TEACHERS’ ATTITUDES TOWARDS INCLUSION OF LEARNERS WITH HEARING IMPAIEMENT IN REGULAR SCHOOLS IN KIAMBU, NYANDARUA, KIRINYAGA AND MURANG’A COUNTIES

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Teachers’ attitudes towards inclusion of
DECLARATION

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

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DEDICATION

This thesis is dedicated to my family whose love and support sustained me throughout the course and to colleagues who contributed their collective wisdom.
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### ABBREVIATIONS AND ACRONYMS

<table>
<thead>
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<th>Abbreviation</th>
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<tr>
<td>ANOVA</td>
<td>One Way Analysis of Variance</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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<td>KISE</td>
<td>Kenya Institute of Special Education</td>
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<td>KSDC</td>
<td>Kenya Society for Deaf Children</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific &amp; Cultural Organization</td>
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<td>USA</td>
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ABSTRACT

Development in thinking and practice in inclusion indicate that the issue is now at the heart of policy and planning in education throughout the world, and is a central part of the movement towards Education for All. The Government of Kenya and development partners have put a lot of efforts in ensuring that all learners with Special Needs and disabilities receive appropriate Education. This study investigated the teachers’ attitudes towards inclusion of learners with hearing impairment in regular schools in Kiambu, Nyandarua, Kirinyaga and Murang’a counties. Literature was reviewed on factors affecting inclusion of learners with hearing impairment in regular schools in Kenya, Africa and other parts of the world. Survey research design was employed. The study targeted a population of 19,500 teachers from special units and regular schools. Random sampling methods were used to arrive at the sample size of 400 teachers. Data was collected using a five point likert scale questionnaire. The study revealed that majority of the teachers have positive attitudes expected for implementation of inclusive education in Kenya. However teachers revealed that they would face serious problems in communication, teaching strategies, workload and lack of audiological equipment. The study recommended that, training of teachers in Special Needs be intensified to address communication; teaching and learning strategies appropriate for learners with hearing impairment, environmental restructuring and community involvement be effected. Finally, further research be carried out to assess the extent to which other barriers have contributed to non-inclusiveness of education of learners with hearing impairment and giving the first priority to those who are hard of hearing.
CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Special Education in Kenya was started on segregation lines in 1940s after the Second World War. This is the earliest form of formal provision of education for learners with Special Needs in the country. In this system, learners with Special Needs are catered for in segregated setups within the community. They may be placed in residential special institutions in which they learn with others who have similar difficulties like them, and small homes. There are institutions of learners with hearing impairment, visual impairment, mentally handicapped and physical and motor difficulties Mwaura, (2001).

Most of these institutions are often far from the learners' home where they are separated from the family and peers. This limits their interaction with the real world as they spend most of the time with others like them. They are also separated from peers and siblings in their formative years and forced to live with people who may not know how to relate to them. This makes it difficult for the learner to face the real world full of diversities, which she or he was not prepared for. Specially trained teachers in the special programmes rarely interact with teachers of regular schools and so they do not exchange new ideas on improved teaching strategies. Such teachers are trained to work with only a specific special need thus teachers for hearing impaired, visually impaired, physically handicapped and mentally challenged Mwaura, (2001).

Segregation though being practiced to date in most schools was found inadequate in 1970s and thus integration implemented. This was in accordance to Kenya Education
commissions that advocated and recommended integration of learners with Special Needs in regular schools (GOK 1976, 1988 and 1999). This provision attempted to place learners with Special Needs in Education in the mainstream regular education system. However, the focus was still on disability.

Learners with Special Needs in the mainstream enjoyed social integration from peers and siblings. The environment was less restrictive than in segregated settings since the learners interacted with others without similar Special Needs. They also supported them with various activities. However, these integration programmes lacked proper coordination and learners with Special Needs in Education were excluded from academic learning while being locationally and socially included. They were labelled and stigmatized hence lowering their self-esteem and finally regular teachers in special schools and other learners felt incompetent to deal with those with Special Needs whom they thought may only be handled by teachers trained in Special Needs Education. In central province, only two schools for hearing impaired are practicing locational integration to date. These are Kambui and Kerugoya. They have provided equal opportunities to all learners to experience normal mainstream activities, while making deliberate and appropriate measures to ensure quality Education For All (EFA). However, as much as this system has provided some favourable factors to the growth of education to learners with hearing impairment, it has turned out to be inappropriate since the child is seen as a problem who must adapt to fit in the education system. The focus is therefore on attendance rates and hence need for alternative provision.
Inclusive Education is about learners with Special Needs learning effectively once they are in the mainstream. The focus is on quality of learning which is responsive, relevant, developmentally appropriate and participatory. Positive learning opportunities with support to learners with Special Needs are planned as an integral part of the ordinary schools, other requirements include change of attitudes, behaviors, teaching strategies, curricula and environment adaptation to meet the needs of all learners hence overcoming barriers to learning and development. Inclusive Education aims to support efforts to make schools more accessible to learners with Special Needs and more responsive to their needs.

Inclusive Education is the process of addressing all learners’ needs within the regular school using all available resources to create opportunities for them to learn together in preparing them for life. It is also a tool for promoting an inclusive society interaction, participation and co-existence. Learners with hearing impairment need to develop constructive and sustainable relationships. The principle of Inclusive Education according to Ainscow, (1999).

Calls for a child centered curriculum and the learner to attend the school that he or she would naturally go to in his community if he or she had no Special Needs. Advocates for accessibility to the learning process and the curriculum by all learners by differentiating the learning and assessment process according to the learner’s needs. Addresses the needs of all learners with visible and invisible learning difficulties such as visual, hearing, physical, intellectual, emotional, communication, behavioral and emotional
problems, child abuse, poverty malnourishment, emotional effects of wars, divorce and family separation, and learners living on the street to name just a few.

Inclusive Education also entails the following:

1. Acknowledges that all learners need support.

2. Accepting and respecting that all learners are different in some way and have different but equally valued learning needs.

3. Capacitating education structures, systems and teaching and learning strategies to meet the needs of all learners.

4. Changing attitudes, behaviours, curricula and the environment to meet the needs of all learners.

   - Maximizing the participation of all learners.

   - Uncovering and minimizing barriers to learning.

   - Empowering learners to participate in the process of learning by developing their individual strengths.

The National policies for Inclusive Education include the earlier mentioned commissions by GOK, (1976) all recommended education of learners with Special Needs in regular schools. The Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond GOK, (1988) emphasized the provision of education for learners with Special Needs in education in the regular classroom and recommended that the media and national programmes be used more intensively to publicize awareness of the needs of people with disabilities. The Totally Integrated Quality Education and Training GOK, (1999) emphasized the need for early intervention for learners including
those with disabilities, improving accessibility, equity, relevance and quality with special attention to gender sensitivity, the disabled and the disadvantaged group, the content of education at various levels with special attention to early childhood special and primary education. Finally Education For All (Kenya, 2001) advocated for Education For All to be free and available to all Kenyans by 2015.

1.2 Statement of the problem

From the above background, it is explicitly clear that education for the hearing impaired learners is not well addressed. There is concern over placement provision of learners with Special Needs in Kenya. The earlier mentioned commissions recommendations have not been fully enacted. This is an indication that the implementation process is experiencing some constraints and barriers. The placement of the learners with hearing impairment has resisted change since independence. As earlier mentioned these learners are still placed in special schools, far from their homes regardless of the current global orientation to educate learners in schools they would attend if they did not have any impairment. Implementation for inclusive schools for hearing impaired would require:

1. Adapting the curriculum to take care of the learners.

2. Change in teacher education system to enhance change of attitude and improving on teaching/learning strategies.

Unfavourable teacher attitudes emanate from ignorance, lack of experience, communication barrier all which are detrimental to education of learners with hearing impairment.
In view of the above this study aimed to investigate on teachers’ attitudes towards learners with hearing impairment in regular schools.

Hearing impairment is a hidden handicap and therefore teachers have continued teaching these learners yet no form of integration has fully succeeded. There may be many factors leading to this, but of concern are those that directly affect the teachers’ attitudes.

1.3 Purpose of the Study

The purpose of the study was to identify the attitudes of primary school teachers toward inclusion of learners with hearing impairments into regular schools. Specifically the study sought to investigate;

1. Whether teachers were well equipped with skills to teach learners with hearing impairment.
2. Teachers’ view about placement options of learners with hearing impairment.
3. Teachers’ view about learners with hearing impairment being taught together with those who are hearing.

These issues address themselves to areas that are key to the successful implementation of Inclusive Education. If the philosophy of inclusion is ‘wanting’ in any of the above aspects, it is bound to experience some constraints in its implementation.
1.4. Research Objectives

The study was guided by the following objectives:

i) To find out the attitudes of primary school teachers toward inclusion of learners with hearing impairment in regular classes.

ii) To establish whether regular school teachers are effective in handling the hearing impaired learners.

iii) To find out whether there is gender difference in teachers' attitudes toward inclusion of learners with hearing impairment in regular classes.

iv) To find out whether there is a significant difference between teachers' attitudes towards inclusion of hearing impaired learners in regular classes and the school type.

v) To find out whether there is a significant difference between teachers' attitudes toward inclusion of hearing impaired learners in regular classes and teachers' teaching experience.

1.5 Research Questions

In order to achieve the set purpose, the following research questions were set to guide the study.

i) What are the attitudes of primary school teachers toward inclusion of learners with hearing impairment in regular classes?

ii) Are regular school teachers effective in teaching with hearing impairment.
1.6 Research Hypotheses

The following hypotheses were formulated and tested in this study:

Ho1 There are a significant gender differences in teachers’ attitudes toward inclusion of learners with hearing impairment in regular classes.

Ho2 There is a significant difference between teachers’ attitudes towards inclusion of hearing impaired learners in regular classes and the school type.

Ho3 There is a significant difference between teachers’ attitudes toward inclusion of hearing impaired learners in regular classes and teachers’ teaching experience.

1.7 Significance of the Study

Since Inclusive Education is a new philosophy of education in Kenya, there is relatively little written literature on it. What is even more lacking is empirical data on any of its various aspects such as implementation, attitudes of teachers and factors influencing their attitudes.

The study was thus to make a contribution to the fulfillment of the Salamanca Statement of Action of 1994, which called all governments of the world to ensure that all learners are taught together. Moreover, the study will also make a contribution to the Government of Kenya obligation of ensuring Education For All by 2015.

The timeliness of a research focusing on Inclusive Education programme was born witness by the constant condemnation of such social evils such as discrimination on the basis of disability and gender, socio-economic status/social background and even to the country wide outcry on subjection of those with disabilities to beggarness.
The report of the National Legislation Policy for Special Education (1981), and the report of the National Committee on Educational objectives and Policies (1976, P. 74) stated that traditionally, Special Education in Kenya has been planned and developed in separate Institutions and away from ordinary Educational Institutions. The above Committee went on to emphasize that there is need to make people with handicaps self reliant and fully integrated into society both in schools and in the wider world as stated below;

1. To follow a policy of integration of handicapped people in society especially in cases where the handicapped have been inadequately compensated for by Special Education and facilities.

2. To expand existing amenities and establish additional services to enable handicapped learners to be integrated into normal schools as far as possible.

In view of the above this study was to investigate on the implications of teachers’ attitudes towards including learners with hearing impairment in regular schools.

1.8 Scope and Limitations of the Study

This study was limited to teachers in Kiambu, Kirinyaga, Nyandarua and Murang’a counties. Within the limitations of time and money, it was not possible to cover the whole country. The choice of the four counties was the presence of special schools for the hearing impaired rendering the regular teachers some knowledge of the subjects of reference. The study is also limited from the point of view of other barriers to Inclusive
Education. The focus has been on the implications of factors affecting teachers' attitudes towards inclusion of hearing impaired learners to regular schools.

1.9 Assumptions of the Study

The researcher assumed that teaching all learners together will result in the improvement of competition in academic skills leading to equal opportunities in the labour market. On the other hand, unfavorable teachers' attitudes towards learners with hearing impairment either due to gender, attitudes and lack of experiences could be detrimental to education of learners with hearing impairment.

The Researcher also assumed that negative attitudes would affect placement and Education of learners with Hearing Impairment. Finally the study also assumed that sensory Impairment has implied indications of what the attitude of the teacher should be.

10 Theoretical Framework

10.1 Ecological Theory of Developmental Framework

The view taken by Brofenbrenner, (1979), that social experience is as a set of nested structures each inside the next, as illustrated in fig. 2.1 below. The framework sets forms for discussing factors that may hinder implementation of inclusive education. The emphasis being that for human beings the environment is much more than just the immediate, concrete setting containing the living creature.
Ecological theory is Bronfenbrenner’s socio-cultural view of development, which consists of five environmental systems ranging from the fine-grained inputs of direct interactions with social agents to the broad based inputs of culture. The five systems are, microsystem, mesosystem, exosystem, macrosystem and chronosystem. He proposed that human development is influenced by factors operating at four different systems.
Learners in regular classes, including those with hearing impairments get along well psychologically and academically.

Regular class attendance plus supplementary instructional service.

Full-time special class.

Special institutions.

Home-bound.

Move this way only as far as necessary.

Figure 1.2 The researcher's conceptual framework of types of placement available for the hearing impaired.

According to the researcher all the placement cited above are environments that can only benefit learners if teachers are willing to accept children with Hearing Impaired.

To the researcher the way to go is towards inclusive education and plan strategies on how to achieve this fundamental education philosophy.
10.2 Definition of Terms

The following key terms were used in this study as defined below:

**Deaf** - Those whose sense of hearing is non-functional or so defective that they require special intervention methods of communication such as sign language.

**Disability** - Is a condition, which makes an individual unable to function normally in a particular socio-cultural context. It is limitation to function as expected of a human being of a given age and sex.

**Exceptional Learners** - Are learners who deviate from the average or normal child in mental characteristics. In sensory abilities, in neuromuscular or physical characteristics. In social or emotional behaviour, in communication abilities, or in multiple handicaps to such an extent that he/she requires a modification of school practice or special education services in order to develop to his/her maximum capacity.

**Handicapped** - Is one who has difficulty in adjusting to the environment because of intellectual, physical, emotional or social problems.

**Hard of hearing** - Those who have residual hearing sufficient for language development with or without amplification.

**Hearing impairment** - Is a generic term, indicating a hearing disability that may range in severity from mild to profound, it includes the subsets of deaf and hard of hearing.

**Integration** - Is the process of educating all learners, with and without handicaps or disabilities in the same setting to the maximum extent possible.

**Impairment** - An identifiable defect in the basic functions of an organ or any biological part of the body.
Inclusion - This refers to the opportunity for persons with disability to participate fully in all of the educational, employment, consumer, recreational, community and domestic activities that typify everyday society. (Inclusion International, 1995). This inclusion concept exposes the process of belonging, human beings feel important thrilled and happy when included and when they are excluded they feel incomplete, unhappy, lonely or troubled.

Inclusive Education - Is the process of addressing learners’ needs within the regular school using all available resources to create opportunities to learn in preparing them for life. The emphasis is on reviewing schools systems, and changing them curriculum adaptations, modification of environment and teaching strategies to suit learners with Special Needs.

Individualized Education Programme - Is a management tool to ensure that each child’s education programme is appropriate to the child’s specific needs. It outlines the child’s short-term and long-term goals and describes the methods and techniques that will be used to achieve them and the responsibilities of various people, who will help the child along the way.

Least restrictive environment - Is one in which the child should be segregated from normal classmates and separated from home family and community as little as possible.

Normalization - Is making available to all people with impairments patterns of life and conditions of everybody living, which are as close as possible to the regular circumstance of society. The principle that learners with disabilities are entitled to programmes that allows them to experience the respect and dignity to which any person in their culture or society in entitled.

Peripatetic Teacher - Refers to a teacher who is trained in Special Needs education and moves from school to school where learners with Special Needs are included to advise the regular teachers and give technical support where need be, they are also referred to as itinerant teachers.
Post lingual – refers to hearing impairment, which occurs after speech and language skills have been acquired through the sense of hearing.

Pre lingual – Refer to a hearing impairment that is present at birth or occurs before the development of speech and language.

Special Education – This is a specially designed programme of instruction to meet the unique needs of learners with Special Needs and disabilities.

Special Needs – These are conditions or factors that hinder an individual's normal learning and development, they may be temporary or life-long.

Special Needs Education – This is education, which provides appropriate modifications in curricula, teaching methods, educational resources, medium of communication or the learning environment.

Special Needs in Education – This is when certain learning barriers occasioned by the learner's handicap, disability or exceptionality hinder learning.
CHAPTER TWO

REVIEW OF LITERATURE

2.0 Introduction

This chapter presents the review of related literature on teachers’ attitudes and related studies to inclusive education for learners with hearing impairments. This will be discussed through grouping readings under specific sub-topics of literature review.

2.1 Ecological Developmental Framework

a) Microsystems

Microsystem is a pattern of activities, roles and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics. This is the first and innermost level; it contains the factors within the child’s immediate environment. The baby’s life at home with its family is one example; the baby’s microsystem is the pattern of feeding, sleeping, bathing, and playing. It is in the home that a child with disabilities first interacts with parents and siblings, visitors, as people get older their range of Microsystems increase. Settings like playgroup, school, church, club, workplace interactions may differ from school to school due to differing environments. Learners with disabilities are placed, sometimes in special schools, regular schools with special class or regular schools.
b) **Mesosystem**

A mesosystem comprises the interrelations among two or more settings in which the developing person actively participates. Such are homes, schools, peer group and church experiences. For example a child whose parents have rejected him due to disability may have difficult developing positive relations with teachers. Developmentalists increasingly believe it is important to observe behaviour in multiple settings such as in family, peer and school context according to Meadows, (1995) At micro and mesosystem levels communication between settings, knowledge and attitudes being applicable to both are seen as being an advantage to the people involved. A weak mesosystem for example minimal links between home and school for example may place a child at risk.

c) **Exosystem**

According to Brofenbrenner, (1979) an exosystem refers to one or more settings that do not involve the developing person as an active participant but in which events occur that affect or are affected by what happens in the setting containing the developing person. Such inactive settings where a person is not fully involved although he/she remains part of it are the community, the government agencies, mass media and informal social settings, professionals involved in implementing of school programmes. Any of these exosystem factors could possibly affect the experiences of individual learners in inclusive education programmes.
d) **Macrosystem**

Macrosystem is the furthest removed from the individuals immediate experience it envelopes the micro-meso and exosystems. Bronfenbrenner, (1979) viewed macrosystem as consistencies in the form and content of lower order systems that exist at the level of the subculture or the culture as a whole along with any belief system or ideology underlying such consistencies. This means that macrosystem refers to the dominant culture and sub-cultural institutions (economic, social, education and political systems and lifestyles). The culture of special needs, education for example values integration as a practice but has been influenced over the years by the movement towards normalizations (Weolfensberge, 1972). Another example is that the Ministry of Education has not so far made proper implementation background for inclusive education system, yet the recommendations were made in 1994.

e) **Chronosystem**

In Bronfenbrenners Ecological Theory, this involves the patterning of environmental events and transitions over the life course and socio historical circumstances with regard to sociocultural circumstances, for example girls today are likely to be encouraged to pursue a career than they were 20 to 30 years ago. Education for learners with disabilities over time has kept changing from homebound to special institutions, to full-time special class; to integration and today the global trend is towards inclusive education.
2.2 Rosenberg’s Theory of Affective-Cognitive Consistency

Rosenberg, (1960) concerned himself primarily with conceptualising what happens within the individual when attitudes change. He was particularly interested in the relation between affective and cognitive components of an attitude change. Rosenberg linked cognitions about the attitudes object with the person’s values. Strong positive affect toward an attitude object should be associated with beliefs that it leads to the achievement of important values, and negative affect toward an object, suggests that it blocks the attainment of these values.

He postulated that if either affect or cognition shifts markedly, inconsistency arises and produces a force toward changing the remaining component. Other researchers agree with Rosenberg. For example Eagly & Chaiken, (1973) & Triandis, (1971) viewed cognitive component as containing the ideas, thoughts, or beliefs which are used by people in thinking. They said that these ideas or thoughts are inferred from consistencies in responses to discriminably different stimuli.

The effective component of attitude consists of feelings, moods and emotions that people experience in relation to the attitude object. (Triandis, 1971; Oppenheim, 1992, Eagly, & Chaiken, 1993). These affective responses could range from extremely positive to extremely negative and hence considered as evaluative responses.

This study adopted Bronfenbrenner’s, (1979) ecological model with the exemption of the meso and exso systems. Since the group being studied is assumed to be minority, communication theories that would have highlighted the factor of the language identity were not attempted. This was done purposely, despite the fact that the adopted model
could be used to study the physical as well as the pedagogical aspect of inclusion. However, the aim was to avoid reflecting on the study of the minority identity and the language of communication, which requires differential treatment.

The study also adopted attitudinal theories of Rosenberg (1960), Kelman (1961), and Eagly & Chaiken, (1973) & Triandis, (1971). All the above theories clearly show that attitudes are formed and hence can change.

2.3 Effect of Educational Setting on Performance
Ross & Maxon, (1982) observed that special education in the United States received a severe challenge in 1975 with the passage of the Landmark Education for All Handicapped Learners Act Public Law 94-142. One of the important educational emphases of this law requires that learners be educated in the least possible restrictive educational setting. For hearing impaired learners the most restrictive would be full enrolment in their local regular school. Ross & Maxon, (1982) posed a question of whether there are any benefits in enrolment in a local regular school than in a special school for the average hearing impaired child? Jensema, 1975, Jensema & Trybus, (1978). Their study reviewed that hearing impaired learners in regular schools showed that they speak more intelligibly and perform better on language and academic achievement tests. Ross & Maxon, (1982) noted that the superior performance noted for the hearing-impaired learners in the regular schools may simply be a reflection of other variables as well rather than of the educational placement for example their performance could have antedated the educational placement. A much more extensive study was
conducted in Canada by Reich et al, (1977). In this investigation, the authors assessed the academic, speech and psycho-social status of hard of hearing learners.

The findings reflected that in academic performance the fully integrated learners were performing at or above grade level whereas the learners receiving itinerant help or enrolled in special classes were a year or more behind their classmates.

Integration is referred to as mainstreaming or normalization by different writers. The meaning varies from country to country making it to have many definitions (Mwaura, 2001). The main idea behind it is educating learners with disabilities in regular schools and classes. Several researchers such as Jordan and Powell, (1994), Soder, (1989) have pointed out that, integration is often seen as re-integration after a period of segregation. Integration therefore reflects the attempts to place learners with Special Needs in the mainstream in regular classes.

Lynas, (1986) however postulated that advocates who have been confronted with the problem of educating learners with disabilities in regular schools want to ensure that the learners are offered and receive an optimum education in a regular environment. According to KSDC, (2000) and Lynas, (1986) there are three main forms of integration of learners with disabilities. These are locational, social and functional integration.

Locational integration is a situation where a special class of learners with hearing impairments is located in a regular school, however other than sharing the same site/compound, the learners interact with their hearing counterparts. In reality many
learners who are locationally integrated experience no curriculum integration and attend a regular school far from his home (Mwaura, 2001).

Social integration is where learners with hearing impairments attend all their lessons in the special class but interact with other learners during recess time and also probably share organised out-door activities such as games, athletics, drama and excursions out of school.

Functional integration is the fullest form of integration and is achieved when locational and social integration lead to joint participation in educational activities, where learners with hearing impairments join, part-time or full-time the regular classes of the school and make a full contribution to the activities of the school. According to Lynas, (1986) this is the most ideal type of integration.

2.4 The Salamanca Statement and Framework for Action on Special Needs Education

A conference held in Spain, where more than 300 participants representing 92 governments and 25 International Organizations furthered the objective of education for all by considering the fundamental policy shifts required to promote the approach of inclusive education. The conference adopted the Salamanca statement on Principles, Policy and Practice in Special Needs education and a framework for action. These documents are informed by the principles of inclusion by recognition of the need to work towards schools for all, institutions which include everybody, celebrate differences, support learning and respond to individual needs. (UNESCO, 1994).
The statement reaffirmed the right to education of every individual as enriched in the 1948 Universal Declaration of Human Rights, and reviewing the pledge made by the world community at the 1990 World Conference on Education For All to ensure the rights for all regardless of individual differences. The conference recalled several United Nations declarations culminating in 1993 United Nations Standard Rules on the Equalisation of Opportunities for Persons with Disabilities which urges states all over the world to ensure that the education of persons with disabilities is an integral part of the educational system. Finally they noted with satisfaction the increased involvement of governments, advocacy groups, community and parent groups and in particular organizations of persons with disabilities in seeking to improve access to education for the majority of those with Special Needs still unreached (UNESCO, 1994).

From this document many governments and schools face serious inclusionary pressures from Human Rights Organization (e.g. the United Nations) and other advocates of inclusive education (Hall, 1992) Salamanca recommendations emphasized the fundamental right to education for every child, unique characteristics, interests, abilities and learning needs, the need to structure educational systems and design the programmes to accommodate them within a child centred pedagogy capable of meeting these needs. The conclusion arrived here was that regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities building an inclusive society and achieving education for all. Moreover, they provide an effective education to the majority of learners and improve the efficiency and ultimately the cost effectiveness of the entire education system (UNESCO, 1994).
Ainscow, (1990 observed that although inclusion is a common word, it's discourses have had multiple meanings which are used in a way that masks the attitude of people in the social structure of life. Slec, (1995) adds that inclusion is listening to all voices and learning with one another to experience a society based on non-discriminative acts by practicing social justice.

According to Kauffmann, (1993) the philosophy of inclusive education is focused on educating all learners in the same classroom. And, that each student's unique educational needs be met through adaptation of equipment specialized instruction and personnel.

Inclusive education therefore involves all learners learning together with the peers in the same physical environment thus extending the scope of the schools so that it can include a greater diversity of learners. The argument here is that society is an inclusive community with people of varying abilities/disabilities, race and language. There is need to prepare learners for these kind of life.

Inclusion follows from integration (mainstreaming) but differs from it in that in integration, the child must make adjustments to the requirements of the school but in inclusion it is the school that must make adjustments to accommodate or include the child (Waruguru, 2002) as illustrated below. Research has shown that inclusive education results in improved social development and academic outcomes for all learners. It leads to the development of social skills and better social interactions because learners are exposed to real environment in which they have to interact with other learners each one having unique characteristics, interests and abilities (Stubbs, 2008).
According to Stubbs, (2008), the non-disabled peers adopt positive attitudes and actions towards learners with disabilities as a result of studying together in an inclusive classroom. Thus, inclusive education lays the foundation to an inclusive society accepting, respecting and celebrating diversity.

Figure 1.3 (a): Integrated Education
There is a shift from the child to the environment, what the environment (school) can do for the child with educational needs. For Ainscow, (1999) integration means going to school (as visitor) while inclusion means participation in school life. The goal of inclusion is not to erase differences but to enable all students to belong within an
educational community that validates and values their individuality (Stainback, 1994) cited in Knight, 1999).

According to Giorcelli, (1995) full inclusion involves age and grade appropriate placements in neighbourhood schools, zero rejection philosophy, co-operative beaming and special educational support given to regular education. Savolainen, Kokkala & Alasuutari, (1998) observed inclusive education as evolving from a movement associated with the struggle against exclusion of learners with disabilities and others categorized as having Special Needs, to one which challenges all exclusional policies and practices in education, thus it is an approach which aims at removing any barriers to learning.

The study builds on the success of the United Nations Standard Rules on Equalization of Opportunities, (Jomtein, 1990). Declaration on education for all and the Salamanca Statement and Framework for Action, (UNESCO, 1994) in highlighting the exclusion of disabled people to all levels of education. Among other things discussed was that, schools should accommodate all learners regardless of their physical, intellectual, social and emotional or other conditions.

Among the considered were disabled, gifted and talented, street learners and working learners, learners from nomadic or remote population, learners from linguistic, ethnic or cultural minorities and learners from other disadvantaged or marginalized areas of groups (Salamanca Framework for Action articles 3, UNESCO, 1994).

Inclusive education involves a different vision of regular education, a vision based in heterogeneity instead of homogeneity (Soder, 1997). It is the only way to right education
to equal opportunities and participation. It is not just about the access of some given
groups of students traditionally excluded but to transform the educational system as a
whole in order to attend the diversity of educational needs of all learners (Stangvik,
1997).

Inclusive education caters not only for educational needs, but has also solid, social and
moral arguments. It can lay the foundations of a more inclusive society where all people
belong and where being different is accepted and valued as just part of humanity
(Inclusive International, 1995). The philosophy of inclusive education is focused on
educating all learners in the same classroom, and, that each student’s unique educational
needs be met through adaptation (Kauffman, 1995) of equipment, specialized instruction
and personnel. Inclusion should utilize natural proportions where student’s disability is
not used as a factor to suggest placement observed (Hegarty, 1997). This philosophy
came after the previous philosophies on integration, mainstreaming and normalization.
According to Stainback and Stainback, (1992) all learners should be included in
educational and social life of the neighbourhood school. And that inclusive education
should build a system of education that meets everyone’s needs.

2.5 "Studies of Teacher Attitudes towards Learners with Special Needs"
Favourable teacher attitudes are thought by many educators to be crucial if inclusive
education will succeed. Booth and Ainscow, (1998) contend that in studies involving
inclusive education, it is absolutely imperative for the investigator to specify the type of
Special Needs because teacher attitudes have been found to vary with the type of
disability and the extent of instructional adaptations required in order to accommodate such students.

Rajecki, (1982) argues that attitude is such an important area to study because it influences so much of our personal lives. Attitudes include desires, convictions, feelings, views, opinions, beliefs, hopes, judgments and sentiments. The study of attitudes is thus important because there is a general belief that human behavior and actions are influenced by attitudes, whereby attitudes are seen as the cause and behavior as the consequence (Mushoriwa, 1998).

Mastropien and Scruggs, (2007) suggested that functional inclusion would only take place if the family members are willing to encourage important activities. They further recommended plan for interpreters and successfully repetition of all information taught in the classroom.

Cava and Madison, (1978), suggested that unfavorable teacher attitudes towards accepting handicapped learners stem from insecurity and sometimes sentiment, arising from ignorance and inexperience of handicapped learners. According to these writers, what seems to be important in influencing teacher's attitudes is their knowledge of the implications of handicap and their experience of learners with a particular handicap. Many studies have revealed that a handicapped child's position on the teachers' desirability scale had a direct relationship to the teachers' knowledge of that handicap. Among the lowest ranked groups on the desirability scale were learners with visual impairments.
That teachers need knowledge and understanding of handicap if they are to feel competent to teach a handicapped pupil and to receive him willingly into their classes accord very much with common-sense-reasoning, so also does the idea that experience with a pupil helps teachers feel more confident in having such a child in their class (Lynas, 1986).

In addition to knowledge and experience, there are two other major factors which have been demonstrated to be important in fostering positive attitudes among class teachers towards handicapped pupils. These are, an ideological commitment to the principle of integrating handicapped learners into normal society and the provision of adequate resources and support services to help the teacher cope with the additional responsibility of a handicapped child.

With regard to the issue of ideological commitment, the research findings from Schutz, (1982) suggest that a belief that handicapped learners should be educated in ordinary schools is a significant independent factor in promoting positive attitudes in teachers towards handicapped pupils.

Likewise, the provision of special facilities and extra resources for class teachers receiving handicapped learners into their classes has been shown to be important by several investigators. For example, Schutz, (1982) emphasized that class teachers as well as being given information and advice, should receive additional help such as the services of a classroom or welfare assistance or specialist support teacher. Again, it seems to accord with common-sense reasoning that teachers given extra assistance will feel more
favorable to the presence of a handicapped child in the class and more confident in their ability to serve his/her often time-consuming Special Needs.

A conclusion, that can thus perhaps be safely reached from above reviewed studies is that ordinary class teachers are more likely to have positives attitudes towards a handicapped pupil if they believe they can make a contribution towards his/her educational development.

2.6 Studies Done on Inclusive Education Outside Africa

In the United States of America the idea of including students with disabilities in regular schools with support services was first envisioned in 1970’s (Stainback & Stainback 1989). This evolved from a long series of legislative and political events that emphasized equal participation of students with disabilities. In 1986, the United States Department of Education called for full inclusion for all students with disabilities. Later research on inclusion began to show benefits such as availability of age-appropriate role models (Ainscow, 1994).

Today it could be said that USA has led in implementing inclusive schooling. Approximately 71% of students with disabilities are educated in regular classes (Ainscow, 1999). It could be argued that in such schools, diversity and disability heterogeneity has been seen as a positive element in fostering appreciation of individual differences.

In Canadian states, laws have been developed pertaining to education for learners with disability, (Aefksy, 1995). However, the Charter of Rights, and Freedoms, (1982) states
that each citizen has a right to equal benefit without discrimination. In this context, Canadian states developed laws pertaining to education for learners with disabilities (Aefsky, 1995).

According to Booth and Ainscow, (1998), conducted a study in Australia on teacher attitudes towards inclusive education. He found that teachers were more positive about students whose programmes focused on social inclusion than those requiring physical changes in their school or classroom. The teachers were also more accepting to students with physical disabilities than to those who necessitated academic modifications. Such research findings indicate that the type of disability and the demands it eventually makes on the teacher will influence teacher attitudes towards including a child with such a disability in a regular class.

A study done by Peresuh and Ndawi in Canada (African Journal of Special Needs Education (2001) argued that countries of the south lack financial, human and material resources to effectively provide educational and related services to learners with visual and hearing impairments Eleweke, (1998) cited in African journal for Special Needs Education (2001) prompted an argument and said that Peresuh and Ndawi, did not consider the implications of the degree of impairment for achieving successive inclusion, the problems of special institutions in countries of South and challenges of the education.

2.7 Studies Done on Inclusive Education in Africa

Studies done in South Africa by Guijarro cited by (Savaloinen, Kokkala & Alasuutari, (1998) found that Constitution of South Africa points out clearly that everyone has the
right to basic education. This means that all learners whatever their needs and
differences have the right to equal educational provision. The South African School Act,
(1996) also asserts the right of equal access to basic and quality education for all learners
without discriminating in any way. No learner may therefore be denied admission to any
ordinary school on any ground, including disability language difficult in learning and
other impairments, where it is reasonably practicable, which is the first step towards a
single inclusive education system in South Africa.

Studies done in Zambia by Chilufya & Mukihonka as cited by Savolainen & Kokkala
Alasuutari, (1998) revealed that 40% of school age learners do not attend school. The
reasons for this are educational costs, distance to and from school, declining health
conditions such as HIV/AIDS infections which lead to an increased number of orphans,
poverty and inadequate educational opportunities. It is estimated that only 2% of school-
aged learners with special education needs attend school. However since 1990 there has
been an improvement in teacher training where a special component is offered. This is in
line with the idea of inclusive schooling. Most learners with Special Needs study mostly
in ordinary classes with special education teachers assisting the class teachers in their
work.

(2001) research findings suggested that while the blind child may be included physically,
he/she may remain socially and academically excluded because of attitudes of teachers
(and perhaps other pupils). In the end these learners do not live an independent life as
adults and certainly this would indicate that they pursued an education system from
which they did not benefit. Many of the teachers interviewed felt that these learners should be in special schools.

Most studies done in Kenya have recommended integration philosophy of education provision for learners with hearing impairments. Mwangiri, (1989) found that integration of hearing impaired learners in its various forms was not only possible but that it should be pursued more. He further recommended that more teachers be trained to support and guide the teachers in ordinary schools. This has been realised with launching of Distance Education programme at Kenya Institute of Special Education (KISE) which is currently training learners from all over Kenya as a parallel programme to a full time programme that is training approximately 200 diploma teachers annually in special education.

Mwaura, (2001) conducted a study of teachers’ attitudes on teaching the hearing impaired learners together with the hearing. He found that there was a general consensus among all the teachers who participated in the study that learners with hearing impairments should be educated just like their hearing brothers and sisters. However, he postulated that attitudes could be the greatest barrier or the greatest asset to the development of integrated schools. They may influence the challenges to be chosen and goals to be achieved. If education for all is to be achieved, it has to start with a change of attitudes (Mwaura, 2001).

Ainscow, (1999) found that while some African countries are still practicing the old tradition where learners with Special Needs were categorized and placed in special schools, the trend has been changing with inclusive education being advocated globally. However, the impact of inclusive Education in African countries is yet to be felt
according to Hegarty, (1997). In theory many countries have shown the interest. In Karugu’s, 2001 survey of the status of inclusion in Kenya about 80% of educators indicated they would like to learn more about inclusive education.

However there are barriers that are likely to interfere with the implementation of inclusive education such are the size of the classes, the distances to be covered by the learners as they go to school, the availability of the audiological equipment required and finally the teacher pupil ratio, (MOE, 2001)

2.8 Summary of Literature Review

Throughout the literature review the importance of inclusion has been stressed as the core to developing learners with Special Needs to full healthy personality. One with healthy personality feels included and not segregated. Mutual understanding is developed whereby differences are accommodated and not used to marginalize humanity. Self-understanding is developed which helps an individual adjust appropriately, especially where the individual accepts oneself with limitations and utilizes strengths to build on weaknesses. The essence of the study was to create an awareness that regular schools should be inclusive oriented as the most effective means of combating discriminatory attitudes in creating welcoming communities, building an inclusive society and achieving Education For All. Total attention was given to the single variable of teachers’ attitudes. This is because teachers carry the burden of inclusive education and are public servants they are trapped between loyalty to policy and the realities of everyday life in the classrooms.
CHAPTER THREE
METHODOLOGY

3.0 Introduction

The main purpose of this study was to investigate implications of teachers’ attitudes on inclusion of learners with hearing impairment.

This chapter describes the methods employed in carrying out the study under the following subtopics.

3.1 Research Design

Research design provides framework for the collection and analysis of data (Orodho, 2004). This study employed a descriptive survey research design with the priority of being given to a range of dimensions of the research process and importance attached to expressing causal connections between variable and generalization to the larger population.

Survey research is therefore the most commonly used descriptive method in educational research hence adapted for thus particular research to enable the researcher describe, the nature of the existing conditions in view to attitudes of teachers towards learners with hearing impairment. Identify the standards against the existing variables that can be compared and finally determining the attitudes variation toward teaching learners who are hearing impaired.

According to Kerlinger, (1964), surveys are concerned with conditions or relationships that exist, opinions that are held, processes that are evident or trends that are developing.
According to Mugenda & Mugenda, (1999) descriptive surveys are also excellent in obtaining information that describes existing phenomena by asking individuals about their perceptions, attitudes, behavior and values.

Descriptive surveys are also involved in making careful decisions of educational phenomena and finding out the difference between different phenomena. Most of the influential calls for reform of educational systems have used the findings of descriptive research. The design employs several tools. An example of such tools is an attitudinal scale used in the present study. Descriptive survey research findings had major impact on the feelings of policy makers and administrators on education, (Gall, Borg and Gall, 1996). Finally, descriptive survey is the most frequently used method for collecting information about people's attitudes, opinions, habits or any of variety of education or social issues, Orodha, (2004). According to Gall, Borg and Gall, (1996), this is the best design to investigate a whole range of educational problems.

3.2 Population of the Study

The selection of a research site is crucial for the success of the study Gall Borg & Gall, (1996), choosing a research site suitable for field setting and having the cooperation of the respondents or the participants is challenging. The researcher chose central province for convenience of traveling from Nairobi where the researcher was stationed. The teachers in the four counties according to the researcher were representative in terms of the variables which were studied. Hence regardless of the size which is less important than representativeness the population was drawn from former Kiambu, Kirinyaga,
Muranga and Nyandarua counties. By the time of data collection the total number of teachers in the four districts was 19500.

Teachers from regular schools in the neighborhood of the school for hearing impaired was considered to have a common characteristics of knowledge of the existence of learners with hearing impairment in schools and the researcher’s expectations were that they have ideas of whether regular learners can be taught together with those with hearing impairment. The findings obtained from these teachers may be generalized to the rest of teachers population since rarely is a possible study of all members of teaching fraternity. The four districts were preferred to the rest of the districts because they have special schools for the hearing impaired and the researcher hoped that regular teachers in these districts have interacted with learners with hearing impairment in sports, drama and other co-curricular activities. Most teachers in the regular schools are not trained to teach learners with Special Needs and hence have very minimal skills in Special Needs education.

3.3 The Study Sample

The four counties were purposively selected. In this form of sampling the researcher relied on the criteria that all the four counties have schools for hearing impaired. Purposive sampling here enabled the researcher to handpick the cases to be included in the sample on the basis of those counties typicality. From the four counties ten schools were purposively sampled on the same criteria and judgment from the researcher that those schools being in the same location with special schools hand prior information on the presence of learners with hearing impairment and the challenges faced by such
learners in schools. These teachers also meet their colleagues working in the special schools in zonal meetings and most likely had shared ideas on learners with hearing impairment.

From each school ten teachers were randomly selected. The use of simple random sampling was to ensure that all the teachers in each of the 40 schools had an equal and independent chance of being selected as a member of the sample. Precisely this procedure ensured a population that provided every sample of a given size an equal probability of being selected. This technique yielded research data that was generalizable to a larger population within the margins of error that was statistically determined. Random sampling was also preferable because it permitted the researcher to apply inferential statistics to the data. Random sampling is also preferable because it permits the researcher to apply inferential statistics to the data, inferential statistics enabled the researcher to make certain inferences about population value for example the mean, standard deviations and correlation coefficient on the basis of obtained sample values.

Simple random being the only sampling procedure that provides opportunity of selecting each element of population led the researcher to use the lottery technique, whereby Yes/No cards were placed in a container mixed well and then each of the teacher in each selected school was allowed to pick one piece at a time. In each case and in each school ten teachers who picked a yes were included in the study.

The researcher selected this sample through the lottery technique. The basic methodological assumption behind the research design used in this study was that the real
issues involved in the implementation of the inclusive schools could be best understood when it is analysed within the regular schools.

The main advantage of randomly selected samples is that they yield research data that can be generalized to a larger population within margins of error that can be determined by statistical formulas. According to Gall, Borg & Gall, (1996), random sampling also is preferred because it satisfies the logic by which a null hypothesis is tested using inferential statistics.

The counties selected were Kiambu, Kirinyaga, Muranga and Nyandarua. From each of the four counties, ten schools were purposively sampled on the same criteria. From each school, ten teachers were randomly selected in each school in the 40 schools in the four districts making a total of 400.

In total, therefore, there were 400 teachers involved in the study, which was 20.5% of the target population. According to Gall, Borg & Gall, (1996), a sample size equal to or above 10% of the population is considered representative for educational research.

3.4 Research Instrument

The instrument used to collect data was a five point likert scale questionnaire. A questionnaire has the ability to collect a large amount of information in a reasonably quick, space of time. It is also an efficient use of time and questions are standard since everyone got the same questions.
In order to solicit the necessary information that was required for this study, the researcher developed a questionnaire to collect data from the teachers. The questionnaire comprised of two parts:

Part I collected biographic information of the respondent. Of particular importance in this information was the name of the school, gender of respondents, teaching experience and professional qualification.

Part II had fifteen questions, the first 10 concerning learners with hearing impairment while the five concerned regular teachers' views on teaching learners who are hearing impaired alongside the hearing learners.

The questionnaire comprised a rating scale intended to measure the attitudes of teachers toward inclusion of hearing impaired pupils in regular schools. The rating scale was a Likert-type scale where respondents could tick any of Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D) or Strongly Disagree (SD). The scale was assigned numerical values. The most positive (strongly agree) was assigned 5 and the values decreased until the most negative strongly disagree got the value of 1. This rating was considered appropriate in measuring attitudes because it gives a range of rating points describing different feelings.

The design of the scale was chosen because it is easy to score and interpret. Respondents whose total scores were very high, portrayed a positive attitude to the subject while those with low total scores had a negative attitude. The respondents were responding to single
stem from which 15 items were developed, 10 for the child with hearing impairment and 5 for the regular teacher.

3.5 **Piloting of the study**

Before collecting data for this study, the researcher carried out a pilot study at Kenya Institute of Special Education (KISE). Five students each from four randomly selected schools/faculties were randomly picked to fill the questionnaires. Piloting helped to determine the validity and reliability of the research instruments.

3.5.1 **Validity of Research Instruments**

According to Mugenda & Mugenda, (1999), describe validity of a research instruments as the degree to which it measures what is intended by the researcher. This is a judgment made better by a team of professionals or experts in the particular field (Mugenda & Mugenda, 1999). In this connection, the researcher established content validity by seeking expert judgments from his university supervisors while developing and revising the research instruments. This was done by holding discussion, making relevant comments and suggestions that were synchronized.

3.5.2 **Reliability of Research Instruments**

Mugenda & Mugenda, (1999), describe reliability of a research instrument as the measure of the degree to which a research instrument yields results after repeated trials. Nachmias & Nachmias, (1996), stated that an instrument is reliable when it can measure a variable accurately and consistently and obtain the same results under the same conditions over a time.
The twenty questionnaires obtained from the pilot study were checked for reliability using split-half as a measure of reliability. The open-ended questions were scored by giving a mark for relevant response and a zero (no mark) for irrelevant and blank responses. The following steps in the test of reliability were observed:

1. Sample items from the domain of indicators that measure the variable.
2. Administer the total test to an appropriate group.
3. At random, divide the second item into two groups. Alternatively, one can group all the odd numbered items and all the even numbered items together.
4. Compute each subject's total score from the two groups of items.
5. Correlate the scores from the two groups of items for all the subjects.

Data with high split-half reliability have high correlation coefficient. Since the researcher was correlating half of the test scores with the other half, the coefficient so computed did not reflect the reliability of the whole instrument. Hence, the Spearman-Brown prophecy formula was used to correct the realized coefficient.

\[
r_s = \frac{2r_h}{r_h + 1}
\]

Whereby, \( r_s = \) split-half reliability
\( r_h = \) correlation between the two halves of the test.

The result obtained from the reliability test gave a coefficient of 0.89. Any instrument with a split-half estimate between 0.8 and 1 is acceptable as reliable enough according to Gall, Borg and Gall, (1996).
To ensure reliability of the study the Test, pre-test method was applied. This involved administering the same questionnaire at an interval of one week to the same group and then comparing the two scores. Thus aimed at finding out if the results were consistent to determine the reliability of the instrument. Respondents contacted during the pre-test phase were deliberately excluded during the final administration of the instrument. This helped in controlling extraneous influence on the research findings due to prior knowledge of the information required by the instrument.

3.6 Data Collection Procedure

Permit to carry out the research was obtained from the Ministry of Education as required by post-graduate board. Permission and introduction letter to all heads of Institutions was availed. A preliminary visit was then made to the schools to inform the heads of the intended research. A date was agreed to when the questionnaires would be delivered. The researcher self administered the instruments to the respondents to all the forty schools. After a week the Head teachers collected all the questionnaires and the researcher went round to all the 40 schools collecting the filled questionnaires from the Head teachers.

This primary data was most adequate to fulfill the objectives of the study since the data was directed towards answering precisely the questions raised by the research. The data had both qualities of being quantitative and qualitative, although the greater part utilized the quantitative data which is more reliable and easier to utilize in particular by statistical techniques. However, social science is unthinkable without non numerical data (Orodha,
1998), which assists in interpreting numerical data and whose neglect could lead to an incomplete description of the reality.

3.7 Data Analysis Techniques

The data collected from the field was coded and entered in the computer for analysis using the Statistical Package for Social Sciences (SPSS). Statistical analysis was conducted using the One Way Analysis of Variance (ANOVA) test, being the most appropriate procedure to establish the significance between means. The results of data analysis were summarized and reported in tables and frequency histograms using means, frequencies and percentages.

The total score for each participant was obtained by adding the numerical values of the items. Each item connoting positive attitude which the participant identified as strongly agree, was assigned 5 points and 1 for strongly disagree for the positive statements while negative ones were scored 1 for strongly agree up to 5 for strongly disagree.

The following research hypotheses were tested using the One-Way ANOVA at the 0.05 level of significance:

Ho1 There are no significant gender differences in teachers’ attitudes toward inclusion of learners with hearing impairment in regular classes.

Ho2 There is no significant difference between teachers’ attitudes towards inclusion of hearing impaired learners in regular classes and the school type.

Ho3 There is no significant difference between teachers’ attitudes toward inclusion of hearing impaired learners in regular classes and teachers’ teaching experience.
CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

This chapter contains a presentation of the data collected from the field and the analysis procedures employed to interpret the data. The analysis is discussed in the chapter subsections include, theoretical implication of the findings, sample description, attitude of teachers towards inclusion of Hearing Impaired learners in regular schools, regular school Teachers effectiveness in handling Hearing Impaired learners, analysis of research hypothesis, Teachers attitudes towards inclusion across gender teacher attitudes toward inclusion across school type, teachers attitudes toward inclusion across teaching experience, academic performance, social aspects and finally a conclusion of the study findings.

4.1 Theoretical Implication of the Findings

The revised conceptual framework (fig 1.1) is taken as a guideline, in the discussion of the major findings of this study. The essence of the conceptual model is micro-system. It consists of the interaction of the school and the community. Within this frame of reference the researcher explored attitudes of teachers to the learners with hearing impairments, and the extent to which they affect the education of learners with hearing impairment. The discussion on the different school provisions is undertaken in order to discern in which manner differences in educational provision influence, the theory and practice of including learners with hearing impairments. The macro-system represents society. At this level an attempt is made to analyze the society's provisions. In order to
achieve this purpose, the following research questions and hypotheses were set to guide the study:

iii) What are the attitudes of primary school teachers toward inclusion of learners with hearing impairment in regular classes?

iv) Do regular school teachers have the competencies of teaching learner with hearing impairments?

Ho1 There is significant gender differences in teachers’ attitudes toward inclusion of learners with hearing impairment in regular classes.

Ho2 There is a significant difference between teachers’ attitudes towards inclusion of hearing impaired learners in regular classes and the school type.

Ho3 There is a significant difference between teachers’ attitudes toward inclusion of hearing impaired learners in regular classes and teachers’ teaching experience.

The presentation of the analyzed data begins with sample description, followed by the results and finally hypotheses test results and discussions.

4.2 Sample Description

Data to answer research questions was collected from 400 primary school teachers randomly selected from forty schools all in the same Districts that the school for hearing impaired were located. Given below are the personal data of the respondents and the nature of the schools involved in the study.
Figure 4.1 Gender of Participants

There were 161 (40.2%) male and 239 (59.8%) female teachers in the study.

Figure 4.2 Type of Schools in the Study

Majority of the schools in the study were regular only 5.7 schools (14.2%) had a special unit.
As shown in figure 4.3, majority of the teachers (191, 47.8%) had a teaching experience of over sixteen years. This was followed by 125 teachers (31.2%) having between 11 and 15 years of teaching experience. Majority of the teachers (n=352, 88.0%) had not
received any Special Needs Education training. Only 48 (12.0%) of them had received such training.

4.3 Analysis of Research Questions

4.3.1 Attitude of Teachers toward Inclusion of Hearing Impaired Learners in Regular Schools

The first research question of the study asked: What is the attitude of primary school teachers toward inclusion of hearing impaired learners in regular schools?

The teachers who participated in the study were presented with ten items that measured their attitudes toward inclusion of learners with hearing impairments in regular schools. Each of the items was rated on a five-point Likert scale ranging from one (strongly disagree) to five (strongly agree).

The highest score that one could get on this scale was fifty (50), while the lowest was ten (10). High scores indicated highly positive attitudes while low scores indicated highly negative attitudes. A score of thirty (the mid-point of the scale) indicated that one was undecided (or neutral).

Based on the teachers' responses to the ten items, an overall attitude score was computed for all the teachers - in order to measure their general attitude, and the results tabulated below were obtained.
Figure 4.4 Teachers' Attitude Toward Inclusion

As can be seen in Table 4.4 there were 90 teachers (22.5%) who scored below 30 (10-29). This group had negative attitudes toward the inclusion of hearing impaired pupils in regular schools. Twelve of the teachers (3.0%) were neutral (had a score of 30). The rest of the teachers (n=298, 74.5%) had scores above 30 (31-50). This group had positive attitudes toward inclusion of hearing impaired pupils in regular schools.

The figure below is a histogram showing the teachers scores, the mean and the standard deviation.
Figure 4.5 Histogram for Teachers’ Attitude Scores

As shown in the histogram, the scores for the majority of the teachers were above thirty indicating positive attitudes. The mean score for the teachers’ attitudes was 35.9 (above the mid-point) and the attitudes distribution was negatively skewed (meaning majority of the teachers had high scores). From this therefore, it can be concluded that majority of the teachers had positive attitudes toward the inclusion of hearing impaired pupils in regular schools.

4.3.2 Regular School Teachers Effectiveness in Handling Hearing Impaired Learners

The second research question of the study asked: Do regular school teachers:

(a) Have the ability to communicate effectively with learners with hearing impairments?
(b) Have an understanding of the problems associated with deafness?

(c) Have the capacity to make appropriate educational provisions for the hearing impaired learners in regular classes?

(d) Have adequate preparedness to teach learners with hearing impairments effectively?

In order to answer this research question, the teachers who participated in the study were presented with the following statements:

1. Regular teachers cannot communicate effectively with the learners with hearing impairments.

2. Regular teachers do not understand problems associated with deafness.

3. Regular teachers do not make appropriate educational provisions for the hearing impaired learners in regular classes.

4. Regular teachers are well prepared to teach learners with hearing impairments effectively.

The teachers were required to respond to these statements on a 5-point Likert scale ranging from strongly agree to strongly disagree. The responses of the teachers regarding these statements are summarized in Table 4.1 below.

Table 4.1 Regular Teachers Effectiveness in Handling Learners with Hearing Impairments

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot communicate effectively with deaf</td>
<td>32</td>
<td>73</td>
<td>6</td>
<td>177</td>
<td>112</td>
<td>400</td>
</tr>
</tbody>
</table>
Table 4.1 above indicates that:

Majority of the teachers felt that regular teachers cannot communicate effectively with hearing impaired learners. A total of 214 teachers (53.5%) felt that regular teachers do not understand problems associated with deafness while 176 teachers (44.0%) disagreed with this. Majority of the teachers felt that the regular teachers (68.35%) do not make appropriate educational provisions for learners with hearing impairments. Majority of the teachers felt that regular teachers (18%) had not been adequately prepared to teach hearing impaired learners. It can therefore be concluded that, while the general teachers’ attitude toward inclusion of hearing impaired learners in regular schools was positive, the teachers felt that teachers in regular schools could not adequately handle such learners.

The findings of the study were very clear on the position of the regular school teachers, being a micro-policy implication of the total sample only 18% who felt that they are prepared to teach hearing impaired learners (Kugelmass, 2004).

A teacher who has no idea of how to teach learners with hearing impairment easily give up the task (68.3%) of the teachers said that they do not know what provisions best suit this category of learners another (72.3%) said they cannot communicate effectively with the hearing impaired.
The study shows that teachers need special education training. The increasing incidence of learners with hearing impairments and other disabilities in regular schools make further demands on the need for special training of teachers. Another reason teachers based their arguments on is the number. Learners guidelines are needed on the number of learners to be in one class. Findings of other studies done in Africa show a similar problem. According to Mushoriwa, (2000) the number per class in Zimbabwe is 50, Ghana 50, Uganda 120 and Kenya between 75-100. For this reason a number of questions can be raised about the usefulness of inclusive education in developing countries with such large classes: One interviewee in their study remarked “How is a teacher expected to attend to these deaf learners meaningfully with the present workload?”

Kauffmann, (1993) & Knight, (1999) have expressed concern over the impact inclusion is likely to have on their teaching and on other learners with Special Needs on similar circumstances.

Most countries especially the developed ones practicing inclusive education have two or more teachers per class and the class sizes are reduced to 15 pupils. Several schools in Canada are successfully practicing inclusive education according to Salend & Duhaney, (1999). The special and general educators formed collaborative teams, sharing subjects, team teaching and grouping according to need rather than label. This is a luxury Kenya and other developing countries can not afford. Although the Teachers Service Commission Staffing Norms in Kenya are 12 hearing impaired learners to one teacher this is still a challenge since currently there are classes of 28 Hearing Impaired learners.
4.4 **Analysis of Research Hypothesis**

Research hypothesis were analyzed across:

(a) Teachers gender,

(b) School type, and,

(c) Teaching experience

The data analysis procedures employed to answer the research question and test the hypotheses are discussed below.

4.4.1 **Teachers' Attitudes Toward Inclusion Across Gender**

The first hypothesis of the study stated that:

\[ \text{Ho 1} \quad \text{There are no significant gender differences across the teachers' attitudes toward inclusion of learners with hearing impairments in regular classes.} \]

To test this hypothesis, a one-way Analysis of Variance (ANOVA) test was carried out at 0.05 level of significance. This was to find out whether there were significant mean differences between male and female teachers in their attitudes toward inclusion.

Tables 4.2 and 4.3 below present the findings of this analysis.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>161</td>
<td>37.124</td>
<td>8.867</td>
</tr>
<tr>
<td>Female</td>
<td>239</td>
<td>35.134</td>
<td>9.184</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>35.935</td>
<td>9.100</td>
</tr>
</tbody>
</table>
Table 4.3 ANOVA Results for: Teachers Attitudes Across Gender

<table>
<thead>
<tr>
<th>Variation Source</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>M. Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>381.079</td>
<td>1</td>
<td>381.079</td>
<td>4.644</td>
<td>0.032</td>
</tr>
<tr>
<td>Within groups</td>
<td>32657.231</td>
<td>398</td>
<td>82.053</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>33038.310</td>
<td>399</td>
<td></td>
<td>4.644</td>
<td>0.032</td>
</tr>
</tbody>
</table>

F=4.644 significant at $p<0.05$ established that there were significant differences between male and female teachers, in their attitudes toward inclusion. From Table 4.5, it can be seen that male teachers had a higher attitude mean score than that for female teachers. This means, therefore, that male teachers were more positive than female teachers as far as inclusion for Hearing Impaired learners in regular Primary Schools was concerned. These findings correspond to Nambira, (1994), study in Tanzania where female teachers had negative attitudes and even not willing to further their education in Special Needs Education.

4.4.2 Teachers Attitudes Towards Inclusion Across School Type

The second hypothesis of the study stated follows:

$H_{02}$ There is no significant difference in the teachers’ attitudes toward inclusion of hearing impaired learners in regular classes across school type.

The hypothesis was tested using the ANOVA test at $p<0.05$. There were two types of schools; regular schools and regular schools with a special unit. The analysis was intended to establish whether teachers in regular schools differed from those in regular
schools with a special unit in their attitudes toward inclusion. The results of the analysis are summarized in Tables 4.4 and 4.5.

**Table 4.4 Teachers' Attitudes Across School Type**

<table>
<thead>
<tr>
<th>School type</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>343</td>
<td>35.37</td>
<td>9.299</td>
</tr>
<tr>
<td>Regular with special unit</td>
<td>57</td>
<td>39.35</td>
<td>6.926</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>35.94</td>
<td>9.099</td>
</tr>
</tbody>
</table>

**Table 4.5 ANOVA Results: Teachers Attitudes Across School Type**

<table>
<thead>
<tr>
<th>Variation Source</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>775.61</td>
<td>1</td>
<td>775.61</td>
<td>9.568</td>
<td>0.002</td>
</tr>
<tr>
<td>Without groups</td>
<td>32262.70</td>
<td>398</td>
<td>81.062</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>33038.31</td>
<td>399</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F=9.568 significant at p<0.05 established that there is a significance difference between attitudes of teachers in regular schools and those in regular schools with a special unit in their attitudes toward inclusion. Specifically, as can be seen in Table 4.4, teachers from schools with special units had more positive attitudes toward inclusion (they had a higher mean score) than those from schools without special units.

The findings of the study demonstrate that teachers in regular schools with units are more positive towards inclusion as can be seen in table 4.4. According to Salend, 2011 educators working effectively in inclusive classes tend to have more positive views of inclusion than those who teach in noninclusive settings. However, their attitudes are
negatively affected due to lack of training on how to handle children with disabilities. These findings contradict other findings in which it was reported that regular teachers who have been exposed to learners with disabilities have negative attitude towards teaching learners with disabilities (Cava and Madison, 1978, Tudesse, 1987, Barnatt & Kabzems, 1992, in Nambira 1994).

This can be attributed to massive awareness that stakeholders in special education have made in this country. Teachers’ attitudes are gradually changing with the child taking the central position on all the key issues of education in this country.

Despite the fact that teachers had been exposed to the problem of the learners with hearing impairments, they were not willing to have them in the regular classes. They argued that lack of training on how to work with learners with hearing impairments made it difficult to accept them Prag, (2004). They preferred that the government build more special schools for hearing impaired. However the researcher found it a motivating factor to the demands for more in-service training, short courses and a further reform of the teacher-training programme.

Taking this argument a bit further, it seems logical to conclude that the issue of accepting or not accepting learners with hearing impairment may be of little value if their needs are not attended to in regular classrooms. Nonetheless, the unwillingness of teachers to have learners with hearing impairments in their classrooms calls for the provision of proper teacher education (Patterson, 2000).
4.4.3 Teachers Attitudes Towards Inclusion Across Teaching Experience

The third hypothesis of the study stated that:

Ho3 There is no significant difference in the teachers’ attitudes toward inclusion of hearing impaired learners in regular classes across the teachers teaching experience.

In order to test this hypothesis, ANOVA test was carried out by comparing the attitude mean scores of teachers in different teaching experience brackets. The results of this analysis are summarized in Tables 4.6 and 4.7 below.

**Table 4.6  Descriptive: Teachers Attitudes Across Teaching Experience**

<table>
<thead>
<tr>
<th>Teaching Experience (years)</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>10</td>
<td>29.000</td>
<td>11.662</td>
</tr>
<tr>
<td>6-10 years</td>
<td>74</td>
<td>33.419</td>
<td>8.290</td>
</tr>
<tr>
<td>11-15 years</td>
<td>125</td>
<td>38.336</td>
<td>8.535</td>
</tr>
<tr>
<td>16-plus</td>
<td>191</td>
<td>35.702</td>
<td>9.201</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>35.935</td>
<td>9.100</td>
</tr>
</tbody>
</table>

**Table 4.7 ANOVA Results: Teachers Attitudes Across Teaching Experience**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>S. of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>1680.4</td>
<td>3</td>
<td>560.140</td>
<td>7.074</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>31357.9</td>
<td>396</td>
<td>79.187</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>33038</td>
<td>399</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F=7.074 significant at p<0.05 established that there is a difference in the teachers’ attitudes towards inclusion across the teachers teaching experience.
From Table 4.6, it can be noted that the more the years of teaching experience, the higher the attitudes toward inclusion became more positive.

The findings clearly showed that experience is the best teacher. The teachers with many years of teaching were more positive towards inclusion. Teaching experience equips teachers with specific qualifications that provide quality education. A teacher who is highly qualified has a greater capacity to understand the problems of the learners because while learning, he/she has been exposed extensively to learning and teaching processes. This fact however, may be misleading because other factors contribute to the learning processes of learners. The researcher noted that teachers in the schools with special units had higher qualifications compared to teachers in regular schools. Eagly & Chaiken, (1973) & Triandis, (1971) postulated that cognitive component as containing the ideas, thoughts or beliefs used by people in thinking. One can therefore conclude that experience being one key source of knowledge is likely to influence the thinking of such teachers rendering them more positive towards education of hearing impaired learners.

In conclusion, therefore, it was established that:

Male teachers had more positive attitudes toward inclusion of learners with hearing impairments in regular schools than female teachers. Teachers in schools with special units had more positive attitudes toward inclusion than those from schools without special units. Teachers with more years of teaching experience had more positive attitudes toward inclusion than those with less experience.
4.4.4 Other Important Findings Revealed by the Study

4.4.4.1 Academic Performance

Ross & Madison, (1982) noted that there was superior performance noted for the hearing impaired learners in the regular schools. This according to Lynas, (1986) is the most ideal placement for learners with hearing impairments. The findings of the present study are also consistent with the above findings, 52% of the respondents argued that if learners with hearing impairment are taught together with those without impairments they are likely going to perform better. While respondents (67.5%) felt that interactions with hearing learners would help hearing impaired learners improve their academic performance and in the end he/she may develop confidence in his/her own academic ability. This was very positive attribute to inclusion.

4.4.4.2 Social Aspects

Responses indicate that including a deaf child in a regular school will increase his/her circle of friends. The reason given is that there is no physical indicator of hearing impairment and those learners look healthy and smart like all other learners without disabilities. Such learners are well adjusted socially according to 64% of respondents and this is an indication that inclusive education will automatically make hearing impaired learners happy (Mwamba & Kalabula, 2000). It also means that inclusive education will not increase social rejection by peers as indicated by 24% of the respondent.

Further 22.75% of the respondents indicated that inclusion would not negatively affect the social development of the other learners because it will allow for full classroom interaction. The best conclusion that can be arrived at from the above responses is that the
majority of the teachers felt that deaf learners are socially accepted in regular classes. This social acceptance has positive implications on the social, psychological and intellectual development of the child. Pupils’ most fundamental need is to be known and accepted as valued members (Hall, 1992). If such pupils are not accepted the end result may be that they will keep to themselves.

In a study carried out in Zimbabwe, (Mushoriwa, 2000) the results showed that blind learners were not accepted in inclusive settings. Teachers felt that such learners would be a bother in terms of seeking assistance from the others while walking. It is for this reason that Mushoriwa, (2000) said that while attempting to include learners with Special Needs in regular classes, type of disability need to be considered. Special education to date has merely reproduced itself in a mainstream setting. It has in other words colonized rather than transform the mainstream. Social acceptance therefore is dictated by the disability itself as stipulated by comparing the results of social acceptability in this study as compared to that of Mushoriwa, (2000).

Thus the heterogeneity of an inclusive class with regard to disability and its degree, talents, interests, preferences, knowledge and experiences make it difficult to define as a group according to Savolainen, (2000), while they may be physically in one class, they may remain separate as a result of some of the above attributes. The disabled child is seen as different and difficult (Booth & Ainscow, 1998) and this sets him/her apart. Should the child sense this rejection, it can cripple his/her whole personality and such crippling is a more serious menace than the physical or sensory disability itself.
4.5 **Summary of Chapter Four**

The study has revealed that casual inclusion exists in regular schools and that mild hearing impairments are to be found more frequently in regular primary schools. In terms of attitudes towards teaching learners with impairment, the study shows that the main problem is the lack of teachers’ education and motivation. The study shows further that when working conditions are improved, teachers will be more positive to assuming the difficult task of teaching learners with impairments. The study also demonstrated that co-operation among the actors and agents of inclusion needs to be strengthened in order to promote effective Inclusive Education.

The findings from the study are also consistent with other research findings, suggesting caution in implementing inclusion until the requisite attitudes accommodations and adaptations for learners with hearing impairments are in place. Effective inclusive practices must be provided that promotes what Fullan, (2001) called reculturing that is transforming the culture and thus – changing the way we do things.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter is divided into three major sections. In the first section, a summary of the major research findings is presented. The second section comprises of conclusions of the research findings in relation to the literature review presented in chapter two. In the third section, recommendations of the study is presented, including and suggestions for further studies made by the researcher based on the study.

5.1 Summary of the Study Findings

The purpose of the study was to identify the attitudes of primary school teachers toward inclusion of learners with hearing impairments in regular schools. The study findings are summarized below.

i) It was established that majority of the teachers (74.5%) had positive attitudes toward inclusion of hearing impaired pupils in regular schools.

ii) The study revealed that male teachers had more positive attitudes toward inclusion of hearing impaired pupils in regular schools than their female counterparts.

iii) Teachers from schools with special units were found to have more positive attitudes toward inclusion than those from schools without special units.

iv) It was established that teachers with more years of teaching experience were more positive towards inclusion than those with less experience.

v) Majority of the teachers reported that regular teachers cannot communicate effectively with hearing-impaired learners, do not understand problems
associated with deafness, do not make appropriate educational provisions for learners with hearing impairments, and have not been adequately prepared to teach hearing impaired learners.

5.2 Conclusion

Responses also revealed that despite teachers’ positive attitude towards inclusion they are not ready to adopt this change without prior training on how to teach the Hearing Impaired. The findings are similar to Giorcelli, (1995) whereby the teachers in Zimbabwe were not ready to have learners with visual impairments included in regular classrooms they found them a burden and as interfering with the normal flow and routine of regular class activities. He postulated that the most important conditions for successful inclusion is zero rejection. If the results of this study are adopted then inclusion for this group may not succeed. Teachers feel that training and environment restructuring should be given the first priority. According to Knight, (1999) when teachers resist a change the change will only be implemented with considerable social dislocation and high cost.

The researcher agrees with Salend & Duhaney, (1999: 124) that the movement toward, Inclusive practices has the potential to have a positive impact on learners with and without disabilities and their teachers. These positive outcomes depend however on changing the perceptions of educators and engendering commitment and the provision of resources to serving the needs of both regular and those with Special Needs in Education.
The teachers were very clear that they cannot communicate with hearing impaired learners, they do not understand psychology of deafness and would not therefore teach such learners effectively.

The researcher also was astonished to find out that male teachers were more positive to teaching learners with hearing impairment than their female counterparts, it is culturally right to imagine that female teachers would be more positive in supporting inclusion since they are expected to be more concerned and responsive to issues concerning children. The placement issue also was very clear that teachers who had prior interaction with learners with special needs were more willing to include them in regular setting. Finally, experiences of teachers gained through the number of years they have taught clearly showed that experience makes the teacher.

5.3 **Recommendations**

According to the MOE, (2001) Kenyans need to restructure schools into communities that support learners with Special Needs. Such would be good schools and good classrooms that help to give opportunity to learners to improve their self-esteem and academic competencies with, minimal challenges. To achieve this, teacher need to be competent inclusive teachers. The researcher recommends that attitudes of regular primary teachers be addressed through in-service courses and public education because they are important variables in the initiation of Inclusive Education for learners with hearing impairment.
Learners need a caring and stimulating learning environment to understand what is being taught and to interact effectively with their peers and teachers. Teachers should consider making adjustments in methods, materials, settings and schedules, to accommodate students rather than trying to make learners adjust to existing practices. Such adjustments will benefit education quality for all learners not only those with a disability.

Teachers need to be flexible and be ready to teach learners in diversified placements and meet their individual needs, to be consistent and patient, and to respect learners' individual learning styles. Teachers also need: accept that learners learn at different rates, and in different ways, and so plan lessons with diversity and difference in mind; Plan activities according to the learning taking place, rather than according to a fixed interpretation of the curriculum; Cooperate with families and community members to ensure that girls and boys are in school and that their learning is optimized; Respond flexibly and creatively both to the individual needs of particular learners and to the needs of all learners in the classroom. Finally, be aware that a proportion of learners in all classes will experience some learning difficulties.

5.4 Suggestions for Further Research

This research was confined to Muranga, Nyeri, Kirinyaga and Nyandarua counties due to lack of adequate time and monetary resources, the results cannot therefore be generalized to the rest of provinces. I find five research areas as being most critical. There is need to replicate this study in other parts of Kenya hence need for a large National diagnosis of the teachers attitudes to be conducted to provide not only evidence of the situation but a close estimate of the reality. Such studies would give some idea on factors that would
affect teachers from embracing this philosophy of education. There is a clear need for research focusing on other barriers to Inclusive Education. It is important to carry out further research as to why the male teachers were more willing to include hearing impaired learners in regular schools as opposed to female teachers.

The process of exploring the Inclusive Education of learners with hearing impairments evokes a difficult issue that is, how do they communicate. It is important to study the communication modes of deaf people and the implication this has on the practice of inclusion. Clearly any attempt to include a hearing impaired learner without considering sign language may prove to endanger the recognition of the deaf community towards the practice of Inclusive Education.

Above all a National research data on the population of Hearing Impaired is required to facilitate planning and inform the policy makers.

Finally a study on cultural patterns and practices requires a purely ethnographical approach to explore the impact of culture and tradition in the education of persons with hearing impairments.
REFERENCES


APPENDIX 1
TEACHERS’ QUESTIONNAIRE

The aim of this questionnaire is to get your opinions concerning educating children with hearing impairments in regular schools. Complete the following items as honestly as possible. Tick as appropriate.

1. Gender:  
   - Male  
   - Female

2. Name of the school .............................................................

3. Type of school (Tick as appropriate)
   - Regular
   - Regular with a special unit

4. Teaching experience (Tick where appropriate)
   - One to five years
   - Six to ten years
   - Eleven to fifteen years
   - Sixteen years and above

5. Present position (Tick where appropriate)
   - Regular teacher with special needs education training
   - Regular teachers without special needs education training

Using the stem below, respond to item 1 - 15. The first 10 concern the children with hearing impairment while the last 5 concern the regular teachers.

STEM: Including children with hearing impairments in a regular classroom rather than in special school will:

1. Increase the child’s circle of friends.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Tick the most appropriate.
Give a reason for your answer.

2. Limit the child's level of academic performance

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Tick the most appropriate.

Give a reason for your answer.

3. Make the child less well adjusted socially.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Tick the most appropriate.

Give a reason for your answer.

4. Ensure that hearing children will be happy to play with the hearing impaired children.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Tick the most appropriate.

Give a reason for your answer.

5. Worsen the child's learning problems.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Tick the most appropriate.

Give a reason for your answer.

(a) Have a negative effect on the social development of other children.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

(b) Provide more opportunities for the other children benefit from the specialized instruction of the hearing impaired children.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

(c) Develop a stronger feeling in the child of confidence in his/her academic ability.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Tick the most appropriate.

Give a reason for your answer.
9. Increase the amount of social rejection by the child's peers.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Tick the most appropriate.

Give a reason for your answer.

10. Ensure that hearing children will be more appreciative of children with hearing impairment.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Tick the most appropriate.

Give a reason for your answer.

Regular Teachers

11. Regular teachers cannot communicate effectively with the children with hearing impairments.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Tick the most appropriate.

Give a reason for your answer.

12. Regular teachers do not understand problems associate with deafness.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Tick the most appropriate.

Give a reason for your answer.

13. Regular teachers do not make appropriate educational provisions for the hearing impaired children in regular classes.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Tick the most appropriate.

Give a reason for your answer.

14. Regular teachers are well prepared to teach children with hearing impaired effectively.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Tick the most appropriate.

Give a reason for your answer.

15. Regular teachers are happy to have children with hearing impairments in their classroom.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Tick the most appropriate.

Give a reason for your answer.
Lucy N. Kiriungi  
Kenyatta University  
P.O. BOX 43844  
NAIROBI  

Dear Madam  

RE: RESEARCH AUTHORISATION  

Following your application for authority to conduct research on 'investigation of factors that influence Teachers Attitudes towards inclusion of learners with Hearing impairment in regular Schools in Central Province of Kenya, I am pleased to inform you that you have been authorised to conduct research in Murang'a, Nyeri, Kiambu, Nyandarua and Kirinyaga Districts for a period ending 30th July, 2003.

You are advised to report to the District Commissioners and the District Education Officers of the respective Districts of your research before embarking on your research project.

It is noted that the research is a requirement on part fulfilment for the award of Masters Degree in Education by Kenyatta University.

Upon completion of your research project, you are expected to avail two copies of your research report to this Office.

A. G. KAARIA  
FOR: PERMANENT SECRETARY/EDUCATION  

The District Education Officer  
Kiambu  
Murang'a  
Nyeri  
Kirinyaga  
Nyandarua  

The District Commissioner  
Kiambu  
Murang'a  
Nyeri  
Kirinyaga  
Nyandarua