

**HINDRANCES TO EFFECTIVE LEARNING OF PUPILS WITH  
HEARING IMPAIRMENT IN MERU NORTH DISTRICT-KENYA**

**BY**

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**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE  
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**DECLARATION**

I hereby declare that this thesis is my original work and has not been presented for a degree in any other university.

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**DEDICATION**

This research thesis is dedicated to the Almighty God who enabled me complete it, my husband and children for their financial and moral support.

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**ABBREVIATIONS AND ACRONYMS**

<b>dB</b>	Decibel Unit.
<b>EARC</b>	Educational Assessment and Resource Services.
<b>EFA</b>	Education For All.
<b>IE</b>	Inclusive Education.
<b>IEP</b>	Individualized Education Programme
<b>HI</b>	Hearing Impairments.
<b>KSDC</b>	Kenya Society for Deaf Children.
<b>QASO</b>	Quality Assurance and Standards Officer.
<b>SNE</b>	Special Needs Education.
<b>UN</b>	United Nations.
<b>UNESCO</b>	United Nations Educational Scientific and Cultural Organization.

## ABSTRACT

One is learning when he is increasing the probability of making a correct response to a given stimulus. One has learned only when he is capable of giving an appropriate response. The 8.4.4 Curriculum of Education is followed in education of hearing impaired in special schools and units. Hence just as the case in regular education, the hearing impaired are expected to learn and perform well academically. Statement of the Problem was that children with hearing impairments are typically not educationally managed well to permit them compete satisfactorily in the society. The study aimed at investigating factors hindering effective learning of children who are hearing impaired in one special primary school and units in Meru North District in Eastern Province of Kenya. Education being a basic human right, children who are hearing impaired successful learning, needs to be emphasized and factors hindering it to be addressed. Literature was reviewed on trends in the education of children who are hearing impaired and how units of hearing impaired are successfully manned in order to mode children with hearing impairments. The study was carried out within Meru North District that is Tigania and Igembe. It used a descriptive survey design. One special primary school and 22 units were sampled for the study, which presents 30% of the total population. Purposive and stratified random samplings were used for the particular special primary school and units. Questionnaires, interviews and observation schedules formed the basic research instruments. Expert's knowledge from the supervisors was indispensable in determining the validity of the instruments. The reliability was determined by the use of a pilot study. The results show that Majority (62.5%) of the parents preferred their children to be enrolled in residential special schools. Only 57% of the teachers always use the teaching/learning resources, 87% of the respondents indicated that they have over 10 years of teaching experience, 75% of them went through KCSE system of education and 57% of the teachers prepare their lessons before teaching the children who are hearing impaired. It was concluded that lack of many trained teachers in Special Needs Education may affect learning of pupils with hearing impairment in special schools and units, inadequate teaching and learning resources impede learning of pupils with hearing impairment and lack of inspection of special schools and units by the Ministry of Education officers will affect effectiveness. Among the recommendations, it was recommended that the QASOs be trained in Special Needs Education, the teachers to be given frequent workshops and seminars. Schools should solicit funds to buy the necessary materials and equipment and organise short sign language courses for parents and that parents should cater for the basic needs of their children. The researcher also recommends a similar study to be carried out at a wider scope to uncover the problem at a broad perspective that would benefit children who are hearing impaired.

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Introduction.**

The chapter endeavors to present the various aspects that enabled the researcher to build a case for the study. The study was presented by a way of background to the study, statement of the problem, purpose of the study, research objectives, research questions, limitation of the study, theoretical and conceptual framework and operational definition of terms as outlined in ensuing sections.

### **1.2 Background to the Study**

It is a government policy that all children regardless of disability to access quality education. In this regard, the teachers have a great task of providing quality services to the children who are hearing impaired. The literature on psychology of learning is vast. Many psychologists among them Behaviorists, Cognitivists or Gestalts, including Clinicians would own up to being learning theorists. One is learning when he is increasing the probability of making a correct response to a given stimulus. One has learned only when he is capable of giving an appropriate response (Lancaster, 1974). Moreover, in learning, there is no certainty, nothing is sure. There is only a probability that a response would be correct. This probability varies with time, repetition and other factors. It can be said that an individual has learned something if he or she gives repeatedly an appropriate response to the stimulus. However, desired learning has occurred only when the probability of a correct response is much higher than it would be by pure chance.

Learning is a change in human disposition or capability which persists over a period of time, and which is not simply ascribable to process of growth. The kind of change called learning exhibits itself as a change in behaviour and the inference in learning is made by comparing what behaviour was possible before the individual was placed in a learning situation and what behaviour can be exhibited after such treatment (Lancaster, 1974). The change may be, and often is an increased capability for some type of performance. It may also be an offered disposition of the sort called “attitude” or “interest” or “value”. The change must have more than momentary permanence; it must be capable of being retained over some period of time. Finally, it must be distinguishable from the kind of change that is attributable to growth, such as a change in height or the development of muscles through exercises (Lancaster, 1974). Critics of formal education suggest that many or most schools have lost their concern for learning effectiveness (Lancaster, 1974).

The overall aim of education of the child who is hearing impaired should be to make him/her a well integrated happy hearing impaired individual and not a pale imitation of a hearing person. The teacher’s aim is to produce a happy well-adjusted hearing-impaired individual, each different from the other with his own personality. This calls for a greater commitment on the teachers’ handling such children. A great deal of repetition is needed while teaching so that the children can grasp the teacher’s intended goals. With poor classroom settings where there are no adequate teaching and learning materials together with audiological services, the teacher cannot achieve much.

Generally, the education of children with special needs, (SNE) aims at providing learning opportunities to a child in a coordinated educational programme that emphasizes the natural objectives such as acquisition of literacy, numeracy and manipulative skills and to develop positive image, self-expression and self-discipline.

According to the report of the Commission chaired by Kamunge (Republic of Kenya, 1988), resources that should be available to educational institutions include land, finances, teachers, time, facilities and equipment. The report continues to say that a beautiful school environment creates good teaching and learning; management and provision of quality, in addition to relevant education and training are dependent among other things as the supply of adequate equipment and teaching learning materials. Moon and Meyers (1994) asserts that teaching and learning are the heart of any school's activities. They both further point out that it was on rare occasions that the overall performance of a school or an institution was highly favourable and the facilities and equipment are not in good condition and in need of repair or always in the process of being repaired.

Education of the hearing impaired in Kenya dates back to the establishment of Kenya Society for the Deaf Children (KSDC), in 1958 by Peter Clifford, a government Ear, Nose and Throat Surgeon at King George IV Hospital, currently Kenyatta National Hospital, Mrs. Elizabeth Couldrey, a Speech Therapist and Mrs. Edina Hughes, a member of the then Kenya Legislative Council (Ndurumo, 1993). Currently, records of KSDC show a total of seventy-one programmes including many units (KSDC, 2004).

The 8.4.4 curriculum of education is followed in the education of hearing impaired in special schools and units. Hence just as the case in regular education, the hearing impaired are expected to learn and perform well academically. This calls for the government to have properly coordinated inspection in special schools and units to ensure that standards are not compromised due to lack of necessary materials and equipment for the successful learning of children who are hearing impaired. In order to effectively co-ordinate the education of the handicapped, the Ministry of Education established Special Education section at the inspectorate referred to as quality control and administration in 1976. The special education administration sections were given the mandate in the management and administration of the programmes to ensure that teachers were receiving appropriate training and also inspect schools to ensure that academic standards were being maintained. The placement of deaf children in schools and units is done through Educational Assessment and Resource Centres (EARC).

The special units are usually located in regular schools and should have specialized equipment and teaching devices. In rural areas, like in the case of Meru North the problems of transportation and the expenses incurred in maintaining units has obliged the stakeholders to transform units into full-fledged residential schools. In Meru North there is only one special primary school and twenty two special units catering for all the categories of disability, hearing impaired included. A major outcome of lack of a proper and effective mode of instruction is that many learners who are hearing impaired have low educational achievements and low aspiration for secondary and tertiary education.

Furth (1973), states that if education right or wrong is considered the key to opening opportunity for the civilized world to all children, it is even more critical for the children who are hearing impaired. In fact, to educate children who are hearing-impaired historically meant to literally lead them out of darkness of language, where knowledge and meaningful, civilized existences were to be found.

The current trend being the inclusive setting, there is need of maintaining special units in order for the hearing impaired to benefit fully from the services rendered in the regular school system and Meru North being one of the districts requiring such services is not an exception. The researcher therefore wished to investigate hindrances to effective learning of pupils with hearing impairment in Meru North district.

### **1.3 Statement of the Problem**

The children with hearing impairment are supposed to follow the regular curriculum just like their hearing counterparts. According to Ndurumo (1986), academic education is important in the education of the hearing impaired. This is because it assists in preparing these children to compete with hearing peers. He asserts that special education cannot be divorced from regular education and it is important in preparing children with hearing impairment for the competitive world of work and survival. After all, they sit for the same national examinations with their non-handicapped contemporaries, and thus compete with them for places in the institutions of higher learning for example colleges and universities. Considering the communication

handicap of deafness, it is obvious that the individuals who are hearing impaired are less advantaged because of communication during lessons. So this study provided or identified hindrances to effective learning of these pupils and recommended interventions that may enhance learning among the learners who are Hearing Impaired.

#### **1.4 Purpose of the Study**

The purpose of the study was to establish hindrances to effective learning of children who are hearing impaired in a special primary school and units of Meru North District in Eastern Province of Kenya and recommend interventions that may enhance learning among persons who are hearing impaired.

#### **1.5 Objectives of the Study**

The researcher used the following specific objectives:

1. To establish the level of training of teachers teaching children with hearing impairment.
2. To establish the type of equipment and other learning materials available and their adequacy in the special primary school and units.
3. To identify challenges that teachers of children who are hearing impaired face in the course of their teaching.
4. To establish the special education training of quality control personnel (Inspectors).
5. To establish the type and frequency of supervision.

6. Establish the role of the parents in the education of their children with hearing impairments in a special primary school and units.

### **1.6 Research Questions**

1. What is the level of special education training of teachers teaching children who are HI?
2. What type of equipments and other learning materials are available and their adequacy in the special primary schools and units?
3. What are some of the challenges teachers of children who are HI face in the course of teaching?
4. What is the level of special education training of the quality control personnel?
5. Where are the quality control personnel placed and how often do they visit special primary schools and units?
6. What role do parents play in the education of their children who are HI?

### **1.7 Research Assumptions**

The study assumed that:

- Education administration at all levels would be willing to permit the researcher to conduct the study in their respective institutions.
- The respondents would be willing to participate in the study.
- Lack of proper supervision of special schools and units may lead to poor teaching methods hence hinder effective learning.

### **1.8 Significance of the study**

The findings of the study may have both theoretical and practical implications for the future of the education of the hearing impaired in the country. Theoretically, the study is expected to contribute to the creation of knowledge about hearing-impaired curriculum development education in Kenya. It has also highlighted factors that hinder successful learning in the special primary school and units for the hearing impaired in Meru north District. Practically, the study may lead to the improvement of the implementation and proper coordination of special schools and units.

It may also help the Ministry of Education in formulation of future education policies aimed at maintaining standards in order to enable a learner with hearing impairment benefit. Furthermore, the study may enlighten curriculum developers on achievements of objectives outlined in the curriculum for the hearing impaired. Hearing-impaired teachers training and other stakeholders in the study of special education in the country would also benefit from the study. It has also highlighted the nature of supervision or quality control and the level of the training of the personnel involved in supervision. Furthermore it would form a base on which other researchers can develop their own studies.

### **1.9 Scope and Limitations of the study**

The study was limited to schools in Meru North District in Eastern province of Kenya which include a special primary school and selected special primary school units. The

study was limited to finding out hindrances to effective learning of pupils with hearing impairments. Meru North district is vast with units scattered in the whole district and this posed transportation problems to the researcher in order to access the sampled units in the district. Time and finances were also limiting factors for the researcher. The study was also limited to the education of learners who are hearing impaired in Meru North districts.

### **1.10 Theoretical Framework**

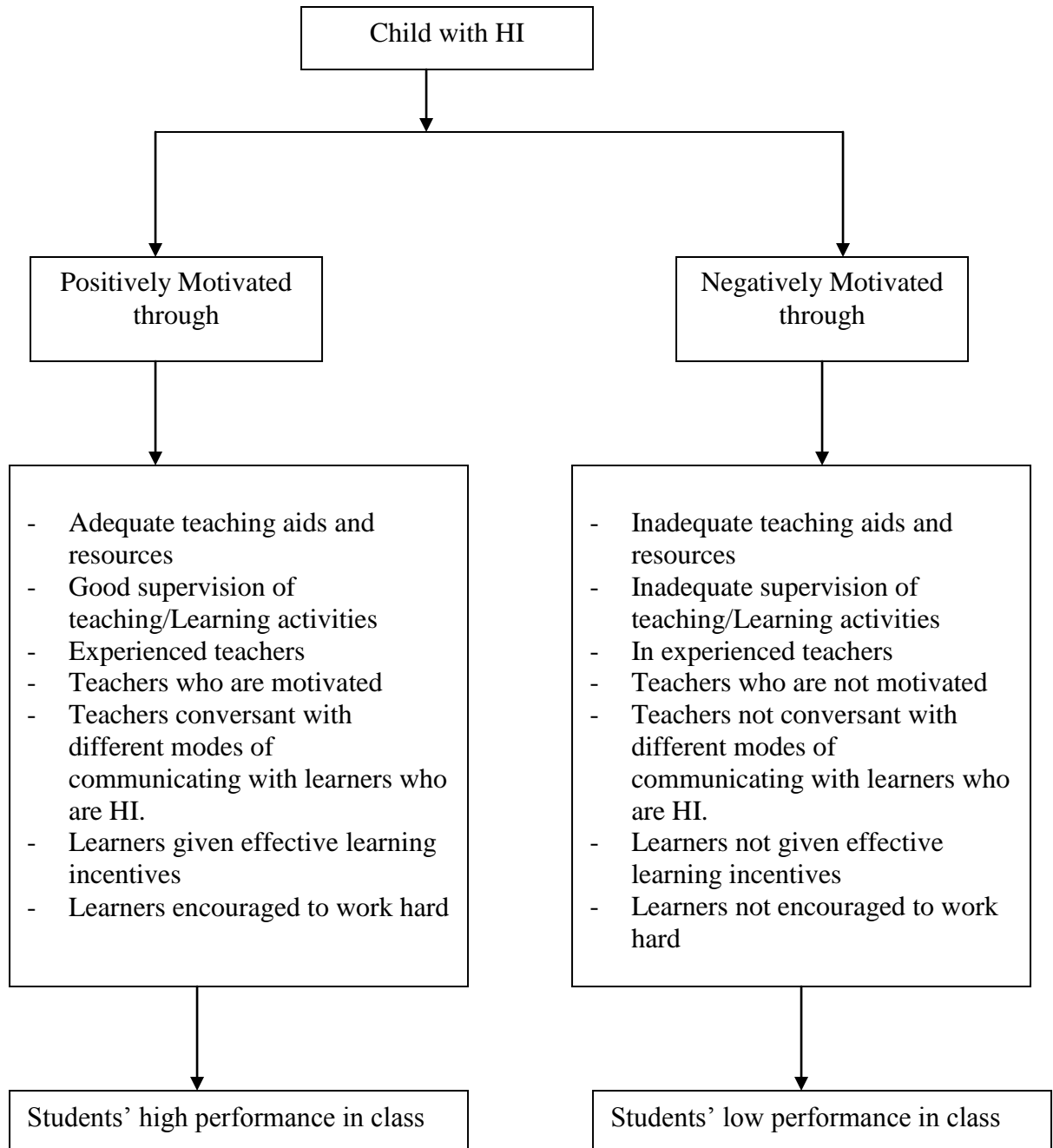
The study was based on Skinner's Theory of Motivation of Learning as cited by Orodho (2004, p.28). The theory's central argument is that students' motivation to undertake a task depends on expected rewards. In this regard, a positively perceived reward includes positive motivation and subsequently realizes high achievement. The negatively perceived reward leads to negative attitudes and underachievement.

It is also implicit that the teaching influences the student high performance; experiences and qualifications of the teachers, instructional resources and teaching strategies enhance teaching and learning (Orodho, 1996). The interaction strategies will translate into student's high performance. The children who are hearing impaired have been known to benefit in properly set up trends where services such as sign language, hearing aids and other audiological services are provided. When provided with all these facilities, the hearing impaired can benefit if at all the teacher is conversant with the mode of communication.

Motivation is regarded by experienced and inexperienced teachers alike as a prerequisite for effective learning and the greatest challenge that many teachers face is to make their students want to learn. If students do not want to learn, their learning efficiency will be so low that they may learn virtually nothing. If you know how to motivate students, you can hugely increase their learning rate. (Petty, 1993). As conceptualize in the framework next page.

### 1.11 Conceptual Framework

#### Effective learning of a learner who is HI



Source: Author 2008

### 1.12 Operational Definition of Terms

<b>Audiometer-</b>	This is an instrument for measuring differences in hearing.
<b>Decibel Unit (dB) -</b>	It is a unit used in measuring the level of the hearing loss in a learner with HI.
<b>Effective-</b>	Essential concerns to bring about the desired results of a Pupil with HI learning by some educational activities.
<b>Hard of hearing-</b>	Describes individuals whose hearing loss fluctuates from mild to moderate which manifest hearing loss of 26dB to 55dB.
<b>Hearing impairment -</b>	A general term used to describe all levels of hearing losses ranging from mild to profound.
<b>.Intervention -</b>	This is designing strategies to help/assist learners with HI to improve in their learning.
<b>Learning-</b>	Relatively permanent change in behaviour which occurs as a function of practice and observed through changes in a learner.
<b>Mild Hearing Loss-</b>	Describes those learners with HI whose hearing level range from 25 dB to 55dB.
<b>Profound Hearing Loss-</b>	Describes those learners with HI whose level of hearing range from 56 to 91dB and above.
<b>Special Unit -</b>	It is a special class attached to a mainstream/regular school where the learners with HI are taught.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

The researcher has reviewed relevant literature under the following subtopics:

Categories of hearing impairment from education perspective; importance of educating persons who are hearing impaired; adequacy of teaching/learning resources in schools and units and experiences and qualifications of teachers. Other hindrances to effective learning in special primary schools and units of hearing impaired pupils and especially the challenges facing teachers for learners who are hearing impaired, definition of inclusion, philosophy of inclusion, inclusive education, recommended interventions and summary of reviewed literature.

### **2.2 Categories of Hearing Impairment from Education Perspective**

From education perspective, hearing impairment (H.I) is categorized into two groups namely, hard of hearing and deaf. The hard of hearing is a term reserved for those individuals whose hearing loss fluctuates from mild to moderate. These individuals when their hearing loss is assessed using an audiometer manifest hearing loss of 26 dB to 55 dB. Their hearing loss is not severe and therefore they can use the hearing aid, which enables them to use the residual hearing. This residue hearing can enable them to hear and understand spoken language, especially if a hearing aid is also used (Ndurumo, 1993). The deaf include individuals whose hearing loss ranges in severity, from severe to profound, which is from 56 dB to over 91 dB. Their case is different from those who are only hard of hearing. A small percent can benefit from the use of

hearing aids. Ndurumo (1993), states that the chronology of onset of deafness is also important. Deafness occurring from birth or before language and speech patterns are established presents all adjustment problems. Persons with experiences of this kind are called prelingual deaf. They are greatly disadvantaged if deafened at four, than on later years. This means that those who become deaf before four years have a difficult task ahead at school and in the society in terms of adjustment strategies. According to Heward (1984), hearing impairment refers to any one who has a hearing loss significant enough to require special education training and adaptations. Deafness is the condition of individuals whose hearing is disabled and expressed in terms of speech or other sounds calibrated for frequency and integrity.

Before World War II, (1939–1945), increasing recognition of the importance of the pre-school years for the communicative development led to establishment of special school programming for the children with hearing impairment as young as 2 ½ years of age. The rationale for a special class has been to design and implement an educational program unique to the characteristics and needs of the child with moderate, profound or total hearing loss. If a child who is deaf or hard of hearing has been enrolled in a day program, he might leave there upon completion of the eighth grade and enter either a regular high school or secondary phase of a public residential school for the deaf. The typical special class enrolment in Kenya has been seven to twelve pupils per class. The researcher investigated the level of training of teachers, equipment and learning

materials available, frequency of supervision and role of parents in the education of their children with hearing impairment in a special primary school and units.

Inclusive education requires all children to be accommodated in ordinary schools regardless of their physical, intellectual, social, emotional, linguistic or other conditions. National and local policies should stipulate that disabled children attend neighbourhood schools that would be attended if the child did not have a disability (Clough 1998). With inclusion, the emphasis is on reviewing schools and systems and changing them rather than trying to change the learners (Kristensen, 2000).

### **2.3 Philosophy of Inclusion**

Children that learn together, learn to live together. According to Raschke and Bronson (1999), benefits of inclusion can be derived from four areas namely children with special needs, general education, to teachers and society. To children with special needs, inclusion affords a sense of belonging to diverse human family and provides a diverse stimulating environment in which to grow and learn. It evolves feelings of being a member of a diverse community and provides development of friendships, inclusion opportunities to develop neighborhood friends, enhance self-respect, affirmations of individuality, and peer models and opportunities to be educated with same age peers.

To the general education, inclusion provides opportunities to experience diversity of society on a small scale in a classroom. It develops an appreciation that everyone has unique and beautiful characteristics and abilities together with developing respect for others with diverse characteristics; sensitivity towards others limitations, feelings of empowerment and ability to make a difference. Inclusion also increases ability to help and teach all classmates and develops empathetic skills. It further provides opportunities to vicariously put their feet in another child's shoes and enhances appreciation for diversity of the human family.

To the teachers, inclusion helps them appreciate the diversity of the human family. It helps the teachers to recognize that all learners have strengths. It also creates an awareness of the importance of direct individualized instruction and increases ways of creatively addressing challenges. It goes on to teach collaborative problem solving skills and develop teamwork skills. It still enables teachers acquire different ways of perceiving challenges as a result of being on a multi-disciplinary team, enhances accountability skills and combat monotony.

To the society, inclusion promotes the civil rights of all individuals and supports the social value of equality. It teaches socialization, collaborative skills and builds supportiveness and interdependence. It also maximizes social peace and provides children miniature modes of democratic process. The researcher has no doubt about the benefits of inclusion but the great concern is its implementation especially in the

Kenyan education system. One of the challenges of implementation of inclusion in Kenya is buildings and structures, which need to be adapted to accommodate individuals with disabilities that is to meet their needs. Another one is the need for mutual acceptance by able bodied and individuals with special needs. Study has shown that some hearing learners would not like to have hearing impaired ones in their classrooms and vice-versa. Some parents too are reluctant to have special needs children in the same classrooms as their able bodied children. There is also need for teachers and other personnel to be competent in working with all categories of special needs children in addition to regular ones. All schools again need to be provided with appropriate equipment and materials.

In conclusion, inclusive education (I.E) cannot be implemented without proper understanding and planning because of the challenges. It is hard to implement but the researcher tends to believe there is a possibility of inclusion if the trend is worked out well like what some developed countries like America have done to include the learners fully and not just physically.

#### **2.4 Inclusive Education**

According to Meijer et al (1997), the term inclusive education (I.E) stands for an educational system that includes a large diversity of pupils and which differentiates education for this diversity. Hagerty (1994), in Meijer et al (1997), defines inclusion as the provision of the appropriate, high quality education for pupils with special needs in

regular schools. Special education is conceived differently in different parts of the world and practice varies accordingly. The familiar variation in the use made of special schools is just one example of the diversity that characterizes special education provision globally. However, there are some convergences and one of the most significant of these relates to inclusive education.

The language of special education is not static and recent years have seen major debates successively take place around mainstreaming, integration, and inclusion. These concepts are in fact not as sharply delimited from each other as some protagonists maintain, but what has been imagined, regardless of the language, is a clearer focus on education at reform agenda. The provision of high quality education for all pupils is increasingly located within a school reform context and to that extent; pupils with special needs are naturally encompassed within a common framework of significant educational action.

Any discussion about the definition of inclusive education needs to use the Salamanca Statement and Framework for Action (UNESCO, 1994) as a reference point. The statement reaffirms the right to education of every individual, as enshrined in the 1948 Universal Declaration of Human Rights, and renews the pledge made by the world community at the 1990 World Conference on Education for All (EFA) to ensure the right for all regardless of individual differences. The statement also mentions the 1993 UN Standard Rules on the Equalization of Opportunities, which states that education of

disabled children should be an integral part of education system. There is, however, no reference to the convention on the rights of the child.

The guiding principle that informs this framework is that schools should accommodate all children regardless of their physical, intellectual, social and other disadvantaged marginalized groups. The movement towards inclusion of learners with disabilities into general education classes has become the overwhelming trend in education (Chow & Kisari, 1999; Mamlin, 1999). This may be so but it is yet to be fully implemented in Kenya and in most developing countries. The trend also results from the meeting of representatives of 25 international organizations in Salamanca, Spain in 1994.

## **2.5 Importance of Educating Children who are Hearing Impaired**

It is of great importance to educate a child who is deaf or hearing-impaired because he will be able to fit well with the people around him. This means that the child will not remain isolated due to communication barriers. Furthermore, education will open more avenues for the child to secure a job in future after completing school. This again means that the person will not be ignorant of the employment opportunities available for all persons with hearing impairments. The individuals who are hearing impaired have a need for knowledge and skills because they live and interact with the society. Although they are handicapped, they need not be alienated from the society of which they form part. They need quality education to enhance the efficiency of what they do in life.

According to Ndurumo (1986), in his Kenya study, academic education is important in the education of the hearing impaired. This is because it assists in preparing these children to compete with hearing peers. He asserts that special education cannot be divorced from regular education and it is important in preparing children with hearing impairment for the competitive world of work and survival. After all, they sit for the same national examinations with their non-handicapped contemporaries, and thus compete with them for places in the institutions of higher learning for example colleges and universities. Considering the communication handicap of deafness, it is obvious that the hearing impaired individuals are less advantaged because of communication during lessons. Teachers therefore should be conversant with all modes of communication since the pupils with hearing impairment require different modes of communication strategies for them to benefit fully.

## **2.6 Experiences and Qualification of Teachers**

In a Kenyan study done by Kinyanjui (1984) the caliber of teachers in any school form important input variables, which can have tremendous impact on school out come. This means that a teacher's formal qualification, experience, motivation, creativity, interaction with learners and his methodology may greatly influence academic performance of a school. Kinyanjui (1984) is echoing Raju (1973), who in his study on rural schools in Kenya found that most of them lacked properly trained teachers.. More over, the teachers who are being trained for inclusive settings are paying for themselves meaning, if they are not able to sponsor themselves, the training is likely to stop.

Johnson (1960), observes that curriculum implementation is hampered by the degree to which teacher's commitment is constantly interfered with. This comes about when teachers are stressed due to lack of teaching facilities or lack of appropriate time to plan for their work and deliver in time. The researcher supports this view because teachers who have no time to prepare for their work will not carry out teaching process properly. Since the studies reviewed were done in other parts of Kenya and have indicated a deficiency on the issue of qualification and experience of teachers, there is need for such a study to be done which is more current. The review also indicates that the themes are outdated and may apply only to limited extent in today's situation hence a need for an up to date study..

### **2.7 Adequacy of Teaching/ Learning Resources in Special Schools and Units**

Teaching/Learning resources are materials used by the pupils or by the teacher or both to facilitate learning. It is important to note that it is only in very rare occasions for learning materials to be specific for a given category; most learning materials can be used by all learners with disabilities. Research findings reported by most Kenyan researchers show that there are learning resources which both the teacher and pupils cannot do without. These are teaching documents, schemes of work, lesson plans, progress records, IEPs, resource personnel and so on. These resources can also be used by learners with other different disabilities.

Eshiwani (1985), points out that lack of school resources affect learning in both primary and secondary schools in Kenya. The factors are specified as school resources like, size of the class, textbooks, library, and visual aids among others. The researcher is in support of this because lack of school resources actually leads to poor teaching methods. Teachers and pupils are not able to expose themselves to these resources in order to have effective teaching and learning. According to Coombs (1995), teaching materials are used to promote learning; maintain interest, add variety to the lesson and to relate one subject to other subjects. The inadequacy of materials and equipment may have adverse effects to learners who are hearing impaired especially the hearing devices for those who are deaf. These materials therefore should be adequate enough to allow children to effectively use them.

Tum (1996) is in support of Eshiwani as he says that lack of many facilities is a primary contributory factor to poor performance, which comes as a result of poor teaching methods. It is true that lack of any reading books and other facilities manifest poor continuous teaching and learning especially in special schools and units which are mostly marginalized and their vote head interfered with by the head of institutions. Maundu a Kenya researcher in (1993), states that variation in quality and quantity of teaching/learning and facilities suggests that pupils receive poorer education.

Furthermore, previous researches in other districts have shown that pupils are clustered in one room and being taught by different teachers under one roof. This situation can be

found in Nairobi special units where physical classrooms for these children are never constructed hence their being put in one room. Special unit teachers are also withdrawn from the special unit class to teach in the mainstream classes. The review clearly indicates the studies having been done in other parts of Kenya and Meru North being one of the districts, a similar problem might be there which can be a hindrance to effective learning of pupils who are hearing impaired.

### **2.8 Other Hindrances to Effective Learning in Special Schools and Units**

Wiseman (1986), reveals other variables which may affect learning in schools. These are general atmosphere at home, cleanliness and order of security, discipline and possession of books and papers. The researcher agrees with Wiseman (1986) because when home environment is conducive, pupils learning atmosphere will be conducive. In fact, within the family itself factors such as its size, the pupils position of birth, the relationship between the parents, their attitudes towards education, their level of aspiration and the absence of one parent will have their effect which may help or hinder learning. This calls for the parents to take an active role in the education of their children. The review indicates the study in the theme although done long time, can be applied to today's situation especially now when the economic status of most Kenyans is below poverty line.

## **2.9 Challenges Facing Teachers of Learners with Hearing Impairments**

According to the researcher's observation in the district, the curriculum is rigid and therefore difficult for the children to go through hence teachers are not able to complete the syllabus and yet the same children are expected to sit for the same national examinations. Other teachers expectations on learners with hearing impairment are another challenge together with rigid educational approaches, which are not conducive to learners who are hearing impaired. Competitive aspect in the education system whereby the learners who are hearing impaired compete with the hearing peers' poses another challenge. Lack of community involvement that is inability to socially interact with children who are hearing impaired contributes to the children's performance. This is made worse by insufficient human and material resources. Also the late starters within the school become a challenge since they are much older than the average age of the class.

Making of learning materials and teaching resources is a challenge since teachers need expertise which they do not have and money, which sometimes is hard to come by. Teaching of several languages like Kiswahili at the same time with English creates another challenge. The two languages have different structures. Sometimes teachers face challenges when they teach new concepts and abstract words, which have no signs, names or words for them. This can be evidenced in the teaching of social studies, religious education and science.

There is always a communication breakdown between the teacher and the learners, the controversy has continued for a long time and now with the emergence of pure Kenyan sign language, the confusion will be more due to variation of Sign Language that is Kenyan and American, which was initially used. The preparations of Individualized Education Programs (IEP) for all pupils in the class due to large enrolment also pose a challenge. Furthermore, teachers again face a challenge when they have to attend to children with multiple handicaps alongside their hearing counterparts. Communication is the greatest area of difficulty for the deaf especially in the children who become deaf before acquiring language. Consequently, educational intervention has focused more on the acquisition of language for communication. Before placement, comprehensive medical examination, learning tests both educational and psychological evaluation should be done. These enable the child to get appropriate supportive devices like fitting of the hearing device and teaching specialist subjects like auditory training, articulation, readiness, individual speech and sign language.

According to the advocates of early intervention, intervention should include English language, American Sign Language and total communication approach containing spoken English and Kenyan Sign Language. It is important for parents with hearing impaired adults to act as models (Hallahan & Kauffman, 1997). Regular schools where children who are deaf and hearing impaired are enrolled will need increased funding to allow them to access quality education. Since the implementation of the Free Primary Education, special schools are already allocated Special Needs funding which are even

more than the regular schools but are not enough and often spent on more generic needs, which means that for low incidence areas such as hearing impairment, funding is not sufficient. Teachers already qualified to teach deaf and hearing impaired can be given incentives in order to retain them in the special schools and units due to the workload. This could be in form of a scholarship to better their education in form of tuition costs, travel and accommodation expenses.

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Robbins (2001) says that professionals are better motivated by being provided with challenging projects, rewarding them with education opportunities like workshops, trainings and attending conferences that allow them to keep current in their field. The theme clearly indicates that other teachers in other parts of Kenya are experiencing the challenges and the district where the study is being conducted is not an exceptional. Hence the researcher tends to think teachers in the district may be undergoing such challenges. It has also reviewed that teachers require some refresher courses to keep them abreast with current trends of Special Needs Education in order to provide quality education to pupils with hearing impairment.

### **2.10 Summary of Literature Review**

Various gaps have emerged from the review which include the need for a current study which may apply and relevant to today's situation and review more to the current status of qualification of teachers and their experience of teaching children who are hearing impaired. Inadequate teaching/learning resources could impede learning of pupils, those with hearing impairment included hence the need to establish it in the district. Again lack of inspection of Special Schools and units by the Quality Control and Standards Officers may be a hindrance to effective in these institutions hence need to establish the frequency of their supervision.

According to Wiseman (1986) other variables which may affect learning in school include the general atmosphere at home, cleanliness and order of security, discipline

and possession of books and papers. When home environment is conducive pupils learning atmosphere will be conducive. Within the family itself factors such as its size, the pupil's position of birth, the relationship between the parents, their attitudes towards education and their level of aspiration will have their effect which may help or hinder learning hence the need of parents taking active participation in the education of their children.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

The chapter presents the various aspects of research methodology that were used in the study. The study investigated hindrances to effective learning of pupils who are hearing impaired in one special primary school and units in Meru North Districts and the following is covered: research design, locale of the study, target population, sampling techniques and sample size, pilot study, research instruments, data collection, analysis and ethical considerations.

### **3.2 Research Design**

This study investigated factors, which may hinder effective learning of learners who are hearing impaired and employed a descriptive survey. Descriptive survey according to Mugenda and Mugenda (1999) describes and determines a current situation. Descriptive research design is favoured by the most social science researches because of its ability to determine and report things the way they are. The purpose of descriptive survey is also to observe, describe and document aspects of a situation as it naturally occurs (Polit, 1995). It attempts to describe what was or what is in a social system such as the school (Abagi, 1995). It improves direct observation where required behaviour is observed in a particular setting, full time participants in the activities being observed and interview methods, which involve face-to-face interaction between the researcher and the subjects as its methods of inquiry.

According to Orodho (2009), the technique produces data that is holistic and in-depth. The study adopted the descriptive survey design according to Gay (1992) to investigate hindrances to effective learning of pupils who are hearing impaired in one special primary school and units such that they also benefit like their hearing counterparts in the education opportunities being offered in our country. Descriptive survey design is used in the preliminary and exploratory studies (Luck & Rubin, 1992). It allows the researchers to gather information, summarize, present and interpret information for the purposes of clarification (Orodho, 2002). As the study involved teachers, pupils, parents, inspectors and other stakeholders both hearing and hearing impaired, the study falls well in the descriptive survey study design. The data collected through qualitative and quantitative approach was analysed to help to identify hindrances to effective learning of pupils with hearing impairment.

### **3.2.1 Research variables**

According to Mugenda and Mugenda (1999), a variable is a measurable characteristic among the subjects. It is also an empirical property that is capable of taking two or more values Orodho (2009). Independent variables are those that influence the outcome. A dependent variable on the other hand is a result of the influence of independent variables. The study only considered two variables namely independent and dependent variables.

### **3.2.1.1 Dependant variable**

The dependent variable in the study was the hindrances to effective learning which include level of training of teachers teaching children with hearing impairment, type of equipment and other learning materials available and the adequacy, special education training of QASO and their frequency of supervision and parental participation in the learning of their children who are HI.

### **3.2.1.2 Independent variable**

Independent variable was the effective learning of pupils with hearing impairment which include academic performance of learners with hearing impairment and effective use of sign language as a mode of communication

## **3.3 Locale of the Study**

The study was conducted in Meru North District in Eastern Province of Kenya. The location was selected because the researcher intended to investigate hindrances to effective learning of pupils with hearing impairment in the districts hence contribute knowledge to the field of education concerning learning in Special Needs Education. It was also accessible to the researcher. Children were identified in the special primary school and units as learning was in progress. Furthermore, an ideal setting for the study is one that is directly related to the researcher's interest. This is observed by Singleton (1993). The researcher having worked in the districts, in the same area has professional interest to do research in the area about hindrances to effective learning of pupils with hearing impairment. There was therefore need to carry out research on hindrances to

effective learning of pupils with HI in the districts. At the same time, there was no evidenced research that has been carried out on the education of hearing impaired in the same area or in the same aspect. The district is also accessible and convenient to the researcher. According to Singleton (1993), the ideal setting for any study should be easily accessible to the researcher. This is a very important consideration given the limited time and finances at the researcher's disposal.

### **3.3 Target Population**

The research was conducted in Meru North District targeting children who are hearing-impaired in one special primary school and 22 special units, their parents' head teachers, teachers and Quality Assurance and Standards Officers with a population of 180 that is 75 pupils, 27 teachers 46 parents, 21 head teachers and 11 quality assurance and standards officers.

### **3.4 Sampling Technique and Sample Size**

The researcher derived a sample from the population of 180 respondents using purposive and stratified random sampling techniques from the special primary school and six units. Purposive sampling involves selecting samples using a set criterion. In this case, the researcher purposively selected those units having children with hearing impairments. The special school is the only one in the district so it was also purposively selected. Stratified sampling was further used to stratify the school community into teachers, pupils and parents, head teachers and Quality Assurance and Standards

Officers. Stratified sampling recognizes that most target population has difference (Njenga & Kabiru, 2008). These differences are referred to as strata. The main strata that exist in a population include gender, age, socio-economic, educational levels, cultural differences, climate differences or land potential. In this case, the researcher included gender and educational levels of the respondents. The researcher also used proportional representation in the selection of the sample.

To select the number required in each stratum simple random sampling was used. The researcher wrote 'Yes' and 'No' on papers for pupils and parents. The number required was written 'Yes' and the rest 'No'. The papers were shaken to mix well, and then passed round. Those who picked papers with 'Yes' numbers were the ones included in the sample. Four pupils were selected from each of the six units, with a total of twenty four pupils. Four other pupils were selected from two classes of the special primary school, that is from class four and five, a total of four pupils, eight teachers were selected one per class, one parent per class totaling to eight parents, five Quality Assurance and Standards Officers (QASO) and seven head teachers were purposively selected. Gender and age were considered in the selection of the pupils. Finally the researcher remained with a sample size of sixty respondents.

**Table 3.1: Summary of Sample:**

<b>Categories</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Head teachers	6	1	7
Teachers	4	4	8
QASOs	3	2	5
Pupils	16	16	32
Parents	4	4	8
<b>Total</b>	<b>33</b>	<b>27</b>	<b>60</b>

### **3.5 Research Instruments**

The research instruments used in the study included:

**Interview schedules-**The researcher interviewed head teachers, parents and pupils seeking their opinion as the interview schedule requires as indicated by appendix five, two and four respectively. Interview method involves face to face interaction between the researcher and the respondents.

**Observation schedule-** The researcher observed the teachers in the classrooms during lessons as they taught appendix six has the details. Observation involves recording behaviour of interest in the natural setting. This helps the researcher to observe things as they are or as they really happen in real life.

**Questionnaires-** Questionnaires were used because they are less expensive and require less time to administer. The questionnaires consisted of open and closed ended questions. Ambiguity in framing of questions was avoided. The investigator used questionnaires to obtain factual data and opinions in a structural framework from the respondents (Nisbet, 1970). The questions were designed to collect data on hindrances to effective learning of learners who are Hearing Impaired. The researcher gave simple

and straightforward questions to the teachers and QASO as shown in appendix one and three.

### **3.6.1 Pilot Study**

One special primary school from a neighbouring Imenti North district and a unit from Meru North district were used to pre-test the instruments. The researcher involved four pupils from the special primary school, two from the unit, one head teacher and one teacher, both from the special primary school and unit, one parent from the special school and unit and one QASO. Questionnaires were given to the respondents to fill in the presence of the researcher, in order to find out if the respondents experienced any difficulty when responding to the questions. Mugenda and Mugenda (1999), observe that pre-testing is important as vague items are revealed, comments and suggestions can be incorporated, deficiencies are revealed and was to determine if the method of analysis was appropriate. Malusu (1990) also adds that pilot test helps to reveal and adjust ambiguous items. The criterion was used to establish weakness in the research instruments. The researcher personally took part in piloting and in the main research.

### **3.6.2 Validity and Reliability**

A pilot study was conducted with the aim of testing the validity and reliability of the research instruments and develop suggestions on how to improve them. In testing the validity of research instruments, the researcher applied contents validity where the expert's opinions were sought. Those special units, which were involved in the pilot

study, were not included in the main study. Split-half technique was used which requires only one testing session where an instrument is designed in such away that there are two parts. The Cronbach's coefficient Alpha ( $K-R_{20}$ ) which is a general form of Kuder-Richardson was used to test the reliability of the research instruments. (Mugenda&Mugenda, 1999).The use of  $(K-R)_{20}$  is based on split-halves of the instrument.

$$KR_{20} = \frac{(K) (S^2 - ES^2)}{(S^2) (K-1)}$$

Where  $KR_{20}$ =Reliability coefficient of internal consistency

$K$ =Number of items to measure the concept

$S^2$ =Variance of all the scores

$S^2$ =Variance of individuals items

After computation, the reliability coefficient was found to be 0.79 which showed the instruments were reliable. This made the researcher to go ahead with data collection.

### **3.7 Data Collection Procedure and Logistical Considerations**

The researcher got a letter from the university introducing her as a student of Kenyatta University. T he researcher visited the Ministry of Education to seek for a permit to allow her collect data. The researcher visited the District Education Officers concerned to seek permission to visit the special primary schools and units for data collection. She then visited all the units and the school personally and created rapport with the

respondents by explaining to them the purpose of the study, the need to give honest information and suggestions. The researcher ensured confidentiality on the information given and only used it for the research purpose. The researcher collected information through interview schedules, observation and giving out questionnaires to the respondents on hindrances to effective learning of pupils with Hearing Impairment whereby the researcher did it on her own.

### **3.8 Data Analysis**

The researcher dealt with the process of data editing and carried out the entry and initial analysis. The data were sorted out, classified and categorized according to the seven themes. These were demographic characteristics of respondents, the level of training of teachers teaching children who are HI, type of equipment and other learning materials available and their adequacy in the special primary school and unit, challenges teachers face in course of their teaching the children who are hearing impaired, special education training of QASO and their frequency of supervision and the role parents play in education of the children who have hearing impairment. All the information relevant to a particular theme was placed together and further analyzed to interactively yield answers to research questions raised in the study. The data collected from the survey were subjected to descriptive measures where percentages, frequencies, tables, graphs and pie charts were used to sample variables under the study to generalize conclusions on the study findings.

## **CHAPTER FOUR: PRESENTATION AND DISCUSSION OF FINDINGS**

### **4.1 Introduction**

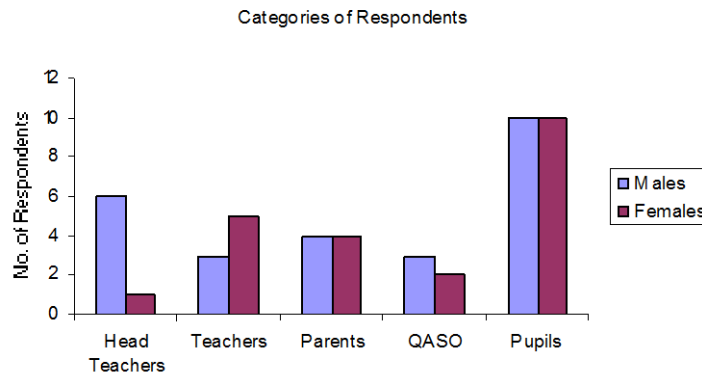
The chapter focuses presentation and discussion of findings of every objective of the study on hindrances to effective learning of pupils with HI. The discussions are mainly based on the findings from the data collected. In addition, the same was equally supplemented by secondary information documented on the topic. This enabled the researcher to draw reasonable conclusions and recommendations. The following were the objectives:

- To establish the level of training of teachers teaching children with hearing impairment.
- To establish the type of equipment and other learning materials available and their adequacy in the special primary school and units.
- To identify challenges that teachers of children who are hearing impaired face in the course of their teaching.
- To establish the special education training of quality control personnel (Inspectors).
- To establish the type and frequency of supervision.
- To establish the role of the parents in the education of their children with hearing impairment in a special primary school and units.

## 4.2 Demographic characteristics of respondents

This study was designed to collect information from five categories of respondents that is teachers, Head teachers, QASO, pupils and parents. Their ages, academic and professional qualifications of head teachers and teachers.

**Figure 4.1 Categories of respondents**



The investigation of the demographic data indicated that eight teachers were interviewed out of which three were males and five were females seven head teachers were interviewed with six being males and one female; five QASOs were interviewed with three males and two females and thirty two pupils interviewed divided equally between males and females. Eight parents were also interviewed.

### 4.2.1 Age of Teachers

The information sought to find the age of teachers who are teaching pupils who are HI.

**Table 4.1 Age of teachers**

<b>Age</b>	<b>21-30</b>	<b>31-40</b>	<b>41-50</b>	<b>50+</b>	<b>Total</b>	<b>Percentage</b>
Male	1	2	-	-	3	<b>37.5%</b>
Female	-	2	3	1	5	<b>62.5%</b>
<b>Total</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>8</b>	<b>100%</b>

The teachers administered with the questionnaires were aged between 21 and about 50 years with half of them that is (50%) aged between 31 and 40 years distributed equally among the gender. This is a good representation since most the teachers are in their prime age and given chance they can teach the pupils effectively.

#### **4.3 The Level of Training of Teachers Teaching Children who are HI**

The information concerning this was sought from the head teachers and teachers on their academic and professional qualification, their effectiveness in communicating using sign language. Their experience in teaching and the duration of their training was also established. The head teachers were interviewed while the teachers were administered with questionnaires as presented in the tables and figures below.

**Table 4.2. a: Academic Qualification of the Teachers**

<b>Academic Qualification</b>	<b>Number of Teachers</b>	<b>Percentage</b>
KCSE	6	75%
KACE	2	25%
<b>Total</b>	<b>8</b>	<b>100%</b>

According to the table above 75% of the teachers went through KCSE system of education with only 25% who went through KACE system. This means they are all qualified to teach the children entrusted with.

**Table 4.2.b: Highest Professional Qualifications of Teachers**

<b>Professional Qualification</b>	<b>Number of Teachers</b>	<b>Percentage</b>
PI and in service course	2	25%
SI/Diploma in SNE	4	50%
ATS I&II	1	12.5%
Graduate in SNE	1	12.5%
<b>Total</b>	<b>8</b>	<b>100%</b>

According to the table majority of the teachers were trained in special needs education as indicated by the highest percentage of the teachers.

**Table 4.2.c Training in Special Education of Head teacher, Teachers & QASO**

<b>Response</b>	<b>Head teachers</b>	<b>Teachers</b>	<b>QASO</b>	<b>Total</b>	<b>Percentage</b>
Yes	1	8	0	9	45%
No	6	0	5	11	55%
Total	7	8	5	20	<b>100%</b>
<b>Percentage</b>	<b>14%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>

According to the above table all the teachers indicated that they had training in special education while only one head teacher was trained in SNE.

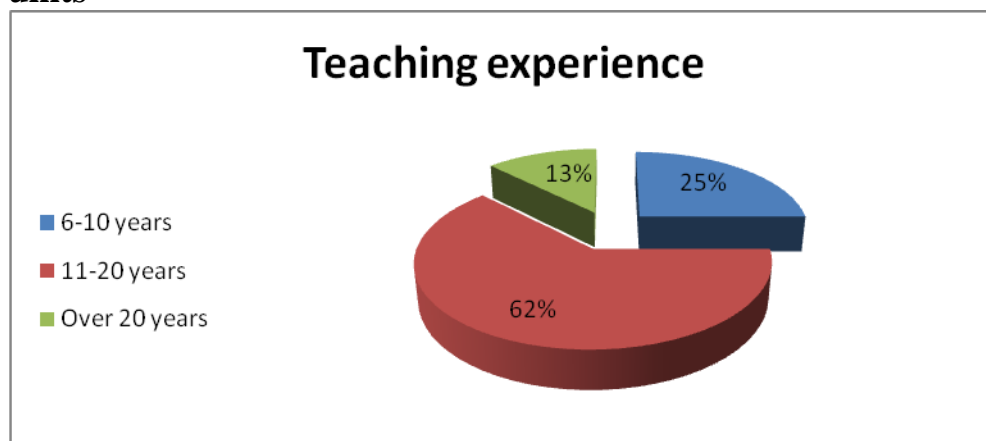
**Table 4.2.d Duration of Training as SNE Teacher**

<b>Duration</b>	<b>In service</b>	<b>1-2weeks</b>	<b>2years</b>	<b>4years</b>	<b>Total</b>
Male	-	-	2	1	3
Female	1	1	3	-	5
<b>Total</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>8</b>
<b>Percentage</b>	<b>12.5%</b>	<b>12.5%</b>	<b>62.5%</b>	<b>12.5%</b>	<b>100%</b>

All the teachers have indicated that they had undergone training in Special Needs Education with 62.5% of them having been trained for duration of two years.

#### **4.3.2 Teaching Experience of teachers in the special school and units**

This information was got from teacher whereby the researcher sought to know the experience of teachers teaching pupils with hearing impairment and their effectiveness in communicating with sign language. They were administered with questionnaires and information presented as below.

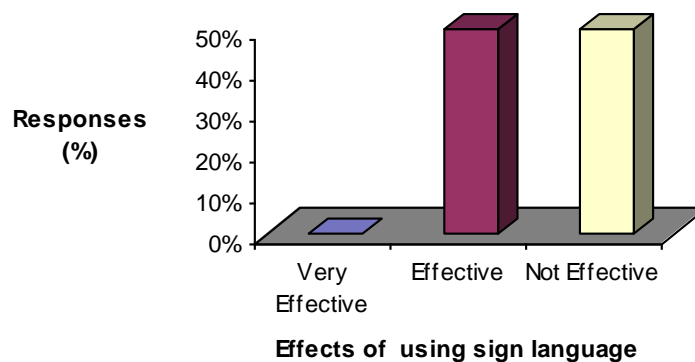
**Figure 4.2: Teaching Experience of teachers in the special school and units**

According to the figure above 87% of the teachers indicated that they had over 10 years of teaching experience which signifies that teaching experience may not be a hindrance to knowledge dispersion in special schools and units.

### 4.3.3 Usage of sign language by teachers

This information was got from teacher on their effective use of sign language which one of the modes of communicating with children who are hearing impaired. The findings were presented in the figure below.

**Figure 4.3 Effectiveness of usage of sign language by teachers**



The figure above has indicated that 50% of the teacher teaching in the Special Primary School and Units are not effective in their communication using sign language.

According to Table 4.2.b on the professional qualifications, majority of the teachers (75%) of them have had training in Special Needs Education and attended two years of training. At the same time, fifty percent of the teachers were ineffective in communicating using sign language. Although sign language is not the only mode of

teaching children who are H.I. it is very important for a teacher to effectively use it. This is because children who are H.I learn the same way as those who hear if given access to the things they need to learn. However, this needs to be done in a language they understand. This calls for the need of teachers who are proficient in sign language for example Kenyan sign language.

Those teachers who are not proficient in sign language can pose hindrances to effective learning of pupils who are hearing impaired and limit them from their academic progression since they also competing with their hearing counterparts as well as following the regular curriculum. Therefore those teachers who are not proficient hinder effective learning of these children. Those who are not proficient can be in-serviced to be more effective. This can hinder effective teaching due to the fact that they do not know the technicalities involved especially in sign language which is the main mode of communicating with pupils who are deaf. A major outcome of lack of a proper and effective mode of instruction is that many learners who are hearing impaired may have low educational achievements and low aspiration for secondary and tertiary education.

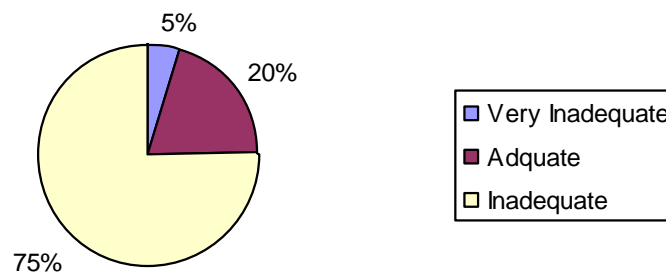
In conclusion Furth (1973) although an out dated literature states that if education right or wrong is considered the key to opening opportunity for the civilized world to all children, it is even more critical for the children who are hearing impaired. In fact, to educate children who are hearing-impaired historically meant to literally lead them out

of darkness of language, where knowledge and meaningful, civilized existences were to be found.

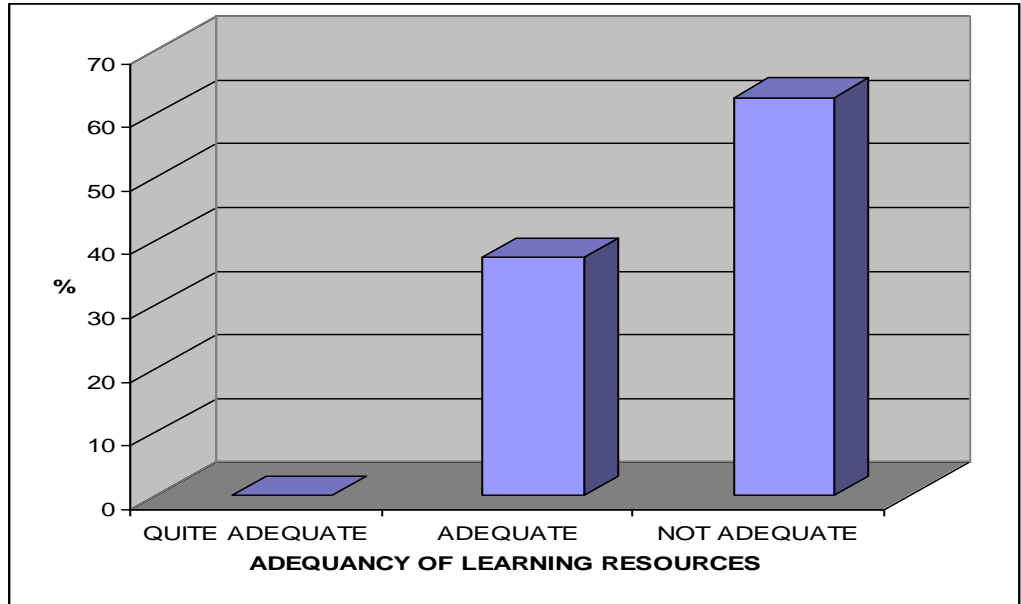
#### **4.4 Type of Equipment and Other Learning Materials Available and their Adequacy in the Special Primary School and Unit**

The information in the theme were to answers questions for objective number two which sought to establish the type of equipment and other learning materials available and their adequacy in the special primary school and units.

**Figure 4.3 State of the learning and Teaching resources as indicated by all the respondents**



According to the figure above the state of teaching and learning resources is inadequate as indicated by the biggest degree in the pie chart above.

**Figure 4.4 Adequacy of Learning Resources as reported by parents**

According to the parents response teaching and learning resources are not adequate as indicated by 60% of their response while only 5% of their response showed they were quite adequate. This is a very small percentage when the pupils who are hearing impaired are supposed to most rely on what they see.

**Table 4.3 Availability of acoustic treatment of the Classrooms**

Response	Frequency	Percentage
Yes	0	0%
No	8	100%
<b>Total</b>	<b>8</b>	<b>100%</b>

According to the table above all the classrooms had no acoustic treatment which can be considered as a teaching/learning resource in a H.I classroom.

**Table 4.4 Efforts being done to treat the classroom acoustically**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
No effort	5	33%
Efforts being done	1	8%
Looking for donors	2	13%
Never mentioned	7	46%
<b>Total</b>	<b>15</b>	<b>100%</b>

The table above indicates that the effort being done to treat the classrooms acoustically is very minimal as indicated by only 8% of the head teachers and teachers responses.

Coombs (1995) asserts that teaching materials are used to promote learning, maintain interest and add variety to the lesson and relate one subject to other subjects. According to Eshiwani (1985) lack of school resources affect learning in both primary and secondary schools. The study has found out that all the special units and the school lack adequate materials which may hinder effective teaching and learning because teachers and pupils are not able to expose themselves to those resources in order to have effective teaching and learning. At the same time, these children need to be equipped with relevant knowledge and skills for their use hence the need for mobilizing resources to be used in equipping the special primary school and units.

All the respondents interviewed and administered with the questionnaires indicated that available materials and resources are inadequate. The teacher's findings showed that they were using classrooms which are not acoustically treated and reported that is because of lack of funds. For the learners with HI to benefit in a learning situation the classrooms should be treated acoustically and enriched with

learning materials. In Meru North District the learning materials and resources in the special primary school and units were inadequate. This was indicated by 75% of the teachers and parents and 60% of Quality Assurance and Standard Officers.

#### **4.5 Challenges Teachers Face in Teaching Children who are Hearing Impaired**

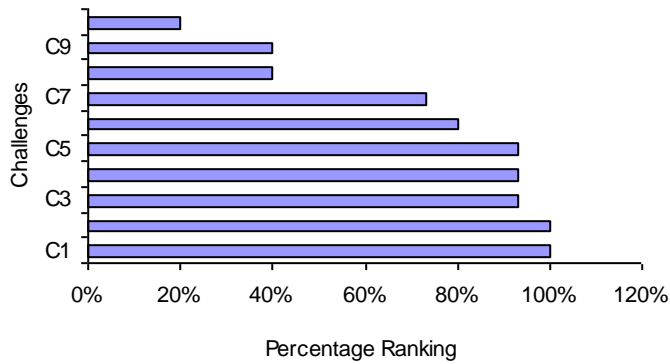
The study wished to find out which challenges specifically teachers face when discharging their duties. This information was given by the teachers and head teachers who were both administered with the questionnaire and interviews respectively.

**Table 4.5 Ranking of Specific Challenges faced when teaching Learners with Hearing Impairments**

<b>Code</b>	<b>Challenge</b>	<b>Frequency</b>	<b>Percentage</b>
C1	Difficult in explaining abstract concept	15	100%
C2	Communication barriers	15	100%
C3	Lack of learning resources	14	93%
C4	Lack of hearing Aids	14	93%
C5	Work Load too big	14	93%
C6	Sharing of one class by learners at different levels	12	80%
C7	Lack of support by parents	11	73%
C8	Short Attention Span of pupils	6	40%
C9	Inadequate training of teachers in colleges	6	40%
C10	Regular Absenteeism	3	20%

According to the table above communication barriers and difficult in explaining abstract concepts are the biggest challenges followed by lack of hearing aids, workload being too big and lack of learning resources as expressed in the figure below.

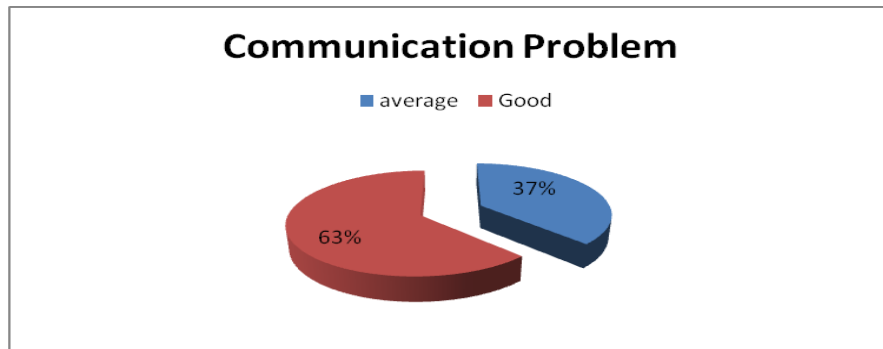
**Figure 4.5: Ranking of Specific Challenges faced when teaching Learners with Hearing Impairments**



**4.5.1 Teachers communication with children who are HI**

The sub-theme sought to find if teachers teaching pupils who are HI experience any communication problems as they use sign language during their interactions with these children. Their response was presented by a pie chart.

**Figure 4.6: If Teachers Experience Communication Problem.**



Majority of the teachers (63%) said that they do not experience many problems when communicating using sign language while 37% of them are just average in their communication using sign language.

#### 4.5.2 In-service attendance of teachers for the last one year

This was intended seek information on the number of times teachers attended in service courses over the last one year. The results were as indicated by figure 4.7.

**Figure 4.7: Frequency of Teacher in – Service Attendance**



The teachers indicated that most of them had not attended in service course for the last one year.

#### 4.5.3 Key challenges identified

The findings showed that all the teachers interviewed were using classrooms with no acoustic treatment due to lack of funds. The results further showed that difficulty in explaining abstract concepts and communication barriers being agreed by all the

teachers are among the challenges in teaching special needs learners. Teachers have expressed many challenges during the course of teaching their children with HI. The different challenges highlighted included; difficulty in explaining abstract concepts, complained of learners being at different levels academically hence difficulty to coordinate them in one class, lack of learning materials for these children, shortage of sign language books, regular absenteeism and lack of parental support.

The head teachers who are responsible for the schools reported that short attention span of the pupils were one of the reported problems facing the pupils. Other problems reported being lack of learning materials for these children, teacher's inadequate training, communication barrier and shortage of sign language books. The head teachers further expressed the problems which the teachers had reported to them as they teach the children with HI in the school and units. They include lack of hearing devices especially hearing aids which are very important in the learning of children with HI. They are used to amplify the sound in order for pupils who are HI to benefit or to hear.

Teachers again raised a concern to the head teachers that the special education training given in colleges is not enough hence they experience problems when teaching children who are hearing impaired. In fact, the children with HI are supposed to follow the regular curriculum and if a teacher is not well equipped then it poses a problem to the teachers. The biggest problem or challenge to half of the teachers is that of communication.

Teachers have also complained of workload being more for them than other teachers in the mainstream. In fact some are even called upon to teach in the mainstream classes. Inefficient in sign language between teachers and children have also raised concern. The time allocation for teaching was also not adequate since repetitive teaching is required for pupils who are deaf for comprehension of the content. According to the observation made by the researcher time actually was not enough.

Head teachers had negative comments on preparations done by teachers who are handling children with HI. All of them said that the teachers are not effective due to lack of qualified personnel. Majority of the teachers have done distance learning programme with Kenya Institute of special Education which does not adequately train these teachers especially in the area of hearing impairments since the course was intended to train teachers for inclusive purposes and not education of learners with HI. The head teachers commented that the preparation is inadequate again due to lack of hearing devices which are very crucial in the teaching of learners with hearing impairments. Another hindrance to effective learning according to the teachers is the chronic absenteeism of learners as reported by the teachers. Communication barrier is the main hindrance for effective learning. Teachers also rarely attend in service courses which are very important for keeping teachers abreast with current trends and issues on SNE.

#### 4.6 Special Education Training of QASO and Frequency of Supervision

The information for the theme were to answer objective four and five which sought to get the special education training of QASO and frequency of supervision. They were administered with questionnaires and their responses were presented as follows.

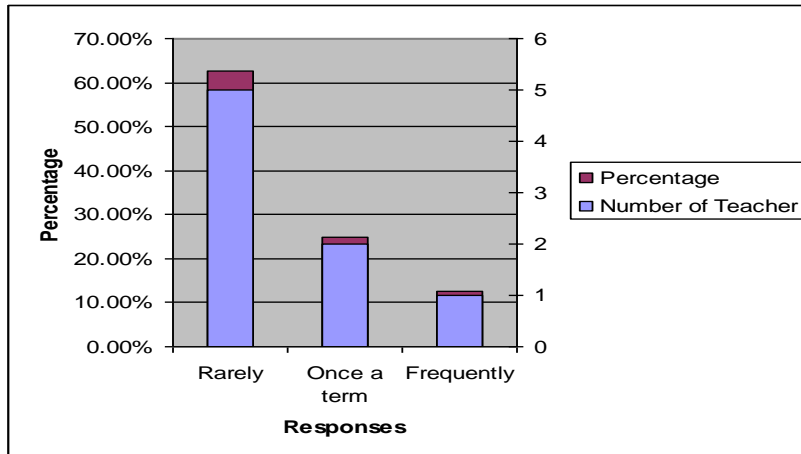
**Table 4.6 Duration Being a School Inspector**

<b>Duration</b>	<b>Number of inspectors</b>	<b>percentage</b>
0-5years	3	60%
Over 11 years	2	40%
<b>Total</b>	<b>5</b>	<b>100%</b>

The findings showed that most that is three out five of the QASO had been school inspectors for less than five years .and had the highest level of education as B.Ed.as presented in the table below.

**Table 4.7 Academic Qualifications of QASO**

<b>Response</b>	<b>KCSE</b>	<b>KACE</b>	<b>B.Ed</b>	<b>M.Ed</b>	<b>Total</b>
Male	-	-	3	-	3
Female	2	-	-	-	2
<b>Total</b>	<b>2</b>	<b>-</b>	<b>3</b>		<b>5</b>

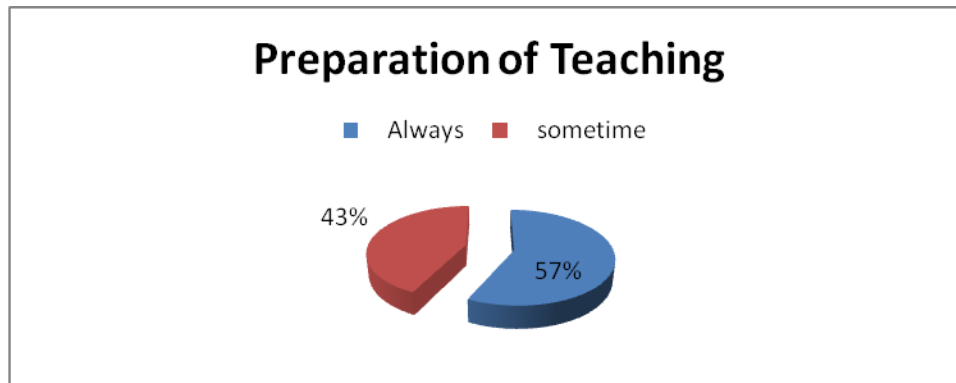
**Figure 4.8: Number of Times of Inspection per year**

The figure above has revealed that majority of the teachers are inspected once a year which is a long period of inspection.

The QASOs are the personnel charged with the responsibility of quality and standards control and maintenance of education in Kenya. According to table 4.2c all the QASOs interviewed had no training in Special Needs Education. This is a major hindrance to effective learning of these children for they do not know exactly what is to be inspected. They seem unaware of the need for special programming and adjustments for these children and that may be the reason as to why they rarely inspect the school and units in the district. According to their response on frequency of inspection it is evident that the special primary school and units are neglected. All of them except one who had not inspected indicated it was done once per year. A long period of inspection may lead to reluctance in teachers. This can adversely affect the learning process hence hindering effective learning of these children. As part of quality control in special

education the QASOs are supposed to check teachers' preparations for their teaching. The figure below indicates the findings of teacher preparation according to the QASOs.

**Figure 4.9: Preparation of Teaching**



The findings reveal that 57% of the Teachers prepare for their lessons before teaching the children who are hearing impaired. This means that there some teachers who do not always prepare for their teaching of the pupils with HI and this can impede learning for the learners.

#### **4.7 The Role Parents Play in Education of the Children Who Have Hearing Impairment**

Parents have a major role to play in the education of their children. They should be in a position to maintain their children in schools and provide them with personal effects.

**Table 4.8 Highest level of education of parents**

<b>Response</b>	<b>Never gone to school</b>	<b>Primary</b>	<b>Secondary</b>	<b>Total</b>	<b>Percentage</b>
Male	-	2	1	3	37.5%
Female	1	4	-	5	62.5%
<b>Total</b>	1	6	1	8	<b>100%</b>
<b>Percentage</b>	<b>12.5%</b>	<b>75%</b>	<b>12.5%</b>	<b>100%</b>	

According to their interview schedules, reports/scores they were attending meetings when invited by the head teachers and the teacher in charge of the units as indicated by 100% of their response as presented in the table below.

**Table 4.9 Response on if they attend meetings when invited**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	8	100%
No	0	0%
<b>Total</b>	<b>8</b>	<b>100%</b>

The interview schedules, reports/scores also revealed that they are very much ready to subsidize on what they are asked, although not all of them are able to meet the basic requirements of their children as indicated by 62.5% of their response.

**Table4.10: Response on if the special school/unit asks the parent subsidize for any of the costs incurred**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	5	62.5%
No	3	37.5%
<b>Total</b>	<b>8</b>	<b>100.%</b>

Parents should not give the children much work at home so that they would have time for studies. According to the response of the pupils, lack of basic needs and lack of private study at home interfere with their learning in school as shown in the table below.

**Table 4.11 Response on if the child thinks any of the following interfere with his/her learning**

<b>Response</b>	<b>Lack of basic needs</b>	<b>Lack of private study at home</b>	<b>None of the above</b>	<b>Total</b>	<b>Percentage</b>
Male	8	4	2	14	56.3%
Female	6	8	4	18	43.7%
<b>Total</b>	<b>14</b>	<b>12</b>	<b>6</b>	<b>32</b>	<b>100%</b>

This reveals that parents do not give their children the necessary support to enable them learn effectively. The parents also indicated that they do not know how to communicate with their children using sign language. This is serious because parents also have a major role to play in the education of their children. It means then that if parents do not know how to communicate with their children they are not helping them in any way which also can be a hindrance to these children's effective learning. Successful education needs the three pillars that are actively involved that is parents, teachers and children. All the same parents are involved for they are subsidizing for what they are

asked to subsidize, mainly food. According to Stockwell (2000) one of the greatest needs for parents is to develop appropriate communication strategies with the children who have HI.

## **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

The chapter focuses on summary of the main findings, conclusions drawn and recommendations for the enhancement of effective learning of pupils with HI. The chapter winds up with suggestions for further research.

### **5.2 Summary of findings**

The Special primary school and units in Meru North Districts have been ineffective offering needed education to pupils with hearing impairment due to inadequate teaching/learning materials and facilities, teachers who are not proficient in sign language, lack of parental support as indicated by some teachers and QASOs who are not trained in Special Needs Education and this can impede learning. The parents who are supposed to mould the children indicated that they do not know how to communicate with their children using sign language. Also majority (62.5%) of the parents preferred their children to be enrolled in residential special schools. Despite the challenges facing teachers, most teachers (57.1%) responded that they rarely attend in-service courses. Pupils interviewed indicated that both lack of basic needs and private study at home interfered with their learning.

**5.2.1 Level of training of teachers**

According to table 4. 5, a, b and d, all the teachers teaching pupils with HI are all academically and professionally qualified and trained in Special Needs Education with a percentage of 62.5% of the having been trained for a duration of two years.

**5.2.2 Teaching Experience**

According to figure 4.2, 87% of the teachers had over ten years of teaching experience signifying that teaching experience may not be a hindrance to knowledge dispersion in special schools and units.

**5.2.3 Equipment and other learning resources**

The state of teaching and learning resources is inadequate as indicated by 75% of the respondents according to figure 4.3 of the state of teaching and learning materials available and their adequacy in the special primary school and units of Meru North district. This can be a major hindrance for effective learning of pupils with HI in the district since pupils who are HI are supposed to most rely on what they see. All the respondents interviewed and administered with the questionnaires indicated that available materials and resources are inadequate. The teacher's findings showed that they were using classrooms which are not acoustically treated and reported that is because of lack of funds. This poses another hindrance to effective learning of pupils with H.I.

#### **5.2.4 Challenges faced by teachers**

According to the teachers response on table 4.5, communication barriers and difficult in explaining abstract concepts are among the biggest challenges faced by teachers. This is followed by lack of hearing devices that is hearing aids which are used to amplify the sound in order for pupils who are HI to benefit or to hear, workload being too big and lack of adequate learning resources. According to figure 4.5, 37% of the teachers are just average in their communication using sign language. Inadequate training was another problem since majority of the teachers had undergone KISE Distance Learning Programme which does not adequately train teachers especially in the area of H.I. This can also be a hindrance to effective learning of pupils with H.I.

#### **5.2.5 Special Needs Education training of QASO and frequency of supervision**

All the QASOs had no training in Special Needs Education, which can be a major hindrance to effective learning of these children for they do not know exactly what to inspect and yet they are the personnel charged with the responsibility of quality and standards control and maintenance of education in Kenya. They seem unaware of the need for special programming and adjustments for these children and that may be the reason as to why they rarely inspect the school and units in the district. According to their response on frequency of inspection it is evident that the special primary school and units are neglected. All of them except one who had not inspected indicated it was done once per year. A long period of inspection may lead to reluctance in teachers. This can adversely affect the learning process hence hindering effective learning of these children.

### **5.2.6 Role of parents**

Their findings revealed that parents do not give their children necessary support to enable them learn effectively. The parents also indicated that they do not know how to communicate with their children using sign language meaning they do not help them in any way which can be a hindrance to these children's effective learning.

### **5.3 Conclusions of the study**

There were few factors investigated hindering effective learning of HI pupils in Meru North Districts which include; inadequate teaching / learning resources in the districts, teachers using classrooms with no acoustic treatment and half of them not proficient in sign language, inspections not done regularly by QASOs and teachers rarely attending in service courses meaning they are not equipped with current trends of education for learners with HI. The researcher feels that there is need for further research to unearth other hindrances to effective learning which could be addressed by other researchers in order to have effective learning of learners with HI.

### **5.4 Recommendations**

Based on the findings of the study, the researcher feels that hindrances to effective learning of pupils with H.I could be enhanced by ensuring all the concerned beneficiaries do the following:

**5.4.1 Quality Assurance and Standards**

The QASOs to be trained in special needs education to enhance proper supervision of special schools and units by the personnel The Ministry of Education should oversee their special education training so that they can be aware of what to inspect in the special schools and units. They should also do frequent supervision to assure standards in the special primary school and units in the districts. The government should also ensure provision of adequate teaching / learning resources.

**5.4.2 The teachers**

The teachers teaching children with HI to be given frequent workshops and seminars to keep abreast with the current trends of the education of learners with HI. They should also attend short courses in sign language in order for them to be more proficient.

**5.4.3 The Parents of pupils with HI**

Parents should provide their children with all the basic needs required and allow them time to study at home in order to give the necessary support to enable them learn effectively. Successful education needs the three pillars that are actively involved that is parents, teachers and pupils. The researcher established from the respondents that both lack of private study at home and lack of basic needs interfere with these children's learning.

#### **5.4. 4 The special schools and units**

The parents have indicated that they do not know how to communicate with their children using sign language. This is serious because parents also have a major role to play in the education of their children. It means then that if parents do not know how to communicate with their children they are not helping them in any way which also can be a hindrance to these children's effective learning. In this case the researcher recommends schools to organize sign language training courses for all the parent of the HI pupils. Schools should also solicit funds to ensure all the necessary equipment and materials are available for use by the HI learners which include acoustic treatment of the classrooms, hearing aids, sign language books and others. Schools should also solicit for funds to ensure all the necessary equipment and materials are available for use by the learners with HI. In conclusion it requires collaboration between all the stakeholders such as parents, teachers, head teachers, pupils, education officers and the community at large to play their role efficiently in order to enhance effective learning of these pupils.

#### **5.5 Suggestions for Further Research**

- The researcher recommends for a similar study to be done at a wider scope say a province or the nation as a whole. This will enable the researchers consider the problems from a broad perspective which will benefit all the Kenyan children
- The researcher was also limited to HI but other researchers could consider other categories of disability.

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- (a) Less than one year
- (b) Between 2-3 years
- (c) Between 6-10 years
- (d) Between 11-20 years
- (e) Over 20 years

6. Do you have any training in Special Education?

- Yes  No

If yes specify the length of training

- (a) In-service
- (b) One to two weeks
- (c) Three months
- (d) Two years

7. How effectively can you communicate using sign language?

- (a) Very effectively
- (b) Effective
- (c) Not very effective

8. Are all the classes in your special primary /units acoustically treated?

- Yes  No

If no, is there any effort being made to treat the classes acoustically? Please

Explain briefly.

.....  
.....

9. What challenges do you face when teaching hearing-impaired learners? Explain briefly.

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

10. How would you describe the state of facilities in your school /unit.

- (a) Very adequate ( ) (b) Adequate ( ) (c) Inadequate ( )

11. How many times have you attended in service courses over the last one year?

- (a) Once ( )  
(b)None ( )  
(c) Yearly ( )  
(d) None ( )

12. How often are the school /units inspected?

- (a) Frequently ( ) (b) Once a term ( )  
(c) Once a year ( ) (c) Rarely ( )

**APPENDIX 2**  
**PUPILS INTERVIEW SCHEDULE**

These questions are not meant to be a test. So marks will not be awarded to your responses. You are kindly requested to read carefully before responding to the choices.

1. (i) How old is you?

(a) 7-8

(b) 9-11

(c) 12 and above

(ii) Which class are you?

(a) class 4 ( )

(b) class 5 ( )

2. Have you ever missed any day of school or any lesson?

Yes ( ) No ( )

3. How many years have you been in school?

(a) 1 year ( )

(b) 1-4 years ( )

(c) 5-8 years ( )

4. Do you have enough textbooks, exercise books and writing materials to use?

(a) Have enough ( )

(b) Not enough ( )

(c) Have a few ( )

5. Which subjects do you perform poorly?

- a) English ( )
- b) Kiswahili ( )
- c) Social studies (Geography, History & Civics) ( )
- d) Others. ( )

Specify.....

.....

6. Why do you perform, poorly in those subjects?

- (a) Books are inadequate ( )
- (b) Failure of teachers to attend classes regularly ( )
- (c) Communication problems ( )
- (d) Others.

.....

.....

7. Do you think any of the following interfere within your learning?

- (a) Lack of basic needs like clothes, food, exercise pens, etc ( )
- (b) Lack of time for private study at home due to domestic work ( )

8. Do you like sharing your problems with your teachers?

Yes ( ) No ( )

If no, give a simple reason for this.

**APPENDIX 3**  
**SCHOOL INSPECTOR'S/QUALITY ASSURANCE AND STANDARDS**  
**OFFICER'S QUESTIONNAIRE**

Dear Sir/Madam,

I am using this questionnaire to collect data on hindrances to effective learning of pupils who are hearing impaired in the special primary school and units in the former Meru North District. All the answers you are giving are important. Please write them clearly and be as honest and accurate as possible. The information you give will be confidential and will be used for research purpose only.

1. Sex      male ( )                      female ( )

2. For how long have you been a school inspector?

0-5 Years                      ( )

6-10 years                      ( )

11 years and above              ( )

3. What is your highest level of education?

(a) K.C.S.E.                      ( )

(b) K.A.C.E.                      ( )

(c) B.E.D                      ( )

(d) M.ED                      ( )

4. Which is your highest level of professional qualification among the following?

(a) P.I                      ( )

(b) DIPLOMA/SI                      ( )

(c) Graduate teacher              ( )

(d) A.T.S IV ( )

(e) Any other specify

.....

5. Do you have any special education training?

(a) Yes ( ) (b) No ( )

( i ) If yes, state the level of training.....

6. How many times do you inspect special primary schools and units in Meru North

District in a year?

(a) Not inspected any time ( )

(b) Once per term ( )

(c) Once per year ( )

7. Indicate the adequacy of teaching resources in the school inspected.

(a) Very Adequate ( )

(b) Adequate ( )

(c) Inadequate ( )

8 Do all teachers prepare schemes of work and records of work in the schools you

inspect?

( a).All the teachers ( )

(b. Some ( )

(c).None ( )

9. Do all teachers teach following the syllabus?

- (a) All of them ( )
- (b) Some ( )
- (c) None ( )



In which areas? .....

.....

5. Does the head teacher /teacher in charge invite you for parents meetings?

Yes ( ) No ( )

If yes, how many times in a year

(a) Once ( )

(b) 2-3 time ( )

(c) More than 3 times ( )

6. Do you attend meetings when invited by the head teacher?

Yes ( ) No ( )

7. Do you know how to communicate with your child using sign language?

Yes ( ) No ( )

8. Are you able to meet all the basic needs of your child? e.g. food, shelter, clothing?

Yes ( ) No ( )

9. What is your highest level of education?

(a) Primary ( )

(b) Secondary ( )

(c) University ( )

10. To what extent are the school and units in Meru North district adequately equipped with teaching learning resources?

(a) very adequate

(b) Adequate

(c) Not adequate

11. Are you satisfied with the type of education given to your child in the programme enrolled?

Yes ( )

No ( )

If no, give a brief reason to your answer.....

.....



a) use them always   b) do not use at all   c) Rarely.

10. Indicate the level of adequacy of teaching / learning resources in your school/unit

a) Very adequate      b) adequate      c) inadequate

11. a) How often do your teachers manning the units attend in-services courses on special education?

b) When did they attend the last in-service courses?

12. How many teachers in your school are not trained in special education?

13. What comment can you make about the preparation given to teachers to handle children with hearing impairment.

14. What problems have the teacher(s) reported to you about the teaching of children with hearing impairment?

15. What are your recommendations for effective learning of learners with hearing impairment?

**APPENDIX 6**  
**OBSERVATION SCHEDULE FOR TEACHERS**

I am using these questions to collect data on hindrances to effective learning of pupils who are hearing impaired in Meru North District. All the answers you give are very important. Please write them clearly, honestly and accurately. The information you will give will be used for research only.

Gender

1. Is there a scheme of work to be followed? a) Yes    b) No
2. Are objectives clearly defined /stated?    a) Yes            b) No
3. How long is the lesson plan structured?
  - a) Sequenced lesson plan    b) In form of Discussions        c) Lecture notes.
4. Is the lesson plan related to content in the scheme of work?
  - a) Very close    b) close    c) irrelevant
5. Is the lesson plan logically organized reflecting entering behaviour?
  - a) Very well organized    b) moderately    c) poorly organized
6. a) Is the time allocated for the lessons shown? a) Yes    b) No
  - b) Is it sufficient? a) Yes    b) No
7. Is the selected content related to the syllabus?
  - a) Very closely    b) closely        c) irrelevant
8. Are adequate teaching/learning resources provided for in the scheme or work
  - a) Plenty    b) just enough    c) insufficient.

9. What is the attitude of the teacher towards the teaching of children with hearing impairment in the school/units? a) Very positive b) positive c) a bother to him/her.

10. Does the teacher experience communication barrier when teaching the children?

a) Yes b) No

11. Has the teacher prepared I.E.P for all the learners in the class?

a) Yes b) No.

12. In view of the foregoing observation, the teacher may be rated as

a) Excellent b) Good c) Average d) Unsuitable to teach the children.