

**COMMUNICATION CHALLENGES FACED BY TEACHERS OF ENGLISH
LANGUAGE IN PRIMARY SCHOOLS FOR THE HEARING IMPAIRED IN
CENTRAL KENYA**

BY

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DECLARATION

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

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DEDICATION

This thesis is dedicated to my late father Mathew Mutisya, my mum Susan Kalau, my dear son Clement M Mutisya and my entire family.

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May God bless you all.

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TABLE OF CONTENTS

DECLARATION	II
DEDICATION	III
ACKNOWLEDGEMENT	IV
TABLE OF CONTENTS.....	V
LIST OF TABLES	IX
LIST OF FIGURES	X
ABBREVIATIONS AND ACRONYMS	XI
ABSTRACT.....	XII
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background to the Study.....	1
1.1.1 The Language Policy in Kenya and Kenyan Sign Language	3
1.1.2 Teaching the Hearing Impaired	5
1.2 Statement of the problem	7
1.3 Purpose of the Study	8
1.4 Objectives of the Study.....	8
1.5 Research Questions	9
1.6 Limitations of the study	9
1.7 Significance of Study	9
1.8 Assumptions of the Study	10
1.9 Theoretical framework.....	10
1.10 Conceptual Framework.....	12
1.11 Operational Definition of Terms.....	14

CHAPTER TWO: LITERATURE REVIEW	16
2.1 Introduction.....	16
2.2 Communication Challenges	16
2.3 Communicating with HI learners	18
2.4 Unsatisfactory performance of HI learners.....	19
2.5 Development of education for persons with HI in Kenya	21
2.6 Language of HI children in Kenya.....	23
2.7 Language acquisition and comprehensible input.....	24
2.8 Levels of language proficiency	26
2.9 Reading for the Hearing Impaired	27
2.10 Technology and Hearing Impaired	28
2.10.1 Captioning.....	28
2.11 Teachers attitude	30
2.12 Experience and Qualification of Teacher	32
CHAPTER THREE: METHODOLOGY	34
3.1 Introduction.....	34
3.2 Research design	34
3.3 Study area.....	34
3.4 Target population	35
3.5 Sampling techniques	35
3.6 Research Instruments.....	36
3.6.1 Questionnaire	36
3.6.2 Interview Schedule.....	37
3.6.3 Observation checklist.....	37
3.7 Pilot study	37

3.8 Validity	38
3.9 Reliability.....	38
3.10 The data collection procedures	39
3.11 Data analysis	39
3.12 Logistical and Ethical Consideration	40
4.0 FINDINGS AND DISCUSSIONS	41
4.1 Introduction.....	41
4.2 General information	41
4.3 Communication techniques used by teachers and competence in techniques	44
4.3.1 Class room and furniture.....	45
4.3.2 Teacher utilization of visual aids	47
4.3.3 Communication method and learners per class	48
4.4 Teachers' views	50
4.5 Technological aids and effect of communication methods.....	52
4.6 Communication challenges faced by HI teachers	54
3.6 Research Instruments	57
4.3.3 Communication method and learners per class	58
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	59
5.1 Introduction.....	59
5.2 Summary of the Major Findings of the Study	59
5.3 Implications of findings	60
5.4 Conclusions.....	61
5.5 Recommendation	61
5.6 Recommendations for Further Study.....	62
REFERENCES.....	63
APPENDIX 1: Letter of Introduction	68

APPENDIX 2: Questionnaire for the Teacher of English Language	69
APPENDIX 3:Head Teachers Inteviw Schedule	72
APPENDIX 4: Observation Checklist	74
APPENDIX 5: Distribution Of Institutions For Hearing Impaired In Kenya	76
APPENDIX 6: Project Budget	77
APPENDIX 7: Research Authorization	78

LIST OF TABLES

Table 2.1 Effective communication with HI learners	18
Table 3.1 Sample size	36
Table 4.2: Comparison of academic qualification and professional training	54

LIST OF FIGURES

Figure 4.1 English language teacher academic qualification.....	42
Figure 4.2: English language teachers level of professional training	43
Figure 4.3: English language teachers experience	44
Figure 4.3: English language teachers experience	44
Figure 4.4: Adequacy of reference materials in the institutions	45
Figure 4.5: Use of visual aids by English language teachers.....	47
Figure 4.6: Effect of communication methods on learners' performance	48
Figure 4.7: Difficulty in teaching English language.....	50
Figure 4.8: Availability of teaching aids and effect on communication method in HI learning institutions.....	52

ABBREVIATIONS AND ACRONYMS

GT-Gifted and Talented

HI-Hearing Impaired

KIE-Kenya Institute of Education

KISE-Kenya Institute of Special Education

KSL-Kenyan Sign Language

MHEST- Ministry of Higher Education Science and Technology

MoE- Ministry of Education

PH-Physically Handicapped

SAGA-Semi Autonomous Government Agency

SC - Simultaneous Communication

SE-Signed English

SED-Special Education Division

SL-Sign Language

SNE- Special Needs Education

SPSS- Statistical Package of Social Sciences

TC-Total Communication

VI-Visually Impaired

WHO - World Health Organization

ABSTRACT

This study was geared towards primary schools for learners with hearing impairment in Kenya. It sought to identify communication challenges faced by teachers of English language in selected primary schools for the hearing impaired in Central Kenya. The objectives of the study were to: Establish communication techniques used by teachers of English in schools for learners with hearing impairment; Investigate the teachers' competence in the communication techniques used; Seek views of the teachers towards teaching English to learners with hearing impairment; Find out availability and use of technological aids by teachers of English language in schools for learners with hearing impairment and find out communication challenges faced by teachers of English in schools for learners with hearing impairment. Out of the five primary schools for the hearing impaired; Kerugoya, Tumutumu, Murang'a, Nyandarua and Kambui in Central region, piloting was done in one of the schools; Kambui School for the Hearing Impaired while the actual study was done in four of the remaining primary schools. Purposive sampling was used in the selection of the study participants because only teachers were targeted as well as the head teachers, a group believed to be reliable. In terms of gender 54.6 were male, while in terms of qualification the highest academic qualification was a degree level with 40.9, 54.6% had a certificate as their highest professional qualification while 36.4% had a diploma. The schools lacked adequate reference material for teaching English and 46.4% of the respondents were in agreement with this. Communication methods were termed as being important in the learners' performance by 75% of the respondents. The study revealed that 96.4% of the respondents find it difficult to teach English to learners with hearing impairment. 64.3% indicated that the English curriculum was not relevant for learners with hearing impairment. It was found out that teachers of English in schools for learners with hearing impairment face a lot of challenges in terms of the methods of communication used. The researcher therefore recommended further investigation on the impact of Kenyan sign language on English language in the same schools.

CHAPTER ONE: INTRODUCTION

This chapter will give a detailed background of the study; the statement of the problem; purpose of the study; the study objectives and research questions; significance of the study; limitations and delimitations; theoretical and conceptual frameworks; and operational definition of terms used in the study.

1.1 Background to the Study

According to World Health Organization (WHO) it is approximated that in 2005 there were about 278 million people with moderate to profound hearing impairment. 80% of these people live in low and middle income countries (WHO, 2010). Wilson (2001), points out that with limited access to medical treatment, high rates of malnutrition, middle ear infection (otitis media) and Meningitis, the incidences of hearing impairment are believed to be higher in Africa than in United States and Europe. Children with mild hearing loss (hard of hearing) in Africa who can process speech with the help of hearing aids are unable to access the equipment as the cost is too high for most poor families to afford (Ashoka, 2001). According to Kiyaga (2003), the majority of persons with Hearing Impairment (HI) in Africa lack access to education, especially those in the rural areas where prevalence of poverty is very high.

Education of learners with hearing impaired in the world can be traced back before the 16th Century. Rickchof (1987), cited in Aura and Mathew (2007) identifies philosophers like Aristotle who observed that there was a relationship between congenital deafness and dumbness. He (Aristotle) laid emphasis on speech as primary mode of instruction for persons with hearing impairment. In USA, the use of sign language was a preferred method of teaching learners with hearing impairment in the 17th Century while Europe was divided on the issue of the method that

provided the best education of the hearing impaired. By 18th century one faction under the French priest, Michael de l'Pee favored manual forms of communication. The other faction led by a German Samuel Heinicke believed that spoken language was the basis of thought, hence teaching language through speech and lip reading to the hearing impaired (Aura,2012).

In Kenya, there are about 250,000 children with hearing impairment. Out of these children 6,000 are placed in schools for the hearing impaired. Few studies on teaching learners with HI have been conducted. Low literacy levels of graduates with HI have been seen as an element of educational wastage. This is a great loss, for a developing nation like Kenya where special education is just emerging in the education system. High drop-out rates of HI learners translates into significant wastage rates that are an important dimension of our schools inefficiency (TIQET, 1999)

The history of education of the HI in Kenya highlights the general challenges that are faced in the course of delivering education to the hearing impaired. The first educational program for the HI was the Aga khan unit in Mombasa established in 1958. Other units include Dagoretti and Aga Khan in Nairobi started in 1960 and 1961 respectfully. Mumias and Nyangoma primary schools for the HI were also established in 1961 then Kambui school for the HI followed in 1963.

According to Adoyo 2004, the official policy then advocated for oral means of communication in class but the learners academic performance remained poor. They used to communicate in gestures and sign language amongst themselves. In mid 1970s, the wind of change towards use of sign language in schools for the deaf gained momentum internationally. In 1981 the Ministry

of Education proposed to separate schools for the deaf into two groups to cater for oral/aural and sign language methods of instruction. In November 1982, the Kenya Institute of Education proposed to have systematic sign language based on Kenyan signs. The reason was to change the mentality of the educational system which then viewed sign language as gestural and inappropriate for instructional purposes. Furthermore, there was need to show that sign language could also be used simultaneously with the oral method. Later in 1987 the use of Sign Language and Signed English (SE) modes of communication were officially introduced as the means of communicating with the HI in class under the philosophy of Total Communication (TC) (Okombo, 2006). Total communication encompasses the use of different modes of communication including use of gestures, signs, speech reading and writing among others. Signed English on the other hand is a mode of manual communication which presents vocabulary drawn from English word order with sign words.

To implement the use of sign language, Kenya Institute of Special Education (KISE) was established in 1986 to train teachers for a two year diploma course in Special Needs Education (SNE) which prepared them with basic communication skills for learners with HI. Machakos School for the HI was also established in 1986 as a pilot school for Total communication.

1.1.1 The Language Policy in Kenya and Kenyan Sign Language

According to Mutea (2000), English was recognized as the official language of communication in Kenya after independence in 1963, it has occupied a dominant position in both the school curriculum and public life in Kenya. The language policy states that English should be introduced as the medium of instruction in upper primary when it is assumed the child has

“mastered” English. While this arrangement may work for the hearing child, the situation may be different for the HI child who starts school without acquiring his first language (Stahlman 1998).

Therefore, the need to know English for the HI cannot be over emphasized. The Gachathi Commission of 1976 cited by Mogoia (1998) recommended that English be taught as a subject, taking over as a language of instruction from fourth year of primary school education. In order to enhance concept formation and articulation in linguistic communication, the Koech Commission’s Report (1999) concluded that children should continue to be taught in their mother tongue or the dominant language of the school environment until the end of lower primary (standard three). During this period of lower primary education English remains the official language and be taught as a subject.

Kenyan Sign Language (KSL) is a visual gestural language used by persons with hearing impairment in Kenya. It was developed as a fully fledged language of the Deaf Community in Kenya, however, there was a controversy as to whether it can be used for communication in schools for the HI (KSDC, 2002). It is at the school environment where learners with the HI interact much in communicating with signs more than the home environment. Later, it was recognized as the language of the Deaf in the Disability Act of 2003. In 2004, Kenya Institute of Education, now Kenya Institute of Curriculum Development approved KSL curricula for standard one to standard eight and form one to form four in schools for the HI. However, its use in education, service delivery and everyday life of HI still remains elusive since teachers and other service providers are not very well conversant with the language (Okombo, 2006).

KSL is the language of persons with HI and acts as their first language while signed English is a mode of communication used as a method of teaching the HI. Currently KSL is taught as a subject and examined nationally in the special schools for the HI since 2010. The HI learners may not have acquired KSL well at the home environment due to lack of exposure. The school environment remains the only source for learning both KSL and English language. This study therefore addressed some communication challenges that may be faced by teachers of English in schools for learners with hearing impairment.

1.1.2 Teaching the Hearing Impaired

The World Conference on Special Needs Education of 1994 and The Jomtein Declaration on Education for All of 1990, to which Kenya is a signatory, support education of learners with hearing impairment. In the United States, the HI are entitled to a free and appropriate education ranging from placement in a special classroom to full-time placement in a regular education classroom with hearing peers (Walker,1994). According to Walker, The first real efforts to educate the HI began around 1550 in Spain when Pedro de Leon a monk from Spain taught the HI in a monastery. This was way before Juan Pablo Bonet published the first book in manual alphabet. Charles de l'Epee, a Frenchman also known as the father of sign language emphasized the use of sign language in 1770. Later, Thomas Hompkins Gallaudet opened a school in America with emphasis on sign language in 1817.

Speech reading method was introduced in 1700 by a swiss doctor, Johann Ammons, which saw the establishment of many schools in Scotland, Germany and France. Teaching methods, according to Walker was a combination of oralism and manualism. The controversy surrounding

how to teach children with hearing impairment began centuries ago and continues into the twenty-first century (Moeller, 2000). Proponents of oralism contend that denying the children sign language is tantamount to denying them a language to communicate.

In Kenya, according to Ndurumo (Anorlds of the Deaf 2008), the wind of change towards the use of sign language in schools for the HI gained momentum in 1981 when research was done to establish the performance of learners using oral/aural and sign language methods of instruction. Students performance in English was better for those who were taught in sign language than those taught using oral/aural method. From 1988 sign language was officially accepted by the Ministry of Education as language of instruction under the philosophy of Total Communication. Kenyan Sign Language has been approved by the Kenya Institute of Curriculum Development and it is taught as a subject. The most important educational decision is the communication method used in class. Regardless of teaching, learners with hearing impairment experience difficulties acquiring the language of the hearing society. It is upon the English language teacher to see to it that the learner gets enough communicative English skills that will assist them in advancing for further studies.

Generally, the most important manifestation of schooling quality are literacy, greater cognitive abilities, better student performance in examinations and school completion (Deolakan, 1999). Educational effectiveness and efficiency for the HI have to do with how much they learn and this proportion of learners who successfully complete the cycle through school output is partly determined by the quality and quantity of HI school inputs. The inputs of HI education include human resources such as teachers and administrators as well as material resources which include

school facilities, equipment and teaching aids. Other important factors are communication strategies, the teachers' views, teaching approaches and availability of technological aids. As Otieno & Gravenir 2001, points out, efficiency and efficacy policies for the HI should be designed in such a way that they increase student learning per specified amount of inputs.

1.2 Statement of the Problem

While education for learners with HI in Kenya is not a recent development, studies show that it has not shown significant improvement since the learners complete their studies semi-illiterate as Adoyo (2004) points out. This shortfall has been attributed mainly to lack of effective communication between the learners and teachers and this explains the poor performance of learners with HI. Speech reading, for example, which is one of the methods used to communicate with the HI has not been effective. This is because spoken language is often hidden in fluent speech and therefore difficult for HI to speech-read. Furthermore, sign language commonly used among the HI has a grammar and syntax that is quite different from spoken English. Effective communication for learners with HI is very important for teachers of English language. This is because English language is the medium of instruction for all other subjects. Although Total Communication (TC) was recommended for use in schools for the HI in 1988 to bridge the gap between the HI learners and the teachers (Aura and Mathew 2007), it is not known what exactly happens in the classrooms as the learners are not able to read and write in English well after completion of primary education. This study therefore focused on communication challenges faced by teachers of English in selected primary schools in Central Kenya region.

1.3 Purpose of the Study

The purpose of this study was to find out the communication challenges faced by the English language teachers in schools for the hearing impaired in Central Province, Kenya. The study aimed at using the findings to give an insight for further investigations in order to come up with appropriate communicational approaches for teaching English and other academic subjects to learners with hearing impairments.

1.4 Objectives of the Study

The objectives of the study were to:

- a. Establish communication techniques used by teachers of English in schools for learners with hearing impairment.
- b. Investigate the teachers' competence in the communication techniques used.
- c. Seek views of the teachers towards teaching English to learners with hearing impairment
- d. Find out availability and use of technological aids by teachers of English language in schools for learners with hearing impairment.
- e. Find out communication challenges faced by teachers of English in schools for learners with hearing impairment.

1.5 Research Questions

- a. What are the communication techniques used by teachers of English language in schools for learners with hearing impairments?
- b. What is the level of competence do teachers of English language have in the communication techniques used?
- c. What are the views of teachers of English language towards teaching English to learners with hearing impairment?
- d. What technological aids are available for use by teachers of English in schools for learners with HI
- e. What are the communication challenges faced by teachers of English in schools for learners with HI?

1.6 Limitations of the study

- a. The respondents doubled other teaching subjects and therefore generalized their views to instructional methods.
- b. The study was conducted when the country was in the process of a devolution system of government and this affected the targeted population.

1.7 Significance of the Study

The findings of this study will be of great help to Policy makers, Quality Assurance officers, curriculum developers, teachers, learners and parents. It will help in formulating relevant policies, well designed programmes and improve the existing language curriculum for the HI. This study will also assist teachers to improve receptive and expressive English skills among HI

learners. The findings of this study will contribute significant literature for scholarly work in this area of study for future studies and for global comparison.

1.8 Assumptions of the Study

The following are the assumption that were made

- a. Teachers of English language in schools for learners with hearing impairments in Kenya use various communication techniques.
- b. Teachers of English language in schools for learners with hearing impairment would be willing to participate in the study and that they would voluntarily give the correct information
- c. Teachers of English language in schools for learners with hearing impairment face challenges in the course of delivering content to the HI.

1.9 Theoretical framework

This study was based on the following theories of language acquisition:-

- Behaviorist Theory of Language Acquisition:

According to Skinner, language is a form of behaviour that is acquired through interaction with other users of the language. This explains why a child who is not exposed to a target language cannot learn it naturally. For example, deaf children born to hearing parents do not acquire sign language until they join a school where the language is used. Those born to deaf parents acquire sign language before joining school (Okombo, 2006). The HI child may be the only one in the family of hearing siblings and does not interact with other HI children. It is therefore the responsibility of the teacher to assist the children develop that language.

- Social Cognitive Theory (SCT):

The Social Cognitive Theory by Albert Bandura, is based on the idea that people learn by watching what other people do and will not do. The reciprocal nature of the determinants of human functioning in SCT makes it possible for therapeutic and counseling efforts to be directed at personal environmental factors. Strategies for increasing well being can be aimed at improving emotional, cognitive or motivational processes, increasing behavioral competences or altering the conditions under which people live and work (Pajares, 2002).

In relation to this study, teachers in HI institutions have the challenge of improving their communication skills with HI learners. As Pajares 2002, observes, using the SCT as framework, the teachers can work to improve the learner's emotional status and correct any faulty self-beliefs and habits of thinking (personal factors).

Based on the theories on the nature of language, second language learning and functions of language that is what language is, how it is learned and why it is learned (Groenewegen, 2008).

The SCT explains how people acquire and maintain certain behavioural patterns, while also providing the basis for intervention strategies (Bandura, 1997). Evaluating behavioural change depends on the factors of environment, people and behaviour. SCT provides a framework for designing, implementing and evaluating programmes.

In both theories, emphasis is put on language acquisition and learning through the environment and interaction. This study was therefore set to find out what happens on the ground at the schools for the HI in relation to communication while teaching English language.

1.10 Conceptual Framework of the Study

The diagrammatic of conceptual framework below shows how the different characteristics (school characteristics, teacher characteristics and student characteristics) relate to communication techniques for the HI with the end result being achievements in the learning and teaching process. The framework also investigates the independent and dependent variables affecting the English language teacher in the process of teaching HI learners. The independent variables which was under focus were the choice of communication methods, availability of teaching/learning resources, teachers academic qualification, supportiveness of the organizational framework in which the teaching and learning is taking place. On the other hand the dependent variables of the study were the category of the deafness, learners' ability to communicate and understand concepts and the socio-economic background of the learners.

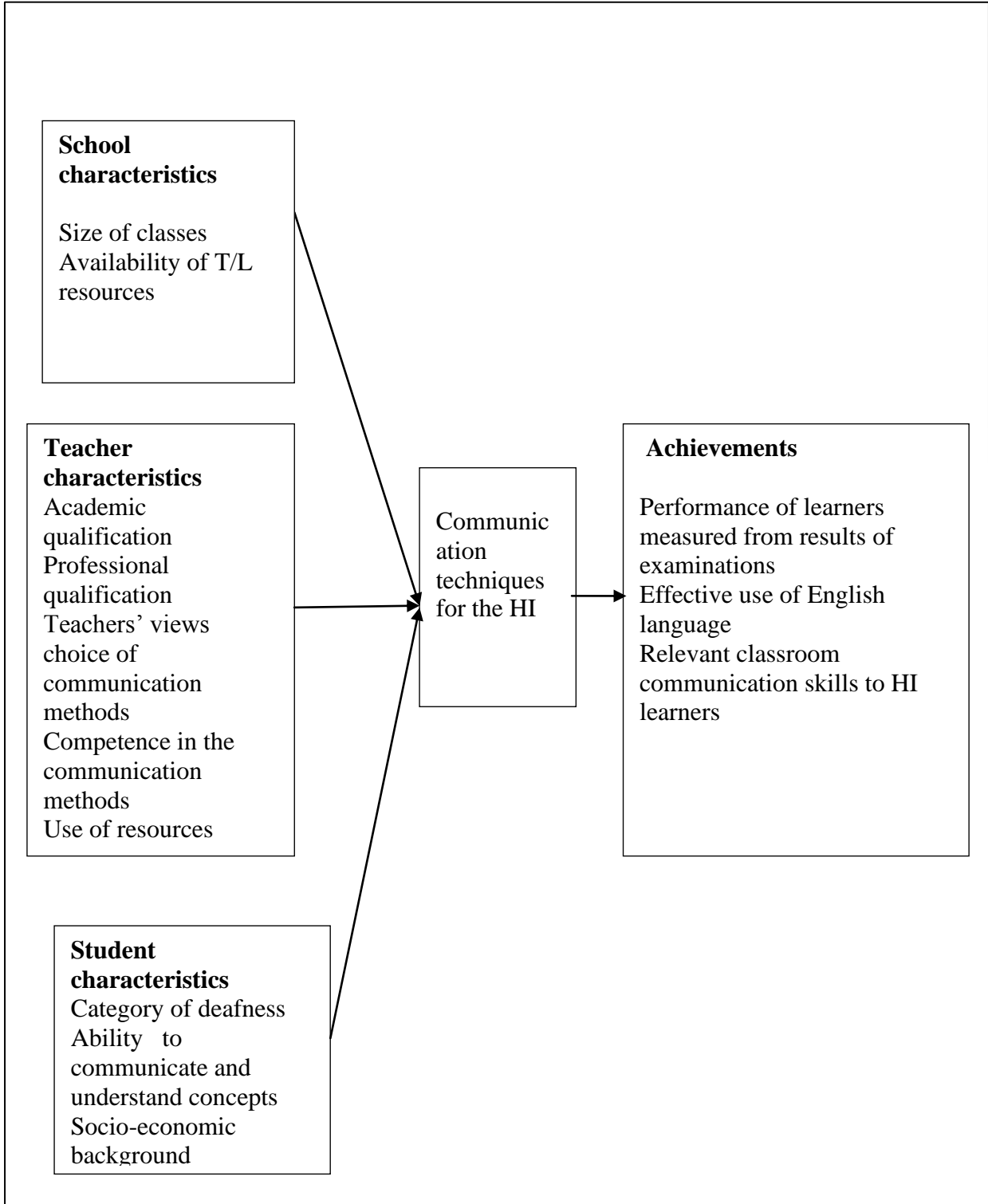


Figure 1.1. Diagrammatic Conceptual framework of the study.

1.11 Operational Definition of Terms

Captioning	:	The process of displaying text on television or other visual display to provide additional or interpretive information to individuals who wish to access it.
Communicative competence:		The ability to deliver information effectively.
Fingerspelling	:	The use of manual alphabet to form words and sentences using different handshapes.
Hard of Hearing	:	Hearing loss that enables one to follow speech and acquire spoken language.
Hearing impairment	:	Hearing disorder ranging from mild to profound hearing loss.
Kenyan Sign Language	:	A visual gestural language used by persons with hearing impairments in Kenya.
Manualism	:	An approach to teaching learners with hearing impairments with the use of hand movement and gestures.
Oralism	:	An approach to teaching language to learners with hearing impairments through speech and lip-reading.
Post-Lingual Deafness	:	Deafness occurring after development of speech and language.
Pre-lingual Deafness	:	Deafness occurring before development of speech and language.
Signed English	:	A manual communication mode which conforms to the English language.
Signing Exact English	:	A manual communication mode which conforms to the English language structure with sign markers for all

affixes and punctuations.

Special Needs Education : A specially designed program of instructions with appropriate modification in curricular, teaching methods, medium of communication or learning environment to meet the needs of learners with special needs.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1 Introduction

In this chapter a review of literature related to the objectives of the study has been done. Basically the review centers on: communication challenges, communicating with HI learners, unsatisfactory performance of HI learners, development of education for persons with HI in Kenya, language of HI children in Kenya, teaching the HI, language acquisition and comprehensible input, levels of language proficiency, reading for the HI, technology and HI, teachers' views; and experience and qualification of teacher.

2.2 Communication Challenges

The main function of language is to communicate. Communication is very important in maintaining relationships. It is a means of sharing ideas and emotions which involves sending and receiving messages. Expression of sharing ideas and feelings can be expressed orally or manually by use of spoken language or signs. (VSO, Jitolee, 2007). Communication challenges faced by the English language teacher have been an issue which has occupied a central place in schools for learners with hearing impairment in Kenya. Johnson, 2004, notes that the ability for the HI to achieve academic success is tied to the communication effectiveness of teachers. He says the difficulty in finding an appropriate classroom communication system that effectively provides access to curriculum content for HI learners is tied to the choice of communicational approach used. All inquiries have pointed to teachers' lack of proper communication strategies as a major obstacle to the learners' academic development.

Some of the communication modes that are used in delivering content to the HI according to Luterman, (2002), include the following:

- Signed English- a communication mode which uses signed words in a sentence following the structure of English language.
- Signing Exact English- a communication mode that uses signed words and sign markers for each and every word, affixes and punctuations following the English language grammar.
- Fingerspelling- use of the manual alphabet by forming different handshapes to spell words and sentences.
- Speech and Lip-Reading- Ability to watch and understand the speakers' mouth and lips as they speak.
- Simultaneous Communication (SC) - Use of signs and speech at the same time.

Even though Simultaneous Communication (SC) is popular in schools and training institutions, studies have revealed that during its use, teachers fail to represent spoken language accurately due to modality difference, that is, vocal and gestural output. Johnson, Liddel and Erting (1989) argue that it suffers not only from distortion, but also from omission of obligatory words, which do not fit the rhythmic pattern of spoken languages. According to Kiyaga 2003 most teachers of the HI in Africa lack appropriate training and relevant skills which are necessary to work effectively with HI children. The office of demographic studies reports that the average reading level of HI learners when they leave school at the age of nineteen hovers at the fourth grade and world data show similar reading levels for HI students learning other languages (other than English) in other countries. In Kenya the situation is not different as mentioned earlier in the background study where low literacy level of graduates with hearing impairments is evident.

2.3 Communicating with HI learners

When teaching HI learners, communication is of utmost importance, due to the nature of their disability. The following is a general guideline on how to teach the HI learners with effectiveness in communication. The guideline is adapted from Cambridge University Disability Resource Center and has been summarized in table 2.1

Table 2.1 Effective communication with HI learners

Lip Reading:
Face the student so that your lips can be read as easily as possible and ensure your face is not in shadow; Speak at a normal pace and do not shout; avoid walking around or covering your mouth whilst talking; and Try to include contextual clues whenever talking most lip-reading is guesswork.
Working with interpreters:
Make sure that the interpreter is within hearing distance and ready before you start talking; Speak directly to the student not the interpreter; The interpreter always lags a little behind the speaker. Be aware of this. You may have to pause or speak more slowly to ensure the interpreter is keeping up; If the interpreting has been intensive, provide a rest break every 15-20 minutes or negotiate an appropriate time with the interpreter as signing is intensive and tiring work.
When teaching:
Attract the student's attention unobtrusively; Face the student so they can lip read; Avoid moving around too much; Ensure light is on your face; Speak clearly, don't shout or over enunciate as this distorts sound and lip patterns; Give a clear view of lips: avoid covering the mouth with hands; Always face the audience, if something is being written on a board, stop talking until you face the audience again; Use gesture and facial expressions; Repeat the content of a question from the lecture before giving the answer

Supervision:

 Ensure suitable seating arrangements. A circle or semi-circle is best, as the student can then see all members of the group; Use normal language i.e. use short sentences rather than single words; use normal speech at a normal rate; Ask open-ended questions, not those that require a yes/ no response. This will enable you to check that the student has understood the question; If a student is having difficulty understanding, re-phrase rather than repeat what you have said; Allow only one student at a time to talk; Hearing impairments increase the time and effort which students must expend in activities of daily living, as well.

As discussed earlier in the background study, implementing the curriculum for Special Needs Education in Kenya had its own challenges with HI mode of communication in schools changing from oralism to Total Communication in 1986. Use of interpreters in class has not been embraced while studies (MOE 2003 Task Force on SNE) reflect a high enrolment in schools with the onset of Free Primary Education in 2003 where the maximum enrolment per class has shifted from the usual 12 to 30. The recommended sitting arrangement of horse-shoe in a HI class cannot accommodate the high number of pupils which makes it impossible to use group hearing aids. The researcher therefore set out to find out more information that may challenge the English language teacher.

2.4 Unsatisfactory performance of HI learners

The studies that have been done on education of the HI have revealed that most of the learners do not make much progress in their studies, instead they retrogress. The learners repeat classes in the course of their studies and in many incidences they end up dropping out of the system, and this hurt their self-image and prospects for future success (Karanja, 2003). Proponents of schools of thought for learners with HI propose remedial teaching, Individualized Educational Programme (IEP) and meeting their Special Needs through adaptive programmes (Lang, 2004). One of the reasons offered as an explanation for failure of retention is lack of improved academic

achievement and that students are often retained in programmes that are not beneficial to them in the first place and that teaching methods fall in second place (Ndurumo, 1993).

Other methods used to teach learners with HI include, chalk and black board, paper and pen, articulation, auditory training using hearing aids, cued speech and Sign Language (SL) (Gallimore,1993). The MoE acknowledges that some of these methods are similar to those of teaching the regular learners but have been adapted to meet the needs of learners with HI (MoEST, 2003). In an appraisal exercise in the same report (MoEST) indicates that literacy of learners with HI is very low as compared to regular learners. In support, Kinaga, (1987) reveals that research on the academic achievement shows that learners with HI lag behind hearing counterparts academically and he also takes into account the role school environment plays in academic achievement.

Ndurumo, (1993) observes that learners with HI are often blamed for their inability to grasp information during classroom teaching when speech and speech reading are being used as methods of communication. The oral methods have several shortfalls alongside the other communication methods. For example, articulation, lip reading and use of hearing aids are other methods that are equally challengeable, as they require the input of specialists such as educational audiologists speech therapists and auto-laryngologists than teachers to use them. This makes the education of learners with HI both complex and expensive and yet they must be taught to achieve the set educational goals. Therefore, a variety of methods should be used that include concept formation for communication to take place. However, simple or complex as the

sole or a supplementary means of language development, such methods include the use of signs based on ideas or pictures coupled by captions in HI education.

Education of the HI has been one of the controversially discussed topics. The issue has been the difficulty in finding an appropriate classroom communication system that effectively provides access to curriculum content. Subsequently, there have been changes in search for better teaching methodology (Gallimore, 1993). In recent developments regarding the education and welfare of the HI and in relation to language development, research suggests that HI children can improve their linguistic competence by captioned TV programmes. The opportunity to generate narrative captions to describe student produced videos is highly motivating for the HI students, so much that they persist in the effort until their captions efficiently and effectively describe the video (Luterman et al., 1995).

With the onset of Free Primary Education in 2003, as found out earlier, teachers have been handling a large population of learners in class apart from the usual twelve per class. The researcher also set out to find the availability and use of relevant facilities in HI schools.

2.5 Development of Education for persons with Hearing Impairment in Kenya

Deaf education in Kenya has faced a downward trend in recent decades. Findings over the years (Ndurumo, 1993; Okombo, 1994; Adoyo, 1995) note that learners with HI have consistently trailed behind their hearing counterparts in academic performance. All inquiries have pointed to teachers' lack of competence in the language of instruction as a major obstacle to their academic development. Even though Simultaneous Communication (SC), a form of contrived sign system developed to educators confuse with Kenya Sign Language (KSL), is popular in schools and

training institutions (Erting 1986), studies have revealed that during its use, teachers fail to represent spoken language accurately due to modality difference, that is, vocal and gestural output. Johnson, Liddel and Erting (1989) reporting on the demerits of SC, they argue that it suffers not only from distortion, but also from omission of obligatory words, which do not fit the rhythmic pattern of spoken languages. Retrogression of learners with HI is also of very much concern to educationists, as there is a serious decline in each individual progressing to the next level of education. Research also reveals that many teachers in schools for the HI have great difficulties in communicating ideas to pupils through SC. (Adoyo 1995). Here, the failure of SC lays the whole problem. What is amazing is that while HI pupils are instructed in SC, they use KSL while on their own with ease. This is a testament to an innate grammatical competence in the brain, a phenomenon that Gee and Goohart (1985) refer to as “nativization”. This theory stipulates that without appropriate and adequate exposure to a naturally occurring language, children will innovate their own set of grammatical rules according to the innate dictates of their human biological capacity for language. The HI children on their own develop a system, which represents the expression of the human linguistic biological capacity in the manual/visual modality, which is sign language as opposed to spoken language (Okombo, 2006). It is therefore important for teachers of English to understand this so as not to confuse the teaching of English as a subject and KSL as a language for communicating with the HI.

The paradoxical combination of teaching and processing a language is the central and perhaps the most difficult problem in the education of HI children. Although hearing impairment itself may have no effect on intellectual potential, the condition may lead to impoverished communication skills that may limit development severely, unless the learners are provided with

compensatory tools, during their education. The specialized techniques that have been developed for teaching the HI are many and varied. Some of them are lip reading, oralism through use of other senses than hearing, manual communication including sign language and finger spelling, the use of hearing aids to utilize residual hearing and many variations of these (Yssedyke & Algozzine, 1998). Dedicated educators have struggled for years to improve the educational programmes and a variety of models have been developed, and most cases, no single method has been used or recommended exclusively. Kenyan Sign Language (KSL) which the learners commonly use amongst themselves has a lot of variations.

2.6 Language of HI children in Kenya

There is no international sign language but different national sign languages due to the fact that signs are culturally determined. Different sign languages have therefore, developed in different parts of the world. Kenyan Sign Language is therefore, the visual gestural language that serves as the primary means of communication for HI people in Kenya (Adoyo, 2002). While many Kenyans still doubt whether KSL is a complete language, studies show that like other sign languages, it is formal, socially agreed on, rule governed symbol system that is generative in nature (Akach (1991), Okombo (1994) and Adoyo (1995)). The components of KSL are not phoneme (sound) combinations that form words as in spoken languages, but rather are phonological combinations such as shapes, hand positions, hand movements and orientation of the palm that signs.

While speech is auditory, vocal and temporal, signs used in KSL are best described as visual, motor and spatial. KSL consists of movements, of shapes and positions of specific body parts,

such as hands, arms eyes, face and head. Concepts are executed with manual and other systematic non-manual signals. Though different in the modes of expression, KSL and other spoken languages are equivalent in their communicative potentials (Adoyo, 2002). Due to demographic factors in a country that has 43 indigenous spoken languages, regional variations have manifested in KSL lexicon. However, as a result of socio-linguistic factors such as language growth and emergence, convergence (that is a situation in which different languages come together through the social interaction of their users to become one language) and phenomena (the process of diffusion by which innovation in some regions where language is used are spread to other regions from which the innovation in question did not originate), the variations have been able to converge into one major standard variety, which has proved a major marker in defining the community, resulting in a strong establishment of culture, a sense of identity, and understanding (Adoyo, 2002).

Challenges facing HI persons include; feeling intimidated by travel due to lack information available to explain events such as delays, and have no way of knowing what the problem is or how long the delay will be. The HI do not participate in activities like voting because they do not understand what the candidates can offer as the pledges are usually verbal. Isolation can also be self-generating, as limited interaction may prevent people with disabilities developing the social confidence and skills needed for full social participation (Bishop *et al.*, 2000).

2.7 Language acquisition and comprehensible input

Krashen (1981) and other researchers have differentiated language learning from acquisition of a language. Acquisition refers to the “subconscious process of ‘picking up’ a language through

exposure and [learning] to the conscious process of studying [a language]” (Ellis,1994). The term “acquisition” is not used consistently in writings on second language. According to Ellis (1994), some researchers consider a feature has been acquired when it appears for the first time, while others require the learner to use it to some predetermined criterion level of accuracy—usually 90 per cent.

Krashen (1982, 1985a, 1985b) hypothesized that language acquisition is nearly inevitable when messages are comprehensible. He proposed that providing background knowledge is one way of making input comprehensible to the second language learner. He further reiterated that language is acquired not through memorizing vocabulary lists or do grammar exercises, but when one understand what people say to us or what they read. The best language lessons are therefore interesting conversations, good books, fine films, etc., situations in which we are absorbed in the meaning of what is said to us or what we read (Krashen and Biber, 1988).

Terrell and Krashen (1983) developed the Natural Approach to language instruction. The Natural Approach calls for multiple opportunities for authentic communication and conversations in the classroom. A good teacher is described as one who continuously delivers at a level understandable by the second language speaker but also just very slightly beyond a learner’s current competence (Baker, 2001). How can a language teacher ensure that comprehension is taking place?

Regardless of input, each student will take in different information based on his or her own background knowledge, affective filter, and a host of other factors. Baker (2001) suggests that

intake is more important than output. Ellis (1994) points out that very few studies have investigated language acquisition resulting from just exposure to comprehensible input. The ability to understand a message does not in and of itself appear to be an adequate representation of linguistic competence in a second language. Baker (2001) cautions that the danger of the classroom is that students may learn to understand a second language, but not be able to produce the second language.

2.8 Levels of language proficiency

In his early work, Cummins (1981; 1984) defined two levels, or categories, of language proficiency: conversational aspects of a second language, called basic interpersonal communication skills (BICS), and cognitive-academic language proficiency (CALP). After receiving much criticism for an overly simplified model which seemed to impose an artificial dichotomy, he elaborated on the original distinction and proposed that communication takes place along two intersecting continuums—one which moves from context embedded to context reduced communication, and the other ranging from cognitively undemanding to cognitively demanding communication. Baker (2001) explains that context embedded communication exists when there is a good deal of support in communication, particularly via body language. For example, by pointing to objects, using the eyes, head nods, hand gestures and intonation, people give and receive plenty of clues and cues to help the second language learner make sense of the message. In context reduced communication, none of these clues or cues are provided, and the learner is left with only words to determine the meaning of the message.

Cognitively undemanding communication occurs when a person has the mastery of language skills sufficient to enable easy communication. An example would be having a conversation in the street, shop, or stadium, where the processing of information is relatively simple and straightforward Baker (2001). In cognitively demanding communication, a significant amount of more challenging information needs to be processed quickly, such as is often the case in classroom settings.

2.9 Reading for the Hearing Impaired

Reading studies with HI children have shown, time and again, that they lag far behind their hearing peers (Allen, 1986; Conrad, 1979; Holt, 1994). The reading difficulties that HI children encounter are most likely related to delays in the acquisition of the spoken language. Reading is a process that is dependent on the language that provides the basis of the writing system, especially during the early stages of acquisition (Perfetti & Sandak, 2000). In these early stages, hearing children learn that written and spoken words consist of smaller elements, letters and sounds (phonological and orthographic awareness), at least for children who learn an alphabetic language. Phonological awareness and orthographic awareness are important prerequisites for mastering the alphabetic principle (Stanovich, 1986), the principle that individual letters map onto individual sounds. Children must be able to decode, independently (without the support of their parents or teachers), the meaning of the many unknown words they are bound to encounter during reading. Mastering the alphabetic principle will turn out to be a very powerful mechanism that enables children to learn reading vocabulary by mapping these new written word forms onto known spoken word forms, especially in regular languages. For learners with HI, this may be a different case since their mode of communication differs from their hearing counterparts. The

manual alphabet encompasses different handshapes which have no relationship with a given sign or gesture.

2.10 Technology and Hearing Impaired

There are several technologies that can be used to help in communicating to the HI learners. This includes provision of hearing aids, radio frequency system, cochlear implant, use of computer and projectors. Assistive Learning Devices consist of a transmitter that sends electronically enhanced sound to receivers worn by individuals who are HI. Other technologies include the use of Computer-Aided RealTime Translation (CART), which uses a stenotype machine with a phonetic keyboard and special software that translates phonetic symbols into English captions almost instantaneously. These facilities may not be available in most schools for the HI in Kenya, and if available classes may be fitted with a loop induction system which enables learners using hearing aids to have direct input from the teacher's microphone, thus eliminating background noise. Audiotapes, videotapes and other auditory materials can be translated into print format to make them accessible when teaching, (Moeller, 2000). Captioning is another method where technology is used and has been discussed in the proceeding section.

2.10.1 Captioning

Captioning is the process of displaying text on a television or other visual display to provide additional or interpretive information to individuals who wish to access it. Captions are created from the transcripts of a programme. A caption specialist separates the dialogue into captions and makes sure the words appear in sync with the audio they describe. Preparation of captions

involve the use of relevant computer software that encodes the captioning information and combines it with the audio and video to create a new master tape or digital file programme. According to Jensema (2003), captions availed to HI children enable them to experience what their hearing counterparts have enjoyed all along and it is hoped to be the signal to end their exclusion from significant areas like social and cultural life.

Among the countries where captioning has been featured prominently are USA, Australia and Netherlands. The American Disability Act (ADA) of 1990 requires that business and public accommodations ensure that persons with special needs are not excluded from or denied services because of the absence of auxiliary aids, captions being one of them. Since the passage of the ADA, the use of captioning has expanded. Educational, informational, entertainment and training materials are captioned for HI audiences at the time of production. In the Netherlands there has been a steady increase in the number of programmes being captioned since 1980 when teletext was introduced. On the other hand the Australian Capital Territory (ACT) is committed to improving access to government information services. Federal legislation in Australia requires that all free to air news, current affairs and prime time broadcasts be captioned since 1 January 2001.

There are some positive contributions of captioning in the education of HI learners. Braverman & Hertzog (1981) report that captioning rates does affect comprehension, but the language level of the captions and in a series of studies, demonstrate that the combination of a reduced rate and a reduced language level improve programme comprehension for school children. Captioning normally addresses the deaf viewers' communication needs through enhancing their general language and reading skills (Jelinek, et al, 2001).

There is however a challenge in the use of captioned programmes as it involves reading as an essential skill for understanding captions and by extension, comprehending the script of the programmes. The process of reading involves the use of applicable knowledge base, memory processes and linguistic adequacy with a word based language. For individuals who are hearing impaired, it may also require skill with a spoken language that they may not have mastered.

2.11 Teachers Attitude

Attitude as a concept is concerned with an individual way of thinking, acting and behaving. It has very serious implications for the learner, the teacher, the immediate social group with which the individual learner relates and the entire school system. Attitudes are formed as a result of some kind of learning experiences. They may also be learned simply by following the example or opinion of parent, teacher or friend. This is mimicry or imitation, which also has a part to play in the teaching and learning situation. In this respect, the learner draws from his teachers' disposition to form his own attitude, which may likely affect his learning outcomes.

In his observational theory, Bandura & Walters (1963) demonstrated that behaviours are acquired by watching another (the model, teacher, parent, mentor, and friend) that performs the behaviour. The model displays it and the learner observes and tries to imitate it. Teachers are, invariably, role models whose behaviours are easily copied by students. What teachers like or dislike, appreciate and how they feel about their learning or studies could have a significant effect on their students. Unfortunately, however, many teachers seldom realize that how they teach, how they behave and how they interact with students can be more paramount than what they teach. In a nutshell, teachers' attitudes directly affect students' attitudes. Teachers' attitudes

are in turn, influenced by their culture and belief system. Teachers' attitudes towards their students in school must be favourable enough to carry students along. Learners with hearing impairments will always depend on their teachers as their role models.

It can be argued to some extent that the characteristics of the teachers and their experiences and behaviours in the classrooms, contribute to the learning environment of their students, which in turn will have an effect on student outcomes. It is also important that we do not undermine the role of the parents in affecting student learning. A common hypothesis with respect to the relationship between teachers' experience and student achievement is that students taught by more experienced teachers achieve at a higher level, because their teachers have mastered the content and acquired classroom management skills to deal within different types of classroom problems (Slavin, 1987; Evans, 1992; Gibbons *et al*, 1997). Furthermore, more experienced teachers are considered to be more able to concentrate on the most appropriate way to teach particular topics to students who differ in their abilities, prior knowledge and backgrounds (Raudenbush and Williams, 1991; Stringfield and Teddlie, 1991). Ejiogu, (1999) was of the view that in order to improve on any aspect of education, it is therefore imperative to involve a well articulated teacher education programme that will prepare the teacher for the leadership role they are expected to play. The nation's overall development is inextricably tied to its educational system. If we accept these views, then there is the need to introduce quality into the system. Most educationists believed that there could be no meaningful socio-economic development without the right type and appropriate quality of education. To become an educated person requires the combination of several factors and processes. At the center of the processes is the presence of an educator. The teacher is the most indispensable factor in the effective administration of any

education system. The attitude of teachers toward the HI learners will be reflected in the manner in which they communicate with them.

2.12 Experience and Qualification of Teachers

Kinyanjui (1984) submits that the caliber of teachers in any school forms important input variables, which can have tremendous impact on school outcome. These means that teachers formal qualification, experience, motivation, creativity, interaction with learners and their methodology may influence academic performance of a school very much. Kinyanjui (1984) is echoing Raju (1973), who in his study on rural schools in Kenya found that most of them lacked properly trained teachers. The researcher is in agreement with him since teachers who are being trained especially in the field of special education are very few as compared with the number of learners who need special attention. Moreover, the teacher who is being trained for inclusive settings are paying for themselves, meaning if they are not able to sponsor themselves, the training is likely to stop. Witt, (2002), notes that the most recurring and salient factor is lack of human component, which is essential for effective learning. In support of their views, the researcher would say that teachers should be in-serviced to be qualified. They should attend in-service courses, seminars and other conferences in the field of special education in order to be familiar with new trends of education, which can lead to better teaching methods enabling effective learning. Communication plays a very big role in teaching the HI and there is need for improving the existing methods used.

Johnson (1968) 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. This is true as teachers who have no time to prepare for their work will not. The factors that may affect are general atmosphere at home, cleanliness and order of security, discipline and procession of books and papers. This is true because if home environment is conducive, pupils learning atmosphere will also be conducive, (Wiseman, 1986). In fact, within the family itself factors such as its size, pupils position of birth, the relationship between parents, their attitudes towards, education, their level of education, the level of aspiration and the absence of one parent will have their effect which may help or hinder learning.

Children with HI are likely to be left out in family activities since most communication is verbal, making the home environment non-conducive. These children are therefore likely to lack the aspect of acquiring language skills from the home environment and expect to get satisfaction at the school environment where they will interact with other HI pupils and teachers.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter covers research design, location of the study, target population, sample and sampling procedures, research instruments, pre-testing, data collection procedures and data analysis.

3.2 Research Design

In this study, descriptive survey was used. This method was preferred because information was readily obtainable from subjects in their natural environment, concerning their attitudes or beliefs on certain issues of the study.

3.3 Study Area

The study area was Central Kenya (Appendix 7). The region was selected as it has several HI institutions; Kambui, Kerugoya, Murang'a, Tumutumu and Nyandarua schools for the HI. The central location of the study area makes the HI institutions in this area more accessible to students and staff from different parts of the country. The schools are among the oldest schools for the HI in Kenya. This increases the chance of the study findings being a representation of other HI institutions in Kenya. According to Singleton (1993), the ideal setting for a study is one that is directly related to the researcher's interest. The researcher frequented the schools as she did her fieldwork and this factor made the province accessible and convenient for the researcher.

3.4 Target Population

The target population of this research was English language teachers of HI institutions in Central Kenya and the principals of the institutions. The teachers were targeted by the study because they are directly involved in teaching of English language which is spoken language as opposed to Kenyan sign language, a visual gestural language. The schools head teachers were targeted because they are the administrators, who supervise, coordinate and ensure that the school is running smoothly.

3.5 Sampling

3.5.1 Sampling technique

The sampling units for the study comprised of HI institutions in the Central Kenya. The study sample was all English language teachers and head teachers in the primary schools which were studied; Kerugoya, Tumutumu, Murang'a and Nyandarua Primary schools for the HI. In this study, all the schools in the study area were targeted.

3.5.2 Sample size

The sample comprised four principals from four schools and 40 teachers. Purposive sampling was used with the head teachers and English language teachers being the target.

Table 3.1 Sample size

Target	Population	Sample	Percentage of total population
Schools	5	4	80
Principals	5	4	80
Teachers	80	40	50

3.6 Research Instruments

These were the tools that were used to collect data from the sampled respondents. The tools which were involved were questionnaires, interview schedule and observation check list.

3.6.1 Questionnaire for teachers

Kothari (1993) highlights that a questionnaire gives the respondents' adequate time to give well thought out answers. The questionnaires enable the researcher to obtain demographic data from teachers and other information concerning teaching of English language. The questions in the questionnaire are a mixture of open-ended closed ended questions. A questionnaire was administered to all the English teachers in the participating institutions. It contained both open ended and closed ended questions. The closed ended questions provided an easy way of coding and were used in gathering quantitative data while the open ended ones enabled the researcher to gather wide and free opinions from the participants and was used in gathering qualitative data.

3.6.2 Interview Schedule for head teachers

An interview is a verbal technique for obtaining data. According to Satyanarayana (1983), interviewing is an appropriate instrument in any study because it helps the interviewer to cover all dimensions of the investigation through probing of the respondents. Kerlinger (1973) also notes that more people are willing to communicate orally than in writing and therefore, provide data more readily in an interview. Prasad (1983) argues that it is possible for the researcher to encourage the respondents to express themselves more freely through an interview. The researcher administered interview schedules to the head teachers of the four primary schools participating in the study. The interview was used in gathering some information about the schools including the number of teachers, methods of communication used, the resources available in the schools and any other information concerning teaching of English language in the schools.

3.6.3 Observation Checklist

The researcher made general observations of the institutions' environment for any relevant information. This was in exposing any hidden information that could not be easily brought out by the questionnaire. A check list was used when making the observation. Some of the information which was observed includes the class sizes, conduciveness of school environment, modes of communication used in class; and availability and utilization of hearing aids.

3.7 Pilot study

The research instruments were pre-tested in Kambui School for the deaf which is one of the HI primary school within the study area but was not included in the main study. The English

language teachers in the institution were sampled to participate in the piloting exercise and the head teacher was also interviewed. The number of English language teachers was ten. The piloting was used to help in establishing the length of time that would be needed to administer the questionnaire to the main sample. Piloting assisted the researcher to identify ambiguities, inadequacies, insufficient spaces to unite the resources, cultured and wrong phrasing of questions.

3.8 Validity

Validity of a research instruments is the degree to which it measures what is intended by the researcher and this judgment is made better by a team of professionals or experts in a particular field (Mugenda and Mugenda, 1998). In this connection, the researcher established content validity by seeking expert judgments from her university supervisors while developing and revising the research instruments. This was through holding discussion, making relevant comments and suggestions that were then synchronized.

3.9 Reliability

This can be defined as a measure of the degree to which a research instrument yields consistent results on data after repeated trials. To ensure reliability the researcher conducted a pilot study in one school (Kambui School for the HI), in the study area where the principal was interviewed and ten English language teachers were asked to fill the instruments. Through this process the researcher was able to establish any ambiguities in instruments which were then corrected before the final data collection process took place.

3.10 The data collection procedures

The researcher obtained authority to conduct the study from the Graduate School, of Kenyatta University and the Ministry of Education head-quarters. Before collection of the data, the researcher contacted the participating institutions and scheduled appointments for visits.

The research entailed the administering of the questionnaire to the participants, who filled the same in the presence of the researcher. This ensured that the exercise took the shortest time possible. This also helped the research participants to fill the questionnaires appropriately since the researcher was around to make any clarification whenever it was required. Ample time was given to the respondents to respond to the questionnaire and interview schedule. Observation Checklist was used by the researcher both during piloting and during the actual research exercise. Classroom observation of teaching English lesson was also done to determine the mode of communication used. Field notes about what the researcher hears, sees, experiences and thinks in the course of collecting data in a study were taken.

3.11 Data analysis

After clean up and reviewing of the collected data, the close ended questions was coded manually and entered into a code book. From the code book, the data was keyed into a computer using the statistical package of social sciences (SPSS) version 17.0. Analyzed data was presented using frequency and percentage tables, pie charts and bar graphs representing findings by pie charts and bar graphs then calculations of correlations was done.

3.12 Logistical and Ethical Consideration

Before conducting the research, permission was sought from the Ministry of Education and the Graduate School of Kenyatta University. The research was only conducted after consulting the respondents in the HI institutions. The respondents were assured of anonymity and that the information given in the questionnaire was to be treated with confidentiality and would only be used for the purpose of the study.

CHAPTER FOUR: FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter reports on the major findings of the study as they relate to each of the five research objectives. Responses on the questions were summarized in tables and graphs. The rest of the data was presented in a narration form where the most outstanding responses were mentioned.

4.2 General Information

The number of male English teachers was slightly higher than the females where the male comprise of 54.5% while 45.4 are female

Table 4.1 Age Group of Teachers

Age group	Frequency	Percent
26-30	2	7.1
31-35	5	17.9
Above 35	21	75.0
Total	28	100.0

From Table 4.1 it is observed that majority of the respondents indicated that they were above 35 years as these group comprised of 75.0% of the respondents; 17.9% of the respondents belonged to 31-35 age group; 7.1% belonged 26-30 age group with no respondents indicating that they were below 25 years of age. This is an indication that majority of teachers are mature enough and had the will of giving required information. From the historical point of view, the trend of teaching language to learners with hearing impairment has been changing from time to time (Aura and Mathew 2007) and it was likely for the teachers in the different age groups to use various communication approaches as was observed in the classroom.

4.2:1 Teachers Highest Academic Level

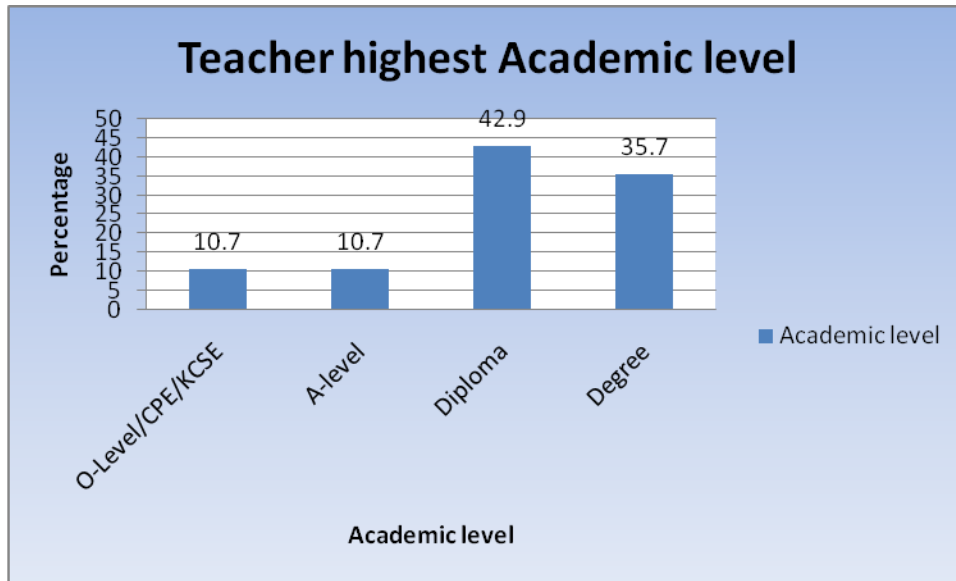


Figure 4.1 English language teacher academic qualification

From figure 4.1, the number of teachers who indicated that a degree was their highest academic qualification was 35.7% while those that indicated that their highest academic qualification was a diploma was 42.9%. From this qualification it shows that most teachers can handle the HI at primary level. It also indicates that they were able to prepare their lesson notes and follow guidelines in preparation to teaching as the English curriculum demands.

4.2:2 Teachers Professional Training



Figure 4.2: English language teachers level of professional training

From figure 4.2 it can be observed that majority of the teachers (53.6%) had a certificate as their highest professional qualification while 32.1% of the teachers had a diploma as their highest professional qualification. This shows that teachers with adequate training to teach English language to learners with HI are not enough in the schools. They cannot handle all the classes, so teachers who have not undergone longer period of practical training are given classes to teach English despite their qualification.

4.2:3 English Language Teachers Experience

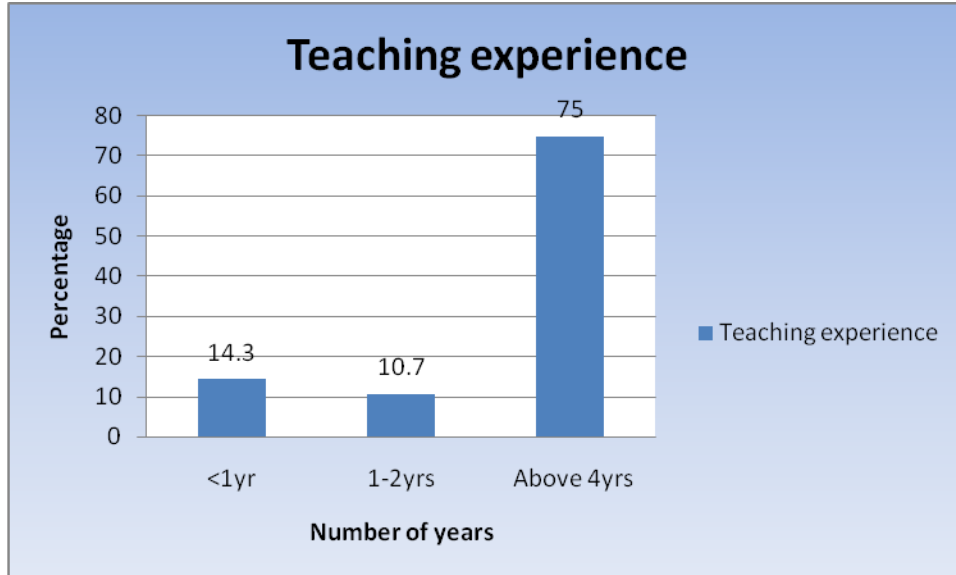


Figure 4.3: English language teachers experience

In terms of teaching experience from the above findings, 75% of the respondents indicated that they had a teaching experience of above four years. The proportion of the teachers who had a teaching experience of less than 1 year was 14.3% while 10.7% had a teaching experience of between 1 and 2 years. This indicates that although a good number of teachers had a wide teaching experience, they lacked some skills of teaching English to learners with HI.

4.3 Communication techniques used by teachers and competence in techniques

Communication between the HI learners and the teachers is the major huddle that needs to be overcome. The research investigated various issues that surround different modes of communication, competence in use of the techniques as well as classroom facilities and furniture, teacher organization of visual aids, communication methods and learners per class.

4.3.1 Classroom facilities and furniture

The results on investigation on availability of facilities in the the HI institutions is as in figure 4.4

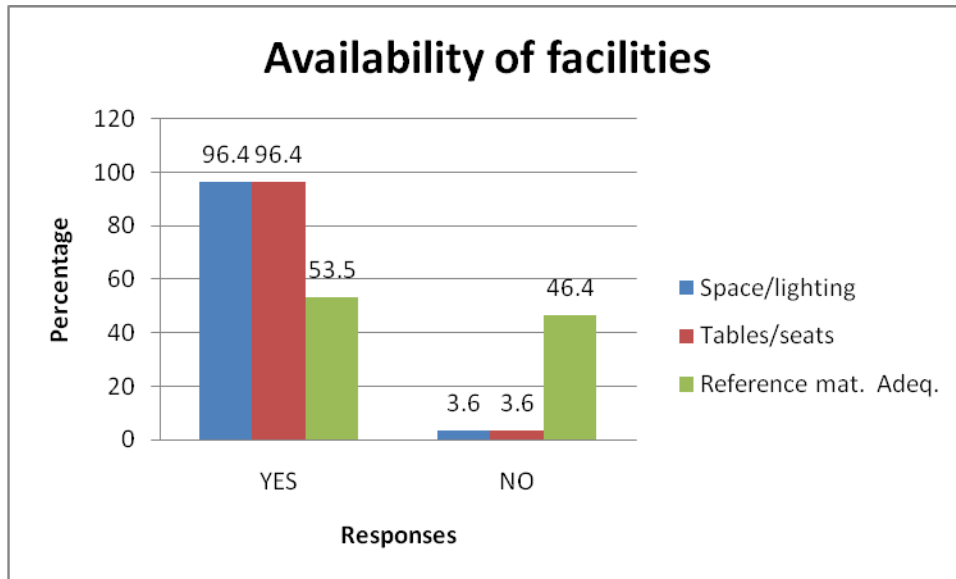


Figure 4.4: Adequacy of classroom facilities and reference materials

When the respondents were asked if there was enough space and lighting in the classes 96.4% of the respondents gave affirmative response as can be seen from figure 4.4. This is an indication that there is a good environment where the HI learners use their sight and eye contact to communicate with the teacher.

There was a similar response when the respondents were asked if there were enough tables and seats as 96.4% indicated that the seats and tables were enough as can be seen in figure 4.4. This is an indication that the learners are not negatively affected due to inadequate seating facilities; however, group hearing aid facilities which are very important in a HI class were not available as will be discussed later.

Availability of reference material in the learning institution is very important for effective communication of the English language teacher. Reference material will keep the teacher posted on new development on teaching the HI. They help the teacher get an insight of the best approach to communicate with the HI learners to understand concepts of the subject matter. The reference materials that are in place will also determine the techniques that will be used in communicating to the HI learners. With no reference materials the teachers are likely to be incompetent to use the various communication techniques when teaching English language to learners with HI.

When the respondents were asked if there were adequate reference material 46.43% indicated that the reference materials were inadequate while 53.57% indicated that the materials were adequate. This can be used as an indication that the reference materials may not be relevant or teachers may not have enough information to guide them identify the communication techniques that are necessary for them to be more effective.

4.3.2 Teacher utilization of visual aids

Visual aids are very important in teaching learners with hearing impairment. Figure 4.5 gives the results of investigation on their use in HI institutions.

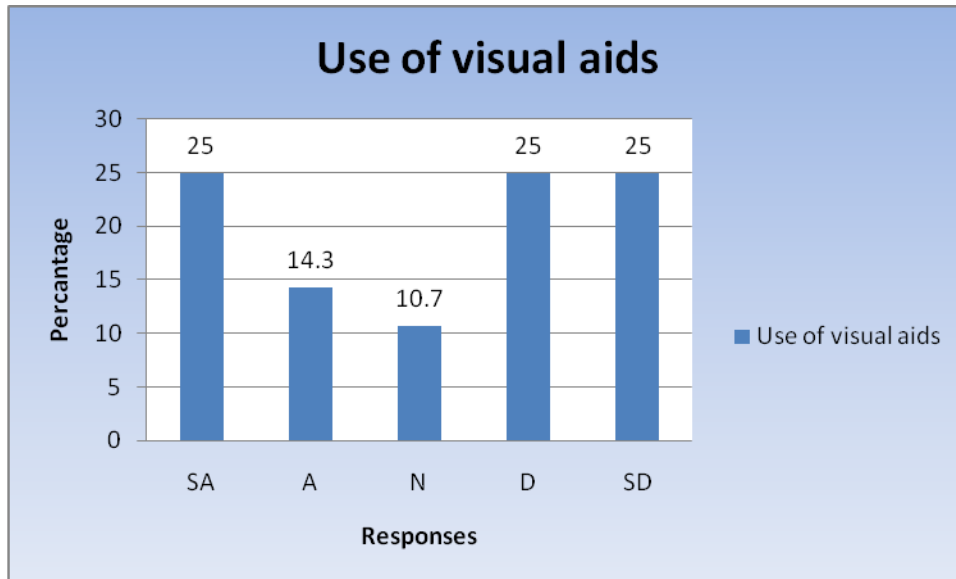


Figure 4.5: Use of visual aids by English language teachers

When the respondents were asked whether they were using visual aids as individuals 100% indicated they used them. This can be used as an indication that the English language teachers understand the importance of use of visual aids in communicating to the HI learners. On response to the statement that all teachers of English used visual aids the response was as in Figure 4.5. It can be observed from the figure that majority of the respondents were in agreement with the statement with 25% disagreeing while the same percentage strongly disagreeing. This could be used as an indication that as much as use of visual aids is popular among the language teachers, effectiveness and use of the teaching aids is varied among the teachers. Some had a feeling that their counterparts do not use them as a communication technique. A combination of various visual aids was mentioned by the respondents including, real objects, flash cards, toys,

pictures, photographs, chalkboard drawings and charts. This is a clear indication that there is a possibility of the teacher expressing ideas to the HI learners with good use of visual aids. The researcher observed that the visual aids available in the schools were not adequate and that those available were not being utilized fully by teachers especially those in upper primary.

4.3.3 Communication method and learners per class

As pointed out in VSO Jitolee 2007, sharing ideas and feelings as a means of communication can be done either orally using a spoken language or manually using signs and gestures. From the class observation, the main means of communication was mainly use of signs accompanied by occasional speech. A few teachers tried to sign exact English though they were not consistent but most learners were not able to get the concept immediately.

When asked if the communication method had effect on the learner's performance the results were as in Figure 4.6 below.

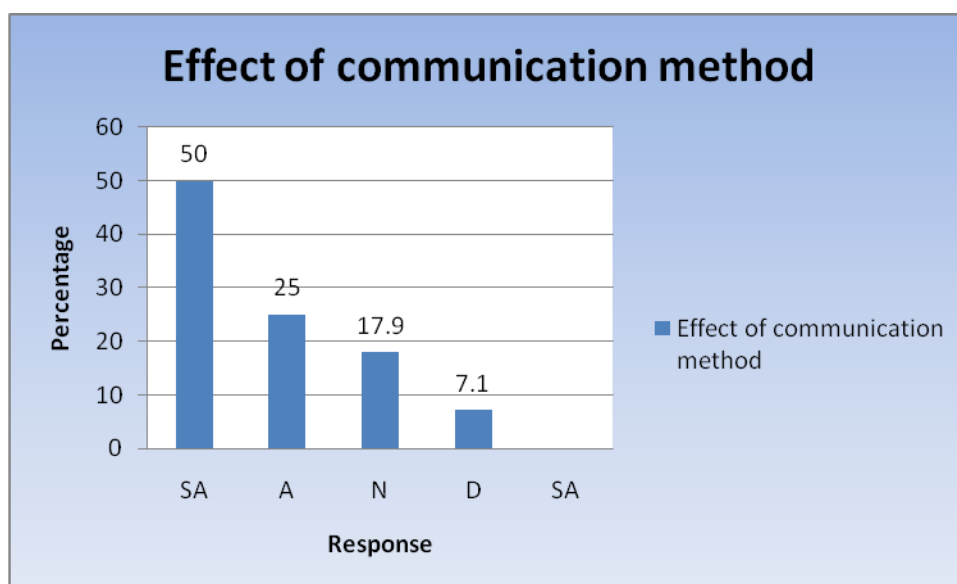


Figure 4.6: Effect of communication methods on learners' performance

From figure 4.6, it can be observed that 50.0% strongly agreed and 25% agreed that the method of communication used had effect on learners' academic performance. This is an indication that the communication method used is very important in ensuring that there is transmission of knowledge from the teacher to the HI learner. This is in agreement with Johnson, 2004 who observes that the ability of the HI to achieve academic success is tied to communication effectiveness of the teachers. This is also in agreement with inquiries pointing out that teachers lack of proper communication strategies is the major obstacle to the learners academic development. This also implies that inability of the teachers to use effective communication methods affects the learners' academic performance adversely.

4.3:4 Learners per Class

When the respondents were asked if the number of learners per class was affecting their teaching methods the results were as in Figure 4.7

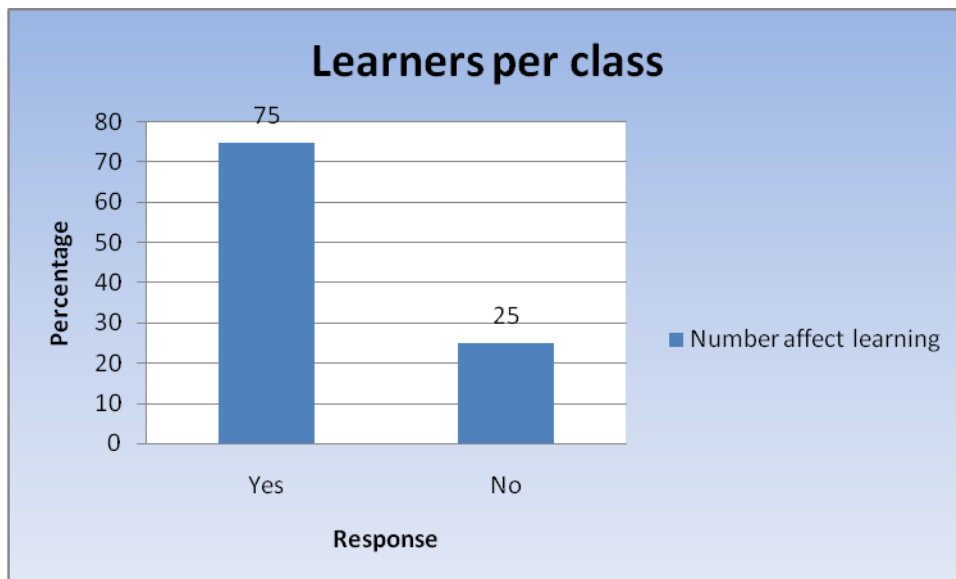


Figure 4.7: Number of learners' effect on learning

As can be observed from figure 4.7, It is clear that the teachers have a very low professional qualification of teaching the HI. The study established that low professional qualification of teachers could be a contributing factor to the challenges they face. This could also be due to lack of refresher courses for teachers of English on new trends.. Generally most classes were overenrolled despite the adequacy of space and some classroom facilities.

4.4 Teachers' views on teaching English to the HI

The research sought views of the teachers on how they found teaching of English to learners with HI in comparison to the curriculum content. The teachers were asked to respond to the statement that teaching English to the HI was difficult and the response on the relevance of curriculum was as in figure 4.8

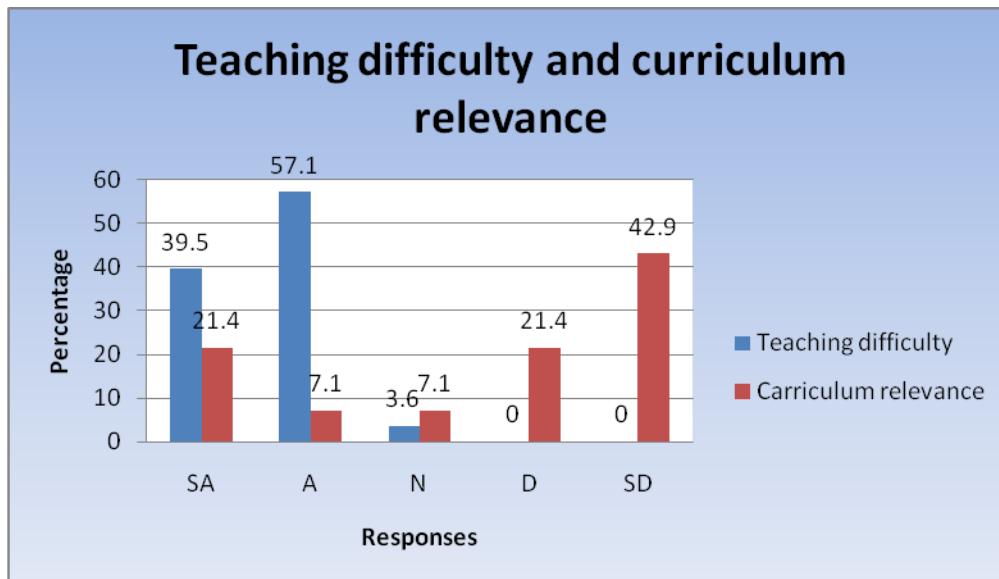


Figure 4.8: Difficulty in teaching English language

From figure 4.8, it can be seen that majority indicated that teaching English language to the HI was difficult with 39.29% indicating that they strongly agreed while 57.14% indicated they agreed. While teaching learners with hearing impairments may have some difficulty the response

could be an indication that the teachers have a negative attitude towards teaching the HI learners. When teachers feel that the English curriculum content is irrelevant it may cause a negative attitude towards teaching. The response on the relevance of the curriculum 42.9% indicated that they strongly disagreed that the curriculum was relevant while 21.4% strongly agreed. A negative attitude of teachers towards teaching the HI learners has adverse effect to the learners. The negative attitude towards teaching HI learners may be attributed to culture and beliefs as pointed out by Slavin, 1987. There is need for the teachers to be aware of the fact that their attitudes affect directly the HI learners. Evans, 1992 points out that teachers characteristics, their experiences and behavior in the classrooms contributes to the learning environment of the learners thus affecting the learners outcome. The teachers view on the curriculum may be a true reflection of the curriculum content which is in agreement with the observation made by MoEST, 2003 that low priority is given to special needs education and bureaucratic curriculum development structure among other observations. The teachers views therefore poses as a challenge to their willingness to adapt to proper methods of communicating with the HI learners when teaching English language.

4.5 Technological aids and effect of communication methods

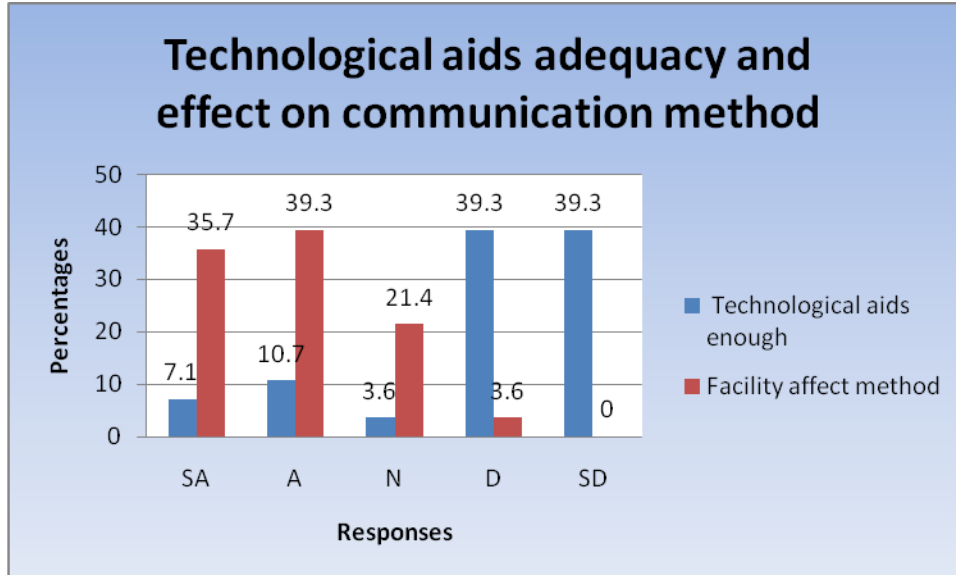


Figure 4.9: Availability of teaching aids and effect on communication method

Technological aids can play a very important role in communication between the teacher and the HI learner. Individual hearing aids and group hearing aids are some of the common technological aids which assist in teaching language to the HI.

When the teachers were asked if there was enough technological aids in the institutions the response was as by blue bars in figure 4.9. From the findings it can be seen that there were equal number of respondents who indicated that they disagreed and strongly disagreed with 39.3% in both cases. This was a true reflection of the school situation as there was no school with the provision of group hearing aids and it was established that no student had a cochlear implant. A few students had individual hearing aids although it was not established whether they were functional or not. None of the schools was using computer and projectors. The other technology which would be expected to be used in these institutions is Computer-Aided RealTime

Translation (CART), which uses a stenotype machine with a phonetic keyboard and special software that translates phonetic symbols into English captions almost instantaneously.

Captioning is another technology that has not been made use of to assist in teaching the HI. The headteachers indicated that availability of technological facilities as one of the factors determining the communication methods used by teachers. This is in agreement with observations made in MoEST (2003) that inadequate and inappropriate and/or obsolete technical training infrastructure, equipment and facilities are some of the challenges faced by Kenya Institute of Curriculum Development in its mandate of fulfilling, preparing and implementing the required curricula. This is an indication that the lack of the relevant technological facilities limits the communication methods which the teachers can use when teaching English to the HI.

4.6: Communication challenges faced by HI teachers

Teachers of English language were in agreement that they face various communication challenges in the process of teaching. From the study, it was established that communication of the teachers with the HI learners can be effective if teachers have quality professional training of teaching the HI. Table 4.2 gives the level of training of the HI teachers by comparison of general academic qualification and professional qualification.

Table 4.2: Comparison of academic qualification and professional training

Highest academic qualification * Professional training Cross tabulation						
			Professional training			Total
			Not trained	Certificate	Diploma	
Highest academic qualification	O-level/K.C.E/ K.C.S.E	Count	2	1	0	3
		Expected Count	.4	1.6	1.0	3.0
	A-level	Count	2	1	0	3
		Expected Count	.4	1.6	1.0	3.0
	Diploma	Count	0	12	0	12
		Expected Count	1.7	6.4	3.9	12.0
	Degree	Count	0	1	9	10
		Expected Count	1.4	5.4	3.2	10.0
	Total	Count	4	15	9	28
		Expected Count	4.0	15.0	9.0	28.0

From Table 4.2 it can be observed that there was no respondent who had acquired professional learning to a degree level. The highest number of respondents had their highest professional training being a certificate with 15 teachers indicating that they had this level of professional training while 9 had a diploma level of professional training. The respondents with an academic qualification of degree level were 10 while those with a diploma were 12. It is clear that the

teachers have a very low professional qualification of teaching the HI. The study established that low professional qualification of teachers could be a contributing factor to the challenges they face. This could also be due to lack of refresher courses for teachers of English on new trends. The other reason alongside low professional training is an indication that the teachers may lack keen interest in the best practices of teaching English language to the HI. There were four teachers who had high school certificate as their highest academic level of education. This is an indication that not all teachers who handle English language in the schools have studied English as a subject. This is an indication that there are not enough teachers who have trained and qualified to teach English language to the HI. As pointed out by Kinyanjui (1987) the caliber of teacher any school forms important input variables which have tremendous impact on the school outcome. The teachers' formal qualification, experience, motivation, creativity, interaction with learners and the methodology used has an influence on the performance of the learners' performance.

The teachers indicated that there was need to have more time allocated per lesson so as to deliver the required content to the learners. The other reason given for need for more time was that some learners were multiply handicapped and needed extra attention. Teachers indicated that it was challenging to handle the learners because of their entry level behavior. Most of the learners lacked early intervention as far as language acquisition is concerned, so they start school with no idea of any kind of language.

The teachers and the head teachers were of the opinion that those teaching Kenyan Sign Language which is also taught as a subject should not teach English language as this could easily

confuse them and confuse learners too. Learners were not able to differentiate the two subjects if taught by the same teacher.

The head teachers indicated that Total Communication was the recommended approach to communicating with the HI; however, the bilingual approach to teaching language was lacking among the teachers of English. The researcher wanted to know if the teachers were using the recommended methods of communication. It was found out that teachers needed to be conversant with the best approaches to teaching English language to the HI. The head teachers were asked whether they took any measures to ensure that the recommended methods were in use. The measures include induction at school level amongst the teachers. Students from Kenya Institute of Special Education (KISE) acted as role models during their teaching practice in the schools. Teachers who teach Kenyan Sign Language (KSL) are also not allowed to teach English grammar because of the difficulty in combining the two.

4.7 Discussion of Findings

The study sought to identify communication challenges faced by teachers of English language in selected primary schools for the hearing impaired in Central Kenya. This discussion is based on the objectives which were to: Establish communication techniques used by teachers of English in schools for learners with hearing impairment; Investigate the teachers' competence in the communication techniques used; Seek views of the teachers towards teaching English to learners with hearing impairment; Find out availability and use of technological aids by teachers of English language in schools for learners with hearing impairment; and find out communication challenges faced by teachers of English in schools for learners with hearing impairment. Purposive sampling was used in the selection of the study participants because only teachers were targeted as well as the head teachers, a group believed to be reliable. The research tools that were used to collect data from the sampled respondents were questionnaires, interview schedule and observation check list.

According to the findings of the study, In terms of gender 54.6 were male, while in terms of qualification the highest academic qualification was a degree level with 40.9, 54.6% had a certificate as their highest professional qualification while 36.4% had a diploma. It is clear that the teachers have a very low professional qualification of teaching the HI. The study established that low professional qualification of teachers could be a contributing factor to the challenges they face. This could also be due to lack of refresher courses for teachers of English on new trends.

The schools lacked adequate reference material for teaching English as 46.43% of the respondents were in agreement with this. 53.57% indicated that the materials were adequate. This can be an indication that the reference materials may not be relevant or teachers may not have enough information to guide them identify the communication techniques that are necessary for them to be more effective.

Communication methods were termed as being important in the learners' performance by 75% of the respondents. From the classroom observation, the main means of communication was mainly use of signs accompanied by occasional speech. Few teachers tried to sign exact English though they were not consistent but most learners were not able to get the concept immediately. It was established that Total Communication was recommended for teaching English language from the interview guide with head teachers but that was not the case.

The study revealed that 96.4% of the respondents find it difficult to teach English to learners with hearing impairment. 64.3% indicated that the English curriculum was not relevant for learners with hearing impairment. The response on the relevance of the curriculum 42.9% indicated that they strongly disagreed that the curriculum was relevant while 21.4% strongly agreed. This is a clear indication that teachers are not motivated to teach and therefore find it very difficult to cope with the situation. It was found out that teachers of English in schools for learners with hearing impairment face a lot of challenges when the learners confuse concepts in Kenyan Sign Language and English language as a subject in the use of methods of communication.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives the summary of the study, implication of the findings, conclusions, recommendation for policy and practice and recommendations for further study

5.2 Summary of the Major Findings of the Study

This section gives a summary of the major findings of this study. In terms of gender it was found that the male teachers were the majority (54.5%) and in terms of age 75.0% were above 35 years of age. The highest academic qualification of the respondents was degree level while the highest professional qualification was diploma level with 32.1% of the respondents having this level of professional qualification and (53.6%) had a certificate as their highest professional qualification.

In terms of classes and furniture it was found that most of the school did not have a problem in this area as majority of the respondents indicated that the facilities were enough. From the study it was found that the schools did not have adequate reference material with 46.4% of the respondents indicating that the reference material available was not adequate. The use of visual aids was found to be popular among the teachers with all the respondents indicating that they used the visual aids. Most of the respondents indicated that the communication method used played a big role in their effectiveness of communication with the HI learners with 75% being in agreement that the communication methods used affect the performance of the learners. The study revealed that the number of students the class had effect of the choice of the communication methods to be used.

From the study majority of the respondents indicated that they found teaching HI learners difficult where 39.5% strongly agreed and 57.1% agreed. With respect to relevance of curriculum the majority (64.3%) of the respondents found the curriculum not to be relevant. The study revealed that the use of technology was almost non-existent in the HI learning institution.

5.3 Implications of findings

In the study it has been found that the number of women teachers is almost equal to that of their male counterparts. This implies that there is no gender imbalance and caution should be taken to ensure that in future recruitments the balance is maintained. There is low professional qualification of teachers and this implies that there is need for the teachers to be given refresher courses. This also may be an implication that there is understaffing of teachers who are professionally trained and qualified to teach English to learners with HI. The fact that the reference materials are inadequate and lack of technological aids implies that enough funds have not been given to the institutions to make sure that these facilities are put in place. The study revealed that the English curriculum used in the institutions is not fully adapted to meet the communication needs for the HI learners and this poses a great challenge to the teachers. Learners' entry behavior as was found out implies that early intervention is not done at the right time thus the need to improve educational assessment services at the community level. The fact that the communication method determines the performance of the learners implies that inability of teachers of English not able to use some communication methods has adverse effect on the performance of the learners. Lastly, all these communication challenges facing teachers of English in schools for the HI contribute to poor performance in other academic subjects since English is the language of instruction.

5.4 Conclusions

1. The teachers of English in schools for the hearing impairment have low professional training as a result they are not able to use the right communication approaches for teaching English
2. The schools are not fully equipped with technological equipments which are important in teaching of English language to the HI and this makes it difficult for the teachers to perform their work effectively.
3. Teachers find it difficult to teach English as a subject as well as Kenyan Sign Language to the HI because learners get confused.
4. The existing English curriculum used in primary schools for the hearing impaired does not address communicational needs for the learners and therefore needs adaptations.
5. Communication method plays a very important role in determining learners' performance and this makes it important for the teachers to be efficient in using various communication approaches that will help the HI comprehend ideas and concepts.
6. Teachers of English lack sufficient information on the best practices of teaching English language.

5.5 Recommendations

1. It is recommended that government facilitate the upgrading of HI teachers professional training in existing institutions and expand the programs to the county level.
2. There is need for the government to ensure that all children with hearing impairment are given early interventions and start school at the appropriate time.

3. The government should equip the HI schools with the necessary technological equipment that will help teaching of English language
4. There is need to review and adapt the existing English curriculum to suit communicational needs for learners with HI.
5. There is need for regular seminars and refresher courses for teachers of English in schools for the HI
6. The government through the Ministry of Education should organize for exchange programmes for teachers in schools outside the country to find out the best practices on teaching English language to the HI.
7. Proper monitoring and evaluation should be done on teaching and learning of English in schools for the HI

5.6 Recommendations for Further Research.

1. A study to be done on the impact of Kenyan sign language on English language in schools for the hearing impaired in Kenya.
2. A study to be done on availability and accessibility of equipment which are required by the persons with special needs in the country.
3. A study be done on the appropriateness of the HI curriculum in primary schools

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APPENDIX 1:

Letter of Introduction

Joyce Kalee Mathew
Kenyatta University,
P.O.BOX 43844,
NAIROBI.

5th June 2012

The Principal

.....

Dear Sir/Madam,

**REF: COMMUNICATION CHALLENGES FACED BY TEACHERS OF ENGLISH
LANGUAGE IN PRIMARY SCHOOLS FOR THE HEARING IMPAIRED IN
CENTRAL KENYA.**

I am a post- graduate student of Kenyatta University, School of Education in the department of Educational Communication and Technology. I am conducting a research on the topic stated above. Your institution is among the institutions selected for this study. The English language teachers in your institution will be required to participate in the study by responding to the questionnaire. The collected information will be treated with confidentiality and will only be used for the purpose of this study. Your co-operation will be highly appreciated.

Thank you in advance.

Yours faithfully,

Joyce.

Part 2

1. Do the classrooms have enough space and lighting?

Yes No

i. If No, does it affect your methods of teaching

Yes No

ii. If yes , explain how it affects _____

2. Do the HI learners have enough tables and seats?

Yes No

3. If no does this affect your method of communication?

Yes No

If yes explain _____

4. Do you have enough reference books and teaching materials that are required in teaching the HI learners English language?

Yes No

If no, does it affect your teaching?

Yes

No

If yes explain _____

5. Do you use teaching aids when teaching the hearing impaired learners?

Yes

No

If yes specify _____

6. Does the number of HI learners you teach in the English language class affect your teaching methods?

Yes

No

If yes explain _____

7. Do you use teaching aids when teaching the HI learners English language?

Yes

No

If yes, how often do you use them?

Always

Sometimes

8. If your answer for number 7 is no, what makes you not use the teaching aids?

Not available Expensive Not adequate

Specify any other reason _____

Part 3

Please indicate whether you: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D) or Strongly Disagree (SD) with the following statements by putting a tick in the corresponding column. Kindly put only one tick against each statement

STATEMENT	SA	A	N	D	SD
Teaching English language to HI learners is difficult					
Facilities available in the classroom determine choice of teaching method used.					
High teacher student ratios affect the method of communication					
The availability or lack of teaching/learning facilities determines choice of instructional method used.					
All teachers use visual aids while teaching.					
The choice of communication methods determine the HI learners academic performance					
There are enough technological aids available for teaching HI learners in the institution.					
The current English language curriculum is relevant for the HI learners					

APPENDIX 3

Head teachers Interview Schedule

Kindly provide the information required in this questionnaire. The information you give will strictly be used for educational purposes and will be treated with confidentiality.

1. What is the number of the HI learners in the school?

2. What is the total number of teachers in the school?

3. What is the number of English language teachers in the school?

4. Comment on the status of the school in terms of the adequacy of the following,
 - i. Classes_____

 - ii. Teachers_____

 - iii. Facilities_____

5. In which areas of the school lack facilities? _____

6. Comment on the state of teachers in terms of training_____

7. What are the methods of communication recommended to be used by the English language teachers?_____

8. Do the English language teachers put into use the recommended communication methods?

9. What factors determine the choice of communication methods teachers use?

10. What measures are in place to ensure that teachers use recommended communication methods?

11. Do the communication methods used have any impact on HI learners English language performance? If yes explain how

APPENDIX 4

Observation Checklist

The researcher will describe the observations he will make on the issues addressed on the observation checklist

1. School environment

- i. Is the environment quiet or noisy?
- ii. Are there playing grounds for the HI learners?
- iii. Are there facilities for the HI learners to play with?
- iv. Are there any obstacles that may hinder the HI learners from playing?

2. Class environment

- i. Are the classes spacious to accommodate the HI learners?
- ii. Are there enough classroom for the student population?
- iii. Is the classroom seating arrangement favorable for HI learners?
- iv. Is there utilization of hearing aids in the classrooms?
- v. Which communication methods are used to teach English language?
- vi. What communication challenges do teachers of English observe?

3. Chairs/ seats and tables/desk

- i. What do the children use to sit and write on?
- ii. Do the teachers have the facilities?
- iii. Are the facilities enough for the HI learners?

4. Teaching aids

- i. Are there teaching aids in the school/classes and of what type?
- ii. Do the teachers use the teaching aids to teach?
- iii. Are teaching aids adequate?

APPENDIX 5

Distribution of Institutions for Hearing Impaired in Kenya

Region	Primary	Secondary	Technical Institutions
Coast	8	0	0
Western	12	1	0
Central	5	1	0
North Eastern	3	0	0
Eastern	10	0	0
Nyanza	17	1	0
Rift Valley	14	0	0
Nairobi	5	0	1
Total	70	3	1

APPENDIX 6

PROJECTED BUDGET

ITEM	UNIT	UNIT COST Kshs.)	TOTAL (Kshs.)
Lap top	1	60,000.00	60,000.00
Digital camera	1	10,000.00	10,000.00
Printing of research instruments			
Check-lists			
Questionnaires	20	5	100.00
	60	20	1200.00
Flash disks	2	1,000.00	2,000.00
Compact Disc.	10	20.00	200.00
Stationery,			
Pens	10	20.00	200.00
Pencils,	10	10.00	200.00
Rubbers	6	20.00	120.00
Proposal			
Typing	500	20.00	10,000.00
Printing	500	10.00	5,000.00
Photocopying	1,000	2.00	2,000.00
Binding	8	50.00	400.00
Transport	-	-	12,000.00
Thesis			
Typing	500	20.00	10,000.00
Printing	500	10.00	5,000.00
Photocopying	1,000	2.00	2,000.00
Draft binding	10	100.00	1000.00
Final thesis binding	6	500.00	3000.00
Miscellaneous	-	-	12,000.00
Total direct costs			<u>124420.00</u>
Overheads			<u>12442.00</u>
Grand total			<u>136862.00</u>

APPENDIX 7

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349
254-020-310571, 2213123, 2219420
Fax: 254-020-318245, 318249
When replying please quote
secretary@ncst.go.ke

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: **NCST/RCD/14/012/827**

Date: **25th June 2012**

Joyce Kalee Mathew
Kenyatta University
P.O.Box 43844-00100
Nairobi.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Communication challenges faced by English language teachers in primary schools for the hearing impaired in Central Province, Kenya,*" I am pleased to inform you that you have been authorized to undertake research in **Central Province** for a period ending **31st December, 2012**.

You are advised to report to the **Provincial Commissioner and the Provincial Director of Education, Central Province** before embarking on the research project.

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

A handwritten signature in black ink, appearing to read 'M. K. Rugutt'.

DR. M. K. RUGUTT, PhD, HSE.
DEPUTY COUNCIL SECRETARY

Copy to:

The Provincial Commissioner
The Provincial Director of Education
Central Province.

Research Permit No. NCS/RC/14/012/827

Date of Issue 25th June, 2012

Fee received KSh 1,000

THIS IS TO CERTIFY THAT:

Prof./Dr./Mr./Mrs./Miss/Institution

Joyce Kalee Mathew

of (Address) Kenyatta University

P.O. Box 43844-00100 Nairobi

has been permitted to conduct research in

Location

District

Central

Province

on the topic: Communication challenges faced

by English language teachers in primary

schools for the hearing-impaired in Central

Province Kenya

for a period ending 31st December, 2012



Applicant's

Signature

Secretary

National Council for

Science & Technology

for a period ending 31st December, 2012

CONDITIONS

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



REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT