objectives while the observation checklist mainly generated data on environmental modifications.

3.5.2 Piloting of the Study
The pilot study was carried out in Majaoni secondary school in Kilifi County which had also been identified earlier for inclusive education. One principal, five teachers and forty students formed the sample giving a total of 46 respondents. The procedures that were used in piloting were the same as those applied in the actual study. Piloting made the researcher familiarize himself with instrument application. From the piloting some questions were noted to make the respondents uncomfortable while others generated unclear responses. Such questions were reviewed.

3.5.3 Validity of Research Instruments Determination
Validity is a question of whether the research instruments measures what it is supposed to measure. It is the degree to which results obtained from the analysis of the data actually represent the phenomena under investigation (Orodho, 2009). In this study the researcher first consulted with the supervisor to determine whether the instruments were capable of collecting valid data for each objective. He used simple clear language in the
questionnaires. Also when interviewing respondents the researcher explained himself clearly to every principal and this created a good rapport which encouraged valid responses.

3.5.4 Reliability of Research Instruments Determination

Orodho (2009) defines reliability as the extent to which the instruments are stable and consistent across repeated measures. For purpose of reliability the researcher ensured that the questions asked in the questionnaire and interviews were clearly stated. To assess the reliability of the questionnaires test-retest method was used. The same questionnaires were administered at an interval of one week to the same group of respondents in one of the schools under study and the results were compared. A formula that uses Spearman Rank Order (rho) correlation coefficient was used to determine reliability i.e.

\[
R = 1 - \frac{6(\sum D^2)}{N(N^2-1)}
\]

Where R is the coefficient of reliability.

\(\sum D^2\): Summation of deviation squared

N: Sample Size

\(N^2\): Sample size squared

From the formula a level of \(\geq 0.80\) reliability indicated acceptable reliability of the instruments. The research study generated 0.84 value of R indicating reliability of the questionnaires. For the interview questions the researcher ensured these were clearly stated devoid of any ambiguity such that each principal got a similar picture of each question. This raised the reliability level of interviews.
3.6 Data Collection

3.6.1 Logistical and ethical considerations

Upon approval of the research proposal and getting permission to proceed with data collection from the university authority the researcher obtained authority to conduct research from the National Council of Science and Technology (NACOSTI), Ministry of Education. To obtain a research permit the researcher presented to the secretary of NACOSTI, two final copies of the approved proposal, two passport size photographs and an application form completed and endorsed by graduate school, Kenyatta University. Upon obtaining these documents the researcher sort authority from Kilifi County commissioner and County director of Education to carry out the research study. He first made a pre-visit to each of the schools identified for the study. He notified the Principals verbally of the intended research. He then booked appointments with the intended respondents on the same day after briefing them about the study.

The researcher first solicited informed consent from the respondent by explaining to them the reasons for the study and what he aimed to achieve through it. He assured the respondent that any information they volunteered to give through any of the research instruments would not be diverged whatsoever. He required them not to indicate their names on the questionnaires for anonymity and confidentiality purpose. The questions were also designed in such a way that they did not offend the respondents. Probing questions were avoided.
3.6.2 Data Collection Procedures

Having ensured validity and reliability of the research instruments the researcher administered the research instruments personally to each of the respondents. He allowed the respondent enough time to fill in the questionnaires. He then interviewed each school Principals and recorded the responses in a notebook. The researcher also made observations and recorded them in an observation checklist. The observations focused on school environment and materials necessary for inclusive education.

3.7 Data Analysis

The interview findings were analyzed using qualitative method while questionnaires were mainly analyzed using quantitative method. This started with checking and editing the collected raw data. It was followed by formulation of a coding scheme that created codes and scales from the responses which were then summarized and analyzed. Quantitative data was analyzed by use of simple descriptive statistics i.e. frequency distribution tables, percentages and means. The qualitative data was analyzed by use of a thematic method. A thematic analysis is one that looks across all the data to identify the common issues that recur and identify the main themes that summarize all the views the researcher has collected.
CHAPTER FOUR

RESEARCH FINDINGS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents the findings of the research study on analysis of factors affecting implementation of inclusive education in regular secondary schools in Kilifi County, Kenya. The study involved four regular secondary schools from which a total of 4 principals, 24 teachers and 392 students gave their responses through questionnaires or interviews. An observation checklist was also utilized to supplement data from the other two instruments. Quantitative data analysis and presentation was done using descriptive statistics of frequencies, mean, mode and percentages. The qualitative data was analyzed and presented using thematic analysis where themes were based on the study objectives.

The objectives as earlier stated were:

i. To establish the type of environmental modification available to facilitate inclusion of learners with special needs in regular secondary schools in Kilifi County.

ii. To determine the type of teaching/learning resources available for learners with special needs in regular secondary schools in Kilifi County.

iii. To find out challenges teachers were likely to come across when implementing inclusive education in Kilifi County.

iv. To find out the opinion of teachers and students towards inclusive education in regular secondary schools in Kilifi County.
Table 4.1 Questionnaire Submission Rate for teachers/students

<table>
<thead>
<tr>
<th></th>
<th>Total issued</th>
<th>Number returned</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>24</td>
<td>22</td>
<td>91.7%</td>
</tr>
<tr>
<td>Students</td>
<td>392</td>
<td>342</td>
<td>87.2%</td>
</tr>
</tbody>
</table>

4.3 Demographic Characteristics of Respondents

4.3.1: Gender of Respondents

The gender of the respondents was recorded in table 4.2.

Table 4.2: Gender of Respondents

<table>
<thead>
<tr>
<th>GENDER</th>
<th>MALE</th>
<th>FEMALE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>16</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td>Students</td>
<td>194</td>
<td>198</td>
<td>392</td>
</tr>
<tr>
<td>Principals</td>
<td>22</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>212</td>
<td>208</td>
<td>420</td>
</tr>
</tbody>
</table>

The study tried to balance the male and female respondents. Male teachers comprised about two thirds and female teachers about one third. The student respondents were almost balanced whereby about half were female and the other half were male. This was achieved through purposive selection of the schools. The gender of the principals was also balanced at half females and half males. This was so because two schools were girls and two were boys’ schools. This was important to avoid gender becoming an extraneous variable in the study. Female respondents are generally perceived as being
more sympathetic than their male counterparts. Curtis (1985) suggested that female teachers are more supportive of inclusion than their male counterparts. This could affect responses especially in the opinion towards inclusive education. By balancing the two genders this interference was avoided.

4.2.2 Level of Education of Teachers and Principals

This was recorded in the following table:

<table>
<thead>
<tr>
<th>Table 4.3: Level of Education of Teachers and Principals</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUCATION LEVEL</td>
</tr>
<tr>
<td>Diploma</td>
</tr>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>Teacher</td>
</tr>
<tr>
<td>Principals</td>
</tr>
</tbody>
</table>

The study established that about one tenth of the teachers had diploma level education, majorities were bachelor holders and another one tenth had post-graduate education. About one tenth had other certificates such as post graduate diploma in education and higher national diploma in technical education. Half of the principals were bachelor holders and the other half had post-graduate level education.
The level of education of principals and teachers was important as this could determine their exposure to learners with special needs. At higher levels the teachers or principals are more likely to have covered some content in special needs education. Hergarty (1984) noted that majority of teachers in inclusive schools have little knowledge about special needs education. This contributes a lot to erosion of their willingness and confidence in dealing with learners with special needs.

4.2.3 Teaching Experience

The teaching experience of respondent teachers was presented using a bar chart as follows:

![Bar Chart](chart.png)

**Figure 4.1: Teaching Experience**

The findings as presented on the bar chart showed that majority of teacher respondents had taught for between 1-5 years, about one tenth had taught for 6-10 years, very few
were within the bracket of 11-15 years another one tenth had taught for 16-20 years. Only a small number, less than one tenth had more than 20 years’ experience. Teachers with a longer experience were more likely to have interacted with learners with special needs which could positively influence their opinion. They might also have been able to cope better with challenges they faced. According to Barker (2001) positive teachers attitude towards including learners with disabilities in general education classroom was related to levels of special education training and experience in working or interacting with learners with disabilities.

4.2.4 Number of Years Principals have headed the School.

Table 4.4: Frequency/Percentage length of stay for Principals

<table>
<thead>
<tr>
<th>Length of stay in school</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 yrs.</td>
<td>4/4</td>
<td>100%</td>
</tr>
<tr>
<td>4-10 yrs.</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>More than 10 yrs.</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The findings indicate that all the principal respondents had been in their current stations for between one and five years. None had stayed in their current stations longer than this. One principal admitted she was not aware her school had earlier been identified for inclusive education. The length of stay in the school was important as it affected awareness which could on the other hand affect readiness to implementing inclusive education. This could influence opinion towards the same.
4.2.6 Class Level of Students

The class level of students was also determined and the results were as follows:

**Table 4.5: Class level of Respondent Students**

<table>
<thead>
<tr>
<th>Form</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>95</td>
<td>24.2%</td>
</tr>
<tr>
<td>2</td>
<td>100</td>
<td>25.5%</td>
</tr>
<tr>
<td>3</td>
<td>99</td>
<td>25.3%</td>
</tr>
<tr>
<td>4</td>
<td>98</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>392</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

From the table the number of student respondents was balanced for various classes. Each class formed a stratum and from each stratum almost the same number of learners was selected using simple random sampling. Selecting of students from different strata or classes helped to randomize the sample. This eliminated bias as the sample was more representative.

4.2.7 Interaction of Student with Children with Disabilities

**Table 4.6: Frequency interaction of students with learners with disabilities**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interacted</td>
<td>278/342</td>
<td>81.3%</td>
</tr>
<tr>
<td>Not-interacted</td>
<td>64/342</td>
<td>18.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>342/342</td>
<td>100%</td>
</tr>
</tbody>
</table>
The level of interaction was based on how often a student had encountered a person with special needs and conversed with them. Those students who had a relative or a neighbor with special needs or those who interacted with them in social places such as churches and mosques were considered to have interacted. This had been explained to respondent students before they filled the questionnaires.

From the table the findings were that majority of respondent students had interacted in one way or another with children with disabilities while only about one fifth indicated they had not. This interaction was likely to shape the opinion of the students towards inclusive education. Those who had interacted were more likely to have positive opinion since they may have overcome fear and prejudices associated with persons with disabilities. Haworth, 1967 found that learners without special needs can project deep feelings of inadequacy onto those with special needs and may regard them as causing fear and anxiety. This on the other hand could lead to prejudice and stigmatization. Interaction and exposure to persons with disability is likely to reduce fear and anxiety towards them and hence eliminate prejudice.

4.4 Type of Environmental Modification and Support Services Available in Schools under Study.

4.4.1 State of School Environmental as Recommended for Learners with Special Needs

The first objective of this study was to establish the type of environmental modification suitable for learners with special needs in the schools under study. Teachers were asked
to indicate whether rumps were present or absent in their schools. The results are indicated in table 4.7.

Table 4.7: Presence or absence of rumps in the schools (Teachers)

<table>
<thead>
<tr>
<th>Percentage of teacher respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of rumps in some buildings</td>
</tr>
<tr>
<td>Presence of rumps in most buildings</td>
</tr>
<tr>
<td>Absence of rumps</td>
</tr>
</tbody>
</table>

Slightly more than one third of teacher respondents indicated rumps were present, less than one tenth indicated these were present in most of the school buildings while slightly more than half indicated absence of rumps in their schools. A similar question was asked to students and the findings are as shown in table 4.8.

Table 4.8: Presence of Rumps, staircases or ridges in the schools (Students)

<table>
<thead>
<tr>
<th>Percentage of student respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of rumps</td>
</tr>
<tr>
<td>Staircases</td>
</tr>
<tr>
<td>Ridges (Steep rumps)</td>
</tr>
</tbody>
</table>

About one third of students indicated presence of rumps in their schools while slightly below half indicated presence of stair cases as opposed to rumps. A small number however indicated rumps were present but of very steep gradient forming what can be
termed as a ridge. Teachers were asked to provide further information on the state of school environment and the results are indicated on table 4.9

4.4.2 Responses from Teachers

**Table 4.9: State of School Environment in the Schools under study**

<table>
<thead>
<tr>
<th></th>
<th>Frequency (responses)</th>
<th>Percentage (responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present</td>
<td>Absent</td>
</tr>
<tr>
<td>Well lit rooms</td>
<td>22/22</td>
<td>0/22</td>
</tr>
<tr>
<td>Spacious Classrooms</td>
<td>21/22</td>
<td>1/22</td>
</tr>
<tr>
<td>Verandas and rails</td>
<td>6/22</td>
<td>16/22</td>
</tr>
<tr>
<td>Large print charts</td>
<td>9/22</td>
<td>13/22</td>
</tr>
<tr>
<td>Adopted toilets</td>
<td>5/22</td>
<td>17/22</td>
</tr>
<tr>
<td>Adopted tables</td>
<td>5/22</td>
<td>17/22</td>
</tr>
<tr>
<td>Well ventilated rooms</td>
<td>7/22</td>
<td>15/22</td>
</tr>
</tbody>
</table>

In the four schools teachers indicated all the rooms were well lit. Majority indicated the classrooms were spacious enough. About a third indicated presence of verandas with rails while majority indicated no rails. Slightly less than half of respondents indicated they were using large print charts with over half showing such charts were not being used. Only a few, about one fifth indicated presence of adopted toilets in their schools while a vast majority indicated these were not there. About one fifth indicated there were adopted tables in their schools while majority, more than two thirds indicated these were missing.
Minority teachers indicated the classrooms were well ventilated with majority indicating this was not so. Students were asked to rate ventilation in their classrooms and their responses are indicated in table 4.10.

**Table 4.10: Level of ventilation in the classrooms**

<table>
<thead>
<tr>
<th>Level of ventilation</th>
<th>Frequency response</th>
<th>Percentage response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good ventilation</td>
<td>105/342</td>
<td>30.7%</td>
</tr>
<tr>
<td>Good ventilation</td>
<td>159/342</td>
<td>46.5%</td>
</tr>
<tr>
<td>Poor ventilation</td>
<td>34/342</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

From the table about one third indicated it was very good, slightly below half rated it as good while very few indicated poor ventilation. The students were further asked to indicate how desks were generally arranged in their classrooms and the results are shown in table 4.11.

**Table 4.11: Desks arrangement in the classrooms**

<table>
<thead>
<tr>
<th>Arrangement</th>
<th>Frequency response</th>
<th>Percentage response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desks arranged in rows</td>
<td>335/342</td>
<td>98%</td>
</tr>
<tr>
<td>Desks not arranged in rows</td>
<td>7/342</td>
<td>2%</td>
</tr>
</tbody>
</table>

From this table majority indicated desks were arranged in rows with minority indicating they were not. Furthermore they were asked to give approximate distance between the rows of the desks and the results are shown in table 4.12.
Table 4.1: Distance between the Rows of Desks in Schools under Study

<table>
<thead>
<tr>
<th>Distance between the rows</th>
<th>Frequency response</th>
<th>Percentage response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1m</td>
<td>243/342</td>
<td>71.1%</td>
</tr>
<tr>
<td>1-2m</td>
<td>19/342</td>
<td>5.6%</td>
</tr>
<tr>
<td>More than 2m</td>
<td>9/342</td>
<td>28.1%</td>
</tr>
</tbody>
</table>

Majority indicated the distance between the rows was less than one meter. Very few rated the distance as being one to two meters and about one third rated it as more than two meters. The learners were also asked to rate the lighting in their classrooms. The findings are presented in table 4.13.

Table 4.13: Level of the Lighting in the Classrooms

<table>
<thead>
<tr>
<th>Frequency response</th>
<th>Percentage response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimly lit rooms</td>
<td>29/342</td>
</tr>
<tr>
<td>Well lit rooms</td>
<td>301/342</td>
</tr>
<tr>
<td>Too much lighting</td>
<td>5/342</td>
</tr>
</tbody>
</table>

From the table less than one tenth rated the rooms as dimly lit while majority indicated they were well lit. A few however rated the lighting as too much especially during the night when they used electricity. From observation checklist, it was noted that ramps were present in a few buildings in some of the schools under study. Wheelchairs and walking sticks were available in two of the schools but these were very few. White canes and hearing aids were completely absent in all the four schools. It was also noted that
most of the rooms in the four schools were well lit and well ventilated. However as opposed to special needs consideration, the reason for this could be due to high temperatures in the region which results in construction of classes with no window panes.

Principals from the four schools were each asked questions concerning the state of their school environment as recommended for learners with special needs. One principal was quoted. “I have not seen any of the assistive devices you are asking about in this school”. Three of the principals quoted wheelchairs, walking sticks and clutches as having been provided. One was quoted. “How do you expect this school to cater for variety of disabilities while only devices for physically handicapped have been provided”? He further noted that lack of assistive devices was a major hindrance to embracing inclusive education. “Even though the school administration is willing”. He was quoted to say. Another principal said. “We do not have specialists around here and our rooms are ordinary ones since they were not designed with people with disabilities in mind”. Another one stated they lacked specialists and adopted rooms and equipment. All the four principals recommended more funding from the government. One of them was quoted to say. “With the rate at which parents are paying school fees here, these modifications must fall entirely on the government all there will never be taking off”.

The findings from teachers, students, principles and observation checklist indicated environmental modifications which were not adequate to admit various categories of disabilities. This concurs with MOEST (2003) taskforce which noted that physical facilities in regular schools were not accessible to learners with special needs in education. Presence of staircases or ridges as opposed to rumps in most of the buildings
as indicated in most of the responses means these structures are not accessible to learners with physical disabilities. Absence of guide rails, hearing aids, and spacious rooms adopted toilets, tables, chairs, beds and buses all concur with the finding of the task force (MOEST 2003).

The findings conflict with reviewed literature by Stainback and Stainback (2000) which indicated that the individuals with disabilities Education Act of 1990 (IDEA),PL101-476 required that each student with special needs in education had a right to education in the least restrictive environment (LRE). This was not the case in the schools under study.

The ministry of education (2009), republic of Kenya (2005) and government of Kenya (2005) observed that the learning environment including the location of institutions, buildings, amenities and furniture pose accessibility challenge to learners with special needs and disabilities in Kenya. This was in line with the findings, which indicated buildings with staircases and ridges as opposed to rumps. Also the furniture was designed for children without special needs only. The three also identified schools’ social amenities (e.g. churches and mosques), public transport (such as buses and matatus) and public utilities (e.g. toilets, libraries and lifts) as not being barrier free. This was in line with the findings in schools where by school buses, toilets, school libraries and dining halls were found not to be barrier free.

4.5 Teaching /Learning Resources

The second task of this study was to determine the type of teaching and learning resources for learners with special needs which were available in the schools under study.
The three data collection instruments (questionnaires interviews and observation checklist) provided data on teaching/learning resources.

4.5.1 Teaching and learning resources in the schools under study

The respondent teachers were asked to indicate the situation of teaching /learning resources in their schools and the responses were presented in table 4.14.

Table 4.14: Teaching and learning resources in the schools

<table>
<thead>
<tr>
<th></th>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td>(\frac{22}{22}) (100%)</td>
<td>0%</td>
</tr>
<tr>
<td>Large Print charts</td>
<td>(\frac{9}{22}) (40.9%)</td>
<td>(\frac{13}{22}) (59.1%)</td>
</tr>
<tr>
<td>Hearing aids</td>
<td>(\frac{1}{22}) (4.5%)</td>
<td>(\frac{21}{22}) (95.5%)</td>
</tr>
<tr>
<td>Modified textbooks</td>
<td>(\frac{5}{22}) (22.7%)</td>
<td>(\frac{17}{22}) (77.3%)</td>
</tr>
</tbody>
</table>

All the teachers indicated there were computers in their schools. Minority indicated large print charts were available with majority stating otherwise. Very few indicated hearing aids were available with a vast majority stating they were not. About one fifth indicated there were modified textbooks while majority indicated otherwise. Students were also asked to respond to the situation of computers in their schools. All the students indicated there were computers in their schools. They were then required to indicate how many students were sharing one computer and the responses were recorded in figure 4.2.
Figure 4.2: Sharing of Computers

Less than one tenth indicated one student per computer. About one third indicated two students per computer and two thirds indicated more than three students shared one computer. Learners were further asked to indicate whether their teachers were using charts and if these were clearly visible or not. The results were recorded in table 4.15

Table 4.15: Use or Non-use of charts

<table>
<thead>
<tr>
<th></th>
<th>Frequency response</th>
<th>Percentage response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used charts</td>
<td>(\frac{155}{342})</td>
<td>45.3%</td>
</tr>
<tr>
<td>Non-use of charts</td>
<td>(\frac{187}{342})</td>
<td>54.7%</td>
</tr>
</tbody>
</table>
Table 4.16: Visibility of the charts

<table>
<thead>
<tr>
<th>Frequency response</th>
<th>Percentage response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearly visible</td>
<td>145/155</td>
</tr>
<tr>
<td>Not clear</td>
<td>7/155</td>
</tr>
</tbody>
</table>

The tables show that slightly below half of students indicated their teachers were using charts while slightly above half responded they were not. Out of those who indicated use of charts majority indicated the charts were clearly visible while minority indicated they were not.

The principals of the four schools were also asked questions concerning the state of teaching/learning resources in their schools during the interview. Two of the principals stated there was lack of teachers trained in special needs education. One was quoted to say. “We have no teachers trained in SNE in this school. The one who had undergone training was transferred to a neighboring school last year.” One principal also responded. “Most of those things you are asking about are not present in this school,” while referring to adopted rooms, large print textbooks, note takers and other resources which could facilitate inclusive education. Two of the principals stated that apart from assistive devices and two teachers trained in SNE they had not received any other assistance from the government to facilitate inclusive education. One was quoted. “There is very little assistance from the government. All that I have seen are a few assistive devices and two teachers trained in SNE”. Two of them agreed as to having received some funds from the government for purpose of inclusive education. One was quoted to say, “It is true some
funds for inclusive education have been trickling in but that is a drop in the ocean compared to the numerous resources needed to actualize inclusive education”. All the four principals stated they needed more funding and two of them indicated they needed teachers who were trained in special needs education. From observation checklist all the schools under study had no note takers, some teachers used charts while others did not and all textbooks were of normal print.

4.5.2 Adequacy of Teaching/ Learning Resources in Schools under Study

Teachers were asked to rate the adequacy of teaching/leaning resources in their schools and their responses were analysed using a four point ricketier scale. Following is a guide used to reach a theoretical mean to be used in the analysis.

Table 4.17: Ricketier Rating Scale

<table>
<thead>
<tr>
<th>Response</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>4</td>
</tr>
<tr>
<td>Agree</td>
<td>3</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
</tr>
</tbody>
</table>

A theoretical mean was determined using the formula $\frac{1+2+3+4}{4} = 2.5$. This mean was then used as a criterion to judge in which direction the respondents opinion was leaning. Any item with a mean equal to or greater than 2.5 indicated the respondent’s opinion was in agreement with the statement while a mean less than 2.5 indicated disagreement with
the statement. The following table was used to summarize teachers’ responses to this question.

### Table 4.18: Responses on Adequacy of Teaching/Learning Resources

<table>
<thead>
<tr>
<th>Item statement</th>
<th>Response mean for the item</th>
<th>Theoretical mean</th>
<th>Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistive devices are adequate</td>
<td>2.0</td>
<td>2.5</td>
<td>Respondent opinion in disagreement</td>
</tr>
<tr>
<td>Teaching/learning resources are enough for all children in the school.</td>
<td>2.7</td>
<td>2.5</td>
<td>Respondent opinion in agreement</td>
</tr>
</tbody>
</table>

From the response mean of 2.0 which is less than theoretical mean of 2.5 most teachers were of the opinion that the assistive devices are not adequate to cater for various special needs. However the response mean for teaching/learning resources was 2.7 indicating more teachers are in agreement resources are enough. It is not clear whether the teachers were responding to resources for children without special needs only or for all learners in general.

Generally the responses from teachers concur with those of students indicating that teaching/learning resources were not enough. A good indicator is the number of students sharing computers which showed more than recommended number shared one computer a situation that could not favor learners with special needs like emotional disorders. General observation also indicated those computers were not adopted to take care of learners with special needs e.g., none of the schools had a talking computer which could
assist learners with visual impairment. Uses of charts were also rare and in schools where teachers used charts, a few of them were not clearly visible. Observation checklist showed that only a few teachers were using charts but the charts were not large print enough for the visually impaired learners. The interview responses from principals also showed resources were inadequate to cater for inclusive education. Most of the teachers indicated the following as resources lacking in their schools: Braille machines, sign language materials, suitable teaching resources, adopted toilets, hearing aids, rumps, special rooms among others.

Muuya 2002 noted that provision of inclusive education is a challenge for all countries willing to establish and maintain a quality education system. This, he noted will require not only well trained and motivated teachers and administrators, but also a large infusion of money to keep the system up to date. The findings of this study have shown that trained teachers are lacking in most schools. Also most principals stated lack of funding as a hindrance to inclusive education. These are in line with the reviewed literature.

The findings of this study also concur with republic of Kenya (2005) and MOE (2009) assertion that implementation of inclusive education in Kenya was compounded by inadequate teaching and learning materials. While teaching and learning materials are present for learners without special needs, those for learners with special needs were inadequate or lacking.
4.6 Responses to Challenges facing Teachers

The third objective was to find out challenges teachers were likely to come across in implementing inclusive education. Teachers were asked to indicate the challenges they felt they were likely to encounter when implementing inclusive education in their school.

4.6.1 Training in Special Needs

One question required them to indicate if they had any training in SNE and their responses were recorded in table 4.19.

<table>
<thead>
<tr>
<th>Frequency response</th>
<th>Percentage response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have training in SNE</td>
<td>5/22</td>
</tr>
<tr>
<td>Have no training in SNE</td>
<td>17/22</td>
</tr>
</tbody>
</table>

From the table only a few teachers had training in SNE while majority had no training at all. However from interview responses one principal was trained in SNE. One of them gave the response. “I have covered only a few units in SNE in the workshops I have attended”. One principal admitted she had no training in SNE at all. She was quoted to say. “To be frank I have not undertaken any course or training in SNE but I am longing to attend one even if it is a workshop”.

Hergarty (1984) stated that the majority of teachers in inclusive schools have little knowledge about special needs. This contributes to eroding their willingness and confidence in dealing with this category of pupils. This literature is supported by the
findings, which indicated most teachers and principals had little or no training in special needs.

4.6.2 Other Challenges facing Teachers in implementing Inclusive Education

Apart from lack of training the teachers were asked to state any other challenge they could foresee and their responses are recorded in table 4.20.

Table 4.20: Responses on Other Challenges facing Teachers

<table>
<thead>
<tr>
<th>Statement (Item)</th>
<th>Response mean for the item</th>
<th>Theoretical mean</th>
<th>Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Lack of training and experience in SNE</td>
<td>3.0</td>
<td>2.5</td>
<td>Respondents opinion in agreement with the statement</td>
</tr>
<tr>
<td>b) Lack of necessary support materials/resources</td>
<td>2.9</td>
<td>2.5</td>
<td>Opinion in agreement</td>
</tr>
<tr>
<td>c) Individual differences among learners</td>
<td>3.0</td>
<td>2.5</td>
<td>Opinion in agreement</td>
</tr>
<tr>
<td>d) Fear of extra work in planning instructions for child with special needs.</td>
<td>2.7</td>
<td>2.5</td>
<td>Opinion in agreement</td>
</tr>
<tr>
<td>e) Lack of support from administrators</td>
<td>2.6</td>
<td>2.5</td>
<td>Opinion in agreement</td>
</tr>
</tbody>
</table>

In analyzing the responses to this question a ricketier scale akin to one used in table 4.20 was used. The theoretical mean remained 2.5. The response mean for the various statements was different. From the response means the teachers felt that lack of training and experience (mean 3.0) and individual differences among learners (mean 3.0) could
pose a greater challenge than other factors they were required to respond to. Lack of necessary materials also posted quite a high response mean of 2.9 indicating they also felt it could be a major challenge they were likely to face. Other factors such as fear of extra work and lack of support by administrators posted lower response means of 2.7 and 2.6 respectively indicating the teachers did not consider these as major challenges.

Bailey (1983) noted that teachers tend to spend more time planning the curricular activities and less time in planning the teaching strategies for use to facilitate learning. It is certain that planning a lesson for certain categories of learners with special needs is more of a challenge than planning for regular learners. The research findings indicate teachers fear extra work of planning instructions for learners with special needs. This fear could result from lack of strategy and innovation in planning teaching strategies for learners requiring special attention. Few teachers have any idea of preparing an individualized education programme (I.E.P) suitable for learners with special needs. The respondent teachers stated that apart from the ones already mentioned, there were other hindrances to inclusive education such as lack of physiotherapists and sign language interpreters.

The findings from the principals interviewed indicated the same trend of challenges as the teachers. All but one principal had little or no training in special needs. Two principals stated lack of trained teachers as a hindrance and two quoted lack of funds and/or necessary support materials (resources) as a hindrance to inclusive education.
The observation checklist also concurred with findings from teachers and principals since it was observed that materials necessary to make the environment least restrictive were missing in the schools. These findings concur with report from UNESCO (2000) which pointed out that inadequacy of resources available to meet the basic needs in education was a major hindrance to ensuring education for all. The findings show clearly that both human and material resources to support inclusive education are lacking or are inadequate in all the four schools under study.

4.7 Opinion towards Inclusive Education

The final task of this study was to find out the opinion of teachers and students towards inclusive education in the selected schools.

4.7.1 Opinion of Teachers towards Inclusive Education

Teachers were asked to give their opinion towards inclusive education. A ricketier scale was used to analyze responses from one of the questions they responded to. The same rating scale of 1 to 4 and a theoretical mean of 2.5 as previous analysis were used. The analysis was as follow:
<table>
<thead>
<tr>
<th>Statement</th>
<th>Response mean</th>
<th>Arbitrary mean</th>
<th>Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Learners with special needs should be totally confined in special schools.</td>
<td>2.3</td>
<td>2.5</td>
<td>Opinion in disagreement</td>
</tr>
<tr>
<td>b) A learner with special needs require more attention than one without.</td>
<td>3.5</td>
<td>2.5</td>
<td>Opinion in agreement</td>
</tr>
<tr>
<td>c) Children with special needs need pity and sympathy.</td>
<td>1.5</td>
<td>2.5</td>
<td>Opinion in Disagreement</td>
</tr>
<tr>
<td>d) Inclusion can compromise discipline in schools.</td>
<td>1.9</td>
<td>2.5</td>
<td>Opinion in disagreement</td>
</tr>
<tr>
<td>e) Teacher training in college is enough to handle children with special needs.</td>
<td>2.1</td>
<td>2.5</td>
<td>Opinion in disagreement</td>
</tr>
<tr>
<td>f) In class children with special needs associate well with normal children.</td>
<td>2.6</td>
<td>2.5</td>
<td>Opinion in agreement</td>
</tr>
<tr>
<td>g) Teachers are neutral when dealing with both normal and children with special needs</td>
<td>2.5</td>
<td>2.5</td>
<td>Opinion neutral</td>
</tr>
<tr>
<td>h) Teachers should avoid punishing learners with special needs.</td>
<td>2.3</td>
<td>2.5</td>
<td>Opinion in disagreement</td>
</tr>
<tr>
<td>i) Children with special needs may not perform as well as those without.</td>
<td>2.0</td>
<td>2.5</td>
<td>Opinion in disagreement</td>
</tr>
<tr>
<td>j) Children with special needs feel inferior to normal children.</td>
<td>2.6</td>
<td>2.5</td>
<td>Opinion in agreement</td>
</tr>
</tbody>
</table>
The statements were given to help gauge the opinion of teachers towards inclusive education. In items a, c, d, e, g, h and I, the response mean is less than the arbitrary mean. This indicates majority of the teachers are in disagreement with these items (statements).

For item g, the response mean is equal to arbitrary mean indicating a balance between the teachers in agreement and those in disagreement with the statement (item). In items b, f and j the response mean is higher than the arbitrary mean indicating most teachers are in agreement with these items (statement).

The teachers’ response towards merits of inclusive education was that all 6 teachers in one of the schools failed to respond to this question. Teachers from two of the schools indicated inclusive education enhances equal opportunities, others noted that it improved the morale of learners with special needs, enhance socialization and maximum resource utilization. Others indicated it enhances performance of learners with special needs.

Asked the demerits of inclusive education, teachers from one school did not respond to this question. The teachers who responded stated the demerits as demands of extra resources, may compromise effective teaching/learning especially for gifted learners, that a lot of attention may be directed to learners with special needs to the detriment of other learners, slow learning pace, that the learners with special needs may be segregated by others due to stigma towards disabilities and that some learners with special needs may develop inferiority complex.
4.7.2 Opinion of Students towards Inclusive Education

The opinion of regular students towards inclusive education was also sort. The results indicated it was more negative than that noted from teachers. This is probably due to less exposure of learners to persons with special needs as compared to their teachers. In one of the questions the learners were required to indicate the degree of comfort in sharing resources with learners with special needs and the results were presented in figure 4.3:

Figure 4.3: Response percentage for level of comfort

From the pie chart majority of respondent students stated they would be comfortable sharing same resources with a child with disability, about one fifth would be uncomfortable and very few (less than one tenth) would be very uncomfortable. The students were then asked to state whether they would be willing to give support to learners with special needs if they were included in their schools. The responses are summarized in table 4.22.
Table 4.2: Support to learners with special needs

<table>
<thead>
<tr>
<th>Frequency response</th>
<th>Percentage response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would support learners with SNE</td>
<td>283/342</td>
</tr>
<tr>
<td>Would not support learners with SNE</td>
<td>19/342</td>
</tr>
</tbody>
</table>

Most of the learners indicated they would support learners with disabilities if they were included in their school while very few stated they would not offer them support. Asked how they would support them, some stated they would share items with them, advise them, hold group discussion with them and assist by pushing wheel chairs and caring and comforting them. The students were further asked whether they supported inclusion of learners with special needs in the coming academic year and their responses were recorded in table 4.23.

Table 4.23: Support of inclusive education by learners.

<table>
<thead>
<tr>
<th>Frequency response</th>
<th>Percentage response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>89/342</td>
</tr>
<tr>
<td>Agreed</td>
<td>172/342</td>
</tr>
<tr>
<td>Disagreed</td>
<td>49/342</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>27/342</td>
</tr>
</tbody>
</table>
From the table slightly below one third strongly agreed, about half agreed, slightly more than one tenth disagreed and very few strongly disagreed such leaners to be included in their schools that soon. Using a ricketier rating scale of 4 points and same arbitrary mean of 2.5. The response mean of students to this question was calculated thus:

\[
\frac{(89 \times 4) + (172 \times 3) + (49 \times 2) + (27 \times 1)}{337} = 3.0
\]

The response mean of 3.0 was greater than arbitrary mean of 2.5 showing that majority of the respondents were in agreement with the statement that ‘learners with special needs should be included in schools in the following academic year’.

The students were also required to indicate what their feelings were when they encounter a person with a serious disability and their responses were recorded in table 4.24.

**Table 4.24: Feelings towards a person with a serious disability**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear</td>
<td>22/342</td>
<td>6.4%</td>
</tr>
<tr>
<td>Pity</td>
<td>300/342</td>
<td>87.7%</td>
</tr>
<tr>
<td>Uneasy</td>
<td>12/342</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

From the table a few of the students would react with fear, a vast majority stated they would pity them while very few would feel uneasy. Still another question required the learners to state whether they supported the idea of sharing the same classroom with learners of differing special needs. The results were presented in figure 4.4.
Figure 4.4: Support or Non-Support of SNE

From the chart about two thirds would support while one third would not support the idea. Those who supported stated the reasons for supporting as that those learners with special needs are also human and disability is not inability. The experience would also expose them to live with persons with disability which would reduce fear, pity and stigma. Those who responded ‘no’ stated the reasons as; That the learners with special needs would disturb others.(“Sometimes they become mad”), that they would need special teachers, will bring confusion in classroom, are difficult to communicate with and that such learners would feel uneasy. This concurs with findings by Akhtar (1994) that most non-literate and semi-literate people see children with disabilities as a burden to society. Others belief disability is a curse and therefore such children should not be given education.

All the four principals interviewed supported the idea of admitting learners with special needs in their schools. One was quoted to say “I have no problem with such learners after all anyone can give birth to a child with special needs”. The assertion by Sage and
Burrello (1994) that beliefs and attitudes of administrators towards inclusive education is a key factor influencing their behavior towards learners with special needs is in line with such findings. Therefore the principals if given support from stake holders are likely to implement inclusive education in their schools without much push.

Findings by Haworth (1987) asserted that the non-handicapped can project deep feelings of inadequacy onto the handicapped by regarding them as causing fear and anxiety. This will lead to prejudice and eventual stigmatization. These study findings concur with this because some students respondents indicated they would react with uneasiness and others would react with fear when they encounter a person with a serious disability.

Findings from Hergaty (1981) showed that learners generally accept those with special needs though they are often considered an ‘out group’ which means they segregate them in various ways. According to the findings the response mean indicated majority learners supported the idea of learners with special needs being included in regular schools. However their relationship with those with special needs would mainly be that of helping and caring such as pushing wheelchairs for them or comforting them as the findings indicated. The findings therefore concur with Hergaty (1981) reviewed literature.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter starts with giving a summary of main research findings. The summary is given based on each objective of the study. It then goes on to draw conclusions based on the findings. The conclusions are also organized by objectives. This is followed by recommendations which are based on the findings and conclusions. The recommendations are categorized into those related to policy, practice and those suggesting further research.

5.2 Summary

Following is a summary of the finding of this study.

5.2.1 Types of Environmental Modification available in Schools under Study.

The study established that in all four schools involved none had met the necessary environmental modification requirements for inclusive education and neither did any have the necessary support services for the same. Environmental modification to make the schools barrier free such as rumps, well lit rooms, spacious classrooms, large print materials, ventilated rooms, adapted school buses, toilets among others were either missing or not up to required standards. This is indicated by responses from teachers where in three of the schools majority of the teachers indicated absence of rumps and almost half of the respondent students indicated presence of staircases instead of rumps. Majority of students indicated the distance between rows of desks to be less than one meter. However in some schools there were some assistive devices such as wheelchairs,
walking sticks and clutches for physically handicapped. None of the schools had assistive devices for other categories of disabilities.

5.2.2 Teaching/Learning Resources

From the findings teaching/learning resources for children with special needs were scarce in all the four schools under study. All the schools had computers. All the respondent teachers and students indicated this. However these did not have software to cater for learners with special needs. Furthermore each computer was shared by more than three students. Charts were available in some schools but these were of normal print as opposed to large print as the checklist indicated. The principals interviewed indicated lack of teachers trained in SNE in their schools. In two of the schools teachers who had been trained in SNE had long been transferred without replacement. All principals indicated lack of funds to support SNE. The responses from teachers and students also indicated teaching and learning resources were not adequate particularly for learners with special needs in education.

5.2.3 Challenges facing Teachers

One of the challenges facing teachers is lack of training in special needs education as the responses indicate. Most of the teacher respondents had no training in special needs education at all. Only one of the four principals interviewed had training in special needs. Other challenges facing teachers included: Lack of support materials for SNE, fear of extra work, uncertainty of support from administrators among others. For all these items the response mean on the ricketier scale was greater than the theoretical mean indicating all teachers were in agreement with the given statements. Lack of special personnel to
assist learners with SNE such as physiotherapists and sign language interpreters was also quoted as a hindrance by some teachers.

5.2.4 Opinion towards Inclusive Education

Teachers’ opinion towards inclusive education was mainly positive. The responses from the ricketier scale attest to this. The response means were mainly greater than the arbitrary mean indicating a positive opinion. Teachers from most schools indicated inclusive education enhanced equal opportunities, improved the morale of learners and other positive remarks. The opinion of students towards the same was somehow negative as indicated by their responses whereby a good number stated they would be uncomfortable sharing same resources with children with disabilities and a few would be very uncomfortable. A number of them indicated they would offer no support to learners with disabilities. Almost half disagreed while a good number strongly disagreed learners with special needs to be included in their school in the following academic year. This trend showed a negative opinion on the part of students. All the four principals supported the idea of inclusive schools.

5.3 Conclusions

This study came up with four conclusions;

Firstly based on findings of objective one, the Environmental modifications in the four schools under study in Kilifi County are not adequate to support inclusive education. In order to facilitate inclusion of learners with special needs in these schools, special attention needs to be given to removing barriers to inclusive education. Different types of
disabilities require different environmental modifications and these have to be put in place if inclusive education is to be realized in these schools and the rest in the county.

**Secondly,** Teaching/Learning resources for learners with special needs were inadequate in all the schools under study. These should be provided to facilitate inclusive education. Although all the schools had computers there was no software to take care of different categories of special needs. This software should be put in place. Modified text books, large print charts, hearing aids among other resources should all be provided. Teachers should also be trained in SNE and other special personnel needed for learners with special needs availed in these schools to facilitate inclusive education. Furthermore, all the principals should be retrained in special needs education and the governments to provide more funds for the same.

**Thirdly,** all teachers need to be trained in SNE in order to be able to handle learners with special needs in the schools under study and others. This is because lack of training is a major constraint to inclusive education. Necessary support materials should be given to teachers and the school administration should support the teachers dealing with the exceptional learners. With enough training, materials and support from administration the teachers will be in a position to take care of all learners.

**Finally,** the opinion of teachers and principals towards inclusive education is mainly positive. If given further training, necessary support and materials the opinion is bound to become even better. The opinion of most students is also positive but a good number have very negative opinion. Lack of exposure may have contributed to this. The students
need guidance in this area since the ones with negative opinion can make the school environment unfriendly to learners with special needs. The school community needs to be encouraged to consider the merits more than demerits of inclusive education.

5.4 Recommendations

5.4.1 Policy Recommendations

The following policy recommendations were made from the findings of this study.

i. Practicing teachers in Kilifi County should be retrained and college curriculum modified to take care of learners with special needs.

ii. The government should allocate more funds in Kilifi County for purpose of inclusive education.

iii. Parents of learners with special needs in Kilifi County should be sensitized on the merits of inclusive education so that they become supportive and advocate for the same.

iv. All learners in Kilifi County should be sensitized on inclusive education through guidance and counseling or any other forum.

v. The county government of Kilifi should as a matter of agency take initiatives in identifying and supporting learners with special needs to ensure that they pursue compulsory education just like others without special needs.

vi. All schools in Kilifi County should as a matter of agency start modifying their physical environments to make them conducive for the diversity of learners.
5.5 Recommendations for Further Research

i. A study should be undertaken to seek the opinion of learners with special needs towards inclusive education.

ii. This study should be expanded to understand the situation of inclusive education in other counties.

iii. A comparative study should be undertaken to compare practices in inclusive education with those of a country where inclusive education has succeeded.
REFERENCES

Agbenyego, J. (2007). Examining Teachers Concerns and Attitudes to Inclusive Education in Ghana.


http://www.unesco.org/education/efted/background/worldconference-jomtien.shtml


Special Education Leadership Review 2(1), 102-122.


APPENDICES

APPENDIX I: QUESTIONNAIRE FOR TEACHERS

BACKGROUND INFORMATION

1. Name of the school-----------------------------

   1. Please indicate your gender. Tick as applicable

       Male

       Female

   2. What is your highest education level? Tick as appropriate

       Diploma

       Bachelors degree

       Post – Graduate

       Others

   3. Teaching experiences (√) where applicable

       i. One to five years

       ii. Six to ten years

       iii. Eleven to fifteen years

       iv. Fifteen to twenty years

       v. More than twenty years
**ENVIROMENTAL MODIFICATION**

5 Please tick as applicable the following table about state of your school environment recommended for SNE.

<table>
<thead>
<tr>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Rumps to various buildings.</td>
<td></td>
</tr>
<tr>
<td>ii) Well lit rooms</td>
<td></td>
</tr>
<tr>
<td>iii) Spacious classrooms.</td>
<td></td>
</tr>
<tr>
<td>iv) Rails on verandas</td>
<td></td>
</tr>
<tr>
<td>v) Large print charts</td>
<td></td>
</tr>
<tr>
<td>vi) Adapted toilets</td>
<td></td>
</tr>
<tr>
<td>vii) Adapted tables / desks</td>
<td></td>
</tr>
<tr>
<td>Well ventilated rooms</td>
<td></td>
</tr>
</tbody>
</table>

6 Apart from the environmental adaptation modifications mentioned in a, above, what other adaptations or modifications would you recommend to facilitate inclusive education?
TEACHING AND LEARNING RESOURCES

7. Please indicate accordingly with a tick ( ) in the following table concerning teaching and learning resources in your school.

<table>
<thead>
<tr>
<th>T/L resource</th>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large print charts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hearing aids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note takers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modified text books</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Please tick as applicable in the following table regarding state of resources in your school.

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) There are enough assistive devices for SNE in the school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) There are enough teaching /learning resources in the school for all children.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. In your view which resources are lacking in your school for learners with special needs?
CHALLENGES FACING TEACHERS

10. Please indicate whether you have been trained in special needs education or not.

Tick as applicable.

<table>
<thead>
<tr>
<th>Trained in SNE</th>
<th>Not trained in SNE</th>
</tr>
</thead>
</table>

11. The following are major challenges teachers face in implementing inclusive education. Tick as applicable.

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>Agree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>a). Lack of training and experience in handling SNE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b). Lack of necessary support materials / resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c). Individual differences among learners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d). Fear of extra work in planning instructions for child with special needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e). Lack of support from administrators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Apart from the challenges mentioned in question 5, what other challenges do teachers face in implementing inclusive education?
OPINION OF TEACHERS TOWARDS INCLUSIVE EDUCATION

13. Please use a tick ( ) to show which answer suits you most, guided by the key.

Key: Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD)

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learners with special needs should be totally confined in special schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>A learner with special needs require more attention than one without.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Children with special needs need pity and sympathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Inclusion can compromise discipline in schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Teacher training in college is enough to handle children with various special needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>In class children with special needs associate well with the normal children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Teachers are neutral when dealing with both normal and children with special needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Teachers should avoid punishing learners with special needs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Children with special needs may not perform as well as those without.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Children with special needs feel inferior to normal children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
</tbody>
</table>

14. In your view what are the merits of inclusive education?

15. In your view what are the demerits of inclusive education?
APPENDIX II: QUESTIONNAIRE FOR STUDENTS

BACKGROUND INFORMATION

1) Please indicate your gender in the table below. Tick where applicable.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Use tick (✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
</tr>
</tbody>
</table>

2) Please indicate your class by ticking in the appropriate space.

<table>
<thead>
<tr>
<th>Form</th>
<th>Use tick (✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

3) Indicate if ever you have interacted with a child with a disability. Tick as applicable.

<table>
<thead>
<tr>
<th>Interacted</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never interacted</td>
<td></td>
</tr>
</tbody>
</table>
ENVIRONMENTAL MODIFICATION

5. Please indicate your class size as per the guide below:
   i) More than 50  
   ii) 40-50  
   iii) 30-40  
   iv) < 30  

6. How can you rate the ventilation in your classroom?
   i) Very good  
   ii) Good  
   i) Poor  

7) How is the arrangement of desks in your classroom?
   i) In rows  
   ii) Haphazard  

8) If in rows what is the approximate distance between the rows in meters?___________

9). Indicate with a tick the type of entry points to various students common rooms:
   i) Stair cases  
      ii) Ramps  
      iii) Ridge  

10) How can you rate the lighting in your classroom?
    i) Dimly lit  
    ii) Well lit  
    iii) Too much lighting.  

TEACHING/LEARNING RESOURCES

1) Are there computers in your school? Yes □ No □

2) If yes, about how many students share a computer? □

3) Do your teachers use charts when teaching? Yes □ No □

4) If yes indicate whether the charts are clearly visible or not.
   i) Clear □
   ii) Not clear □

OPINION OF STUDENTS TOWARDS INCLUSIVE EDUCATION

4) Given a chance would you be comfortable or uncomfortable sharing the same desk, book and other resources with a child with disability. Tick where appropriate.
   Comfortable □
   Uncomfortable □
   Very uncomfortable □

5) If learners with disabilities were included in your school, would you support them?.
   If yes how would you support them?.................................................................

6) Learners with special needs should be included in our school without delay. Tick as applicable.
   Agree □
   Strongly agree □
   Disagree □
   Strongly disagree □
8). When you come across a person with a severe disability what is your first reaction?

Tick where applicable.

Fear ☐  Pity ☐  Uneasy ☐

9. In your opinion do you support the idea of learners with special needs sharing same classroom with learners without special needs?

...........................................................

10. What reason(s) can you give for your answer in question 9?

..........................................................................................................................

..........................................................................................................................
APPENDIX III: INTERVIEWS QUESTIONS FOR PRINCIPALS

1. For how long have you headed this school?

2. What is your highest level of education?

3. Have you ever undertaken any course in special education?

4. What type of assistive devices did the ADB provide to this school?

5. Do you support inclusion of learners with SNE in your school?

6. In your view are the assistive devices provided by ADB able to support inclusion of learners with special needs in your school?

7. According to you which is the main hindrance to this school admitting learners with specials needs?

8. Are you well versed with the section of Kenyan constitution dealing with special needs?

9. Apart from assistive devices and trained teachers from ADB what other assistance have your received from the government or any other sources to support inclusion?

10. As Head teacher of a potentially inclusive school what environmental modifications do you plan to carry out to facilitate inclusive education?

11. What would you wish the government to do to facilitate inclusive education in this school?
## APPENDIX IV: OBSERVATION CHECKLIST

1) Environmental Modification and accommodation

<table>
<thead>
<tr>
<th>Item</th>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Ramps of required gradient.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Wheel Chairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) White canes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Spacious classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Well lit rooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Adopted Chairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) Adopted toilets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) Adopted beds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9) Guide rails</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10) Note takers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11) Well ventilated rooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12) Large print charts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13) Hearing aids</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX V: BUDGET

<table>
<thead>
<tr>
<th>Activity</th>
<th>Units</th>
<th>Rate (Ksh.) per Unit</th>
<th>Total Cost (Ksh.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing and photocopying of this thesis for presentation.</td>
<td>7</td>
<td>600</td>
<td>4200</td>
</tr>
<tr>
<td>Questionnaires</td>
<td>180</td>
<td>35</td>
<td>6300</td>
</tr>
<tr>
<td>Transport</td>
<td></td>
<td></td>
<td>6000</td>
</tr>
<tr>
<td>Phone calls</td>
<td></td>
<td></td>
<td>1000</td>
</tr>
<tr>
<td>Research Assistants allowances</td>
<td>2</td>
<td>4000</td>
<td>8000</td>
</tr>
<tr>
<td>Internet accessing</td>
<td></td>
<td></td>
<td>500</td>
</tr>
<tr>
<td>Printing, photocopying and binding of final thesis report.</td>
<td>5</td>
<td>400</td>
<td>2000</td>
</tr>
<tr>
<td>Miscellaneous expenses</td>
<td></td>
<td></td>
<td>2500</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>30,500</strong></td>
</tr>
</tbody>
</table>
APPENDIX VI: APPROVAL LETTER FROM GRADUATE SCHOOL

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: kubps@yahoo.com
dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 57530

Internal Memo

FROM: Dean, Graduate School
TO: Mr. John N. Kimani
C/o Department of Special Needs Education
Kenya University

DATE: 6th April, 2016
REF: E55/CE/23785/12

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

We acknowledge the receipt of your revised Research Proposal 2015 entitled “Analysis of Factors Affecting Implementation of Inclusive Education in Regular Secondary Schools in Kilifi County, Kenya” as per recommendations raised by the Graduate School Board of 24th February, 2016.

You may now proceed with your Data collection, subject to clearance with the Director General, National Commission for Science, Technology & Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed supervision Tracking Forms per semester. The form has been developed to replace the progress Report Forms. The Supervision Tracking Forms are available at the University’s Website under Graduate School webpage downloads.

Thank you.

EDWIN OBUNGU
FOR: DEAN GRADUATE SCHOOL

cc. Chairman, Department of Special Needs Education

Supervisors:

1. Dr. Chomba Wa Munyi
   C/o Department of Special Needs Education
   KENYATTA UNIVERSITY

2. Dr. JessinaMuthee
   C/o Department of Special Needs Education
   KENYATTA UNIVERSITY

EO/cao

Committed to Creativity, Excellence & Self-Reliance
APPENDIX VII: AUTHORIZATION LETTER FROM GRADUATE SCHOOL

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke
P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

OUR REF: E55/CE/23785/12
Date: 6th April, 2016

The Director General,
National Commission for Science, Technology & Innovation,
P.O. Box 30623-00100,
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR MR. JOHN N. KIMANI REG. NO. E55/CE/23785/12

I write to introduce Mr. Kimani who is a Postgraduate Student of this University. He is registered for M.Ed Degree programme in the Department of Special Needs Education in the School of Education.

Mr. Kimani intends to conduct research for M.Ed. Thesis entitled, “Analysis of Factors Affecting Implementation of Inclusive Education in Regular Secondary Schools in Kilifi County, Kenya”

Any assistance given will be highly appreciated.

Yours faithfully,

MRS. LUCY N. MBAABU
FOR: DEAN, GRADUATE SCHOOL

EO/cao

Committed to Creativity, Excellence & Self-Reliance
APPENDIX VIII: LETTER FROM MINISTRY OF INTERIOR AND CO-ORDINATION OF NATIONAL GOVERNMENT

THE PRESIDENCY
MINISTRY OF INTERIOR AND CO-ORDINATION OF NATIONAL GOVERNMENT
Deputy County Commissioner
Kilifi North Sub-County
P. O. Box 29 - 80108
KILIFI

Telephone: (041) 7522103
Fax: (041) 7522474
Email kilifiode@yahoo.com
When replying please quote
Ref: EDUC.12/7 VOL.I/164

And Date: 13th April, 2017

The Deputy County Commissioner
MALINDI SUB COUNTY

RESEARCH AUTHORIZATION
JOHN NJOROGHE KIMANI

The above named student of Kenyatta University has been authorized to carry out research on
“Analysis of factors affecting implementation of inclusive education in regular Secondary Schools
in Malindi Sub-County, Kilifi County, for a period ending 10th May, 2017.

Kindly accord him any assistance he may require to make the project a success.

J. K. KETER ‘ndc’ (K)
COUNTY COMMISSIONER
KILIFI COUNTY
TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION - JOHN NJOROGE KIMANI

The above named is a student from Kenyatta University. He has been authorized to conduct a research on "Analysis of factors affecting implementation of inclusive education in regular secondary schools in Kilifi County, Kenya" for period ending 10th May, 2017.

Any assistance accorded to him will be highly appreciated.

KARATI MOSES N.
COUNTY DIRECTOR OF EDUCATION
KILIFI

Copy to:
All Sub County Directors of Education
KILIFI COUNTY
APPENDIX X : AUTHORIZATION LETTER FROM NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241349, 3310571, 2219420
Fax: +254-20-318245, 318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote
Ref: No. NACOSTI/P/16/58630/10793

John Njoroje Kimani
Kenyatta University
P. O. Box 43844-00100
NAIROBI.

Date: 18th October, 2016

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Analysis of factors affecting implementation of inclusive education in regular secondary schools in Kilifi County, Kenya,” I am pleased to inform you that you have been authorized to undertake research in Kilifi County for the period ending 10th May, 2017.

You are advised to report to the County Commissioner and the County Director of Education, Kilifi County 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.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Kilifi County.

The County Director of Education
Kilifi County.

APPENDIX XI: APPROVAL LETTER FROM NACOSTI

THIS IS TO CERTIFY THAT:
MR. JOHN NJOROGE KIMANI
of KENYATTA UNIVERSITY, 100-80208,
gende, has been permitted to conduct
research in Kilifi County
on the topic: ANALYSIS OF FACTORS
AFFECTING IMPLEMENTATION OF
INCLUSIVE EDUCATION IN REGULAR
SECONDARY SCHOOLS IN KILIFI
COUNTY, KENYA.

for the period ending:
10th May, 2017

Permit No: NACOSTI/P/16/58630/107
Date Of Issue: 18th October, 2016
Fee Received: Ksh 1000

Applicant’s Signature

Director General
National Commission for Science Technology & Innovation

CONDITIONS

1. You must report to the County Commissioner and
the County Education Officer of the area before
embarking on your research. Failure to do that
may lead to the cancellation of your permit.
2. Government Officer will not be interviewed
without prior appointment.
3. No questionnaire will be used unless it has been
approved.
4. Investigation, filming and collection of biological
specimens are subject to further permission from
the relevant Government Ministries.
5. You are required to submit at least two (2) hard
copies and one (1) soft copy of your final report.
6. The Government of Kenya reserves the right to
modify the conditions of this permit including
its cancellation without notice.

RESEARCH CLEARANCE PERMIT

National Commission for Science, Technology and Innovation

Serial No. A
112.99

CONDTIONS: see back page