Box 30197

ESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFII REQUIRMENTS FOR THE AWARD OF MASTER OF ARTS D
JECT PLANNING AND MANAGEMENT OF THE UNIVERSITY OF

BY

RUMBA NYAMAWI RUMBA

MAIROBI

2012

FORMANCE OF KENYA CERTIFICATE

AST REGION, KENYA

JCATION AMONG CHILDREN WITH HEARING IMPAIR

OF P

#### **DECLARATION**

I, the undersigned, declare that this research project report is my own original work and has never been presented to any other university or institution for examination purpose.

Signature:

Date:

RUMBA N. RUMBA

L50/66740/2010

This research project report has been submitted for examination with my approval as the University supervisor.

LECTURER, UNIVERSITY OF NAIROBI SCHOOL OF CONTINUING & DISTANCE EDUCATION

MOMBASA CAMPUS P. O. BOX 83732-80100 /TEL: 0202026100

08/2012

SIGNATURE:

DR. MOSES OTIENO

LECTURER, DEPARTMENT OF EXTRA MURAL STUDIES

UNIVERSITY OF NAIROBI

DATE:

# **DEDICATION**

This study is dedicated to my office boss Mr. Kimani S. Kiberu for the support in kind during this study. May God bless him abundantly

#### **ACKNOWLEDGEMENT**

My sincere gratitude goes to the University of Nairobi, my supervisor Dr. Moses M.M. Otieno and other lecturers for their guidance, support and availability. Their commitment and invaluable advice has greatly contributed to the preparation of this report. I also extend a lot of thanks to my family for the enabling environment they accorded me throughout. Finally, to the almighty God for his abundant grace, life and good health that has contributed to the success of this work.

# TABLE OF CONTENT

DEC	LARATION	i
DED	OICATION	ii
ACK	NOWLEDGEMENT	iii
LIST	r of tables	vi
LIST	r of figures	vii
ABB	REVIATIONS AND ACRONYMS	viii
ABS	TRACT	ix
СНА	APTER ONE: INTRODUCTION	1
1.1	Background of the study	1
1.2	Statement of the problem	3
1.3	Purpose of the study	3
1.4	Objectives of the study	3
1.5	Research questions.  Study hypothesis	4
1.6	Study hypothesis	4
1.7	Significance of the study	4
1.8	Basic assumptions of the study	4
1.9	Delimitations	5
1.10	Limitations of the study	5
1.11	Definition of significant terms	6
1.12	Organization of the study	7
CHA	APTER TWO: LITERATURE REVIEW	9
2.1	Introduction	9
2.2	Theory related to factors influencing learning of the deaf	9
2.3	Types of hearing impairment	13
2.4	Implications on learning	14
2.5	Intervention strategies for a child with hearing loss	15
2.6	Conceptual framework	18
2.7	Summary of literature	19

CHA	PTER THREE: RESEARCH METHODOLOGY20
3.1	Introduction
3.2	Research design
3.3	Target population
3.4	Sample size and sampling techniques
3.5	Research instruments
3.6	Validity and reliability of the instruments
3.7	Data collection procedures
3.8	Data analysis techniques
3.9	Ethical considerations
3.10	Operational definitions of variables24
CHAI	PTER FOUR: DATA ANALYSIS, PRESENTATION AND
INTE	RPRETATION25
4.1	Introduction
4.2	Response rate
4.3	Demographic profile of respondents
4.3.1	Respondents age bracket
4.3.2	Working period of the workers
4.3.3	Level of education
4.4	Teachers professionalism
4.4.1	Areas of specialization in special needs education by teachers28
4.4.2	Duration of teaching in special schools of children with hearing impairment29
4.4.3	Teachers weekly workload30
4.4.4	Competency in sign language31
4.4.5	Class enrolment31
4.4.6	Academic problems faced by learners in classes
4.5	School administrators professionalism33
4.5.1	Teaching staff situation
4.5.2	Mode of communication used in schools34
4.5.3	Rate of headship turnover in special schools
4.6	Education officers supervision35

4.6.1	Education of	fficers training in spec	cial ne	eds		35
4.6.2	Engagement	in formulation of pol	licies			36
4.6.3	Awareness o	n challenges faced by	y learn	ers with hearing	impairment	36
4.7	School mana	gement board		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	37
4.7.1	Number of n	nanagement board me	eetings	in a year		37
4.8	Test of hypo	thesis		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	38
СНАІ	PTER FIVE	E: SUMMARY	OF	FINDINGS,	CONCLUSION	AND
RECO	OMMENDAI	TIONS			• • • • • • • • • • • • • • • • • • • •	42
5.1	Introduction					42
5.2	Summary of	findings				42
5.3	Discussion of	of findings				43
5.4	Conclusion.	• • • • • • • • • • • • • • • • • • • •	• • • • • • •			44
5.5	Recommend	ation			• • • • • • • • • • • • • • • • • • • •	45
5.6	Suggestion f	or further research	• • • • • • • •	• • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	47
REFE	RENCES	• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	48
Ap	pendix I:	Letter of transmitta	al to Te	eachers Service	Commission	52
Ap	pendix II:	Letter of transmitta	al to re	spondents		53
Ar	pendix III:	Ouestionnaire				54

## LIST OF TABLES

Table 3.1	Target population and sampling size	21
Table 3.2	Operational definitions of variables	24
Table 4.1	Response rate	25
Table 4.2	Respondent age bracket	26
Table 4.3	Duration in service	27
Table 4.4	Level of education	28
Table 4.5	Area of specialization in special needs education	29
Table 4.6	Duration of teaching	30
Table 4.7	Teacher's workload in a week	30
Table 4.8	Competency in using sign language	31
Table 4.9	Average number of pupils in a class	32
Table 4.10	Academic problems faced by learners	32
Table 4.11	Teaching staff situation.	33
Table 4.12	Mode of communication used in schools	34
Table 4.13	Headship turnover in schools	35
Table 4.14	Training in special needs	35
Table 4.15	Formulation of policies.	36
Table 4.16	Awareness on challenges faced by learners	37
Table 4.17	Management board meetings	38
Table 4.18	Test of hypothesis (teachers weekly workload)	39
Table 4.19	Test of hypothesis (class enrolment)	40
Table 4.20	Test of hypothesis (teaching staff situation)	41

# LIST OF FIGURES

Figure 1:	Conceptual	ramework1
-----------	------------	-----------

#### ABBREVIATIONS AND ACRONYMS

BEA Better Ear Average

dB deci Bells

HI Hearing Impairment

KCPE Kenya Certificate Primary Education

KISE Kenya Institute of Special Education

KSL Kenya Sign Language

SNE Special Needs Education

TAC Teachers Advisory Center

TSC Teachers Service Commission

WHO World Health Organization

#### **ABSTRACT**

This study investigated institutional factors influencing academic performance of Kenya Certificate of Primary Education on children with hearing impairment in special schools in Coast region, Kenya. The statement of the problem was the growing concern of the institutional factors influencing academic performance of learners with hearing impairment in the region, prompting the investigation to find solution to improve performance in national examinations. The research was done to establish the extent to which school environment influence KCPE results of learners with hearing impairment in special schools. This was when the researcher looked at the staffing situation to establish whether there were enough teachers in the targeted schools. Class enrolment was also checked to find out if teachers were handling large numbers of learners. Teacher's workload was also highlighted to determine whether they were being overworked which could contribute to working poorly. The research also established the extent to which trained personnel on special needs education influence KCPE performance. This was to find out whether the teachers, school management board members and education officers had undergone trainings on special needs education. That would determine if the concerned had relevant skills to enable the learners perform better in exams. An example of such required skills was the Kenya sign language. This was the only way someone would communicate effectively with hearing impaired learners. Social factors which might have influenced KCPE performance were also highlighted. Awareness on challenges faced by learners with hearing impairment was put into consideration. That would help the stakeholders to deal with the challenges and minimize them where possible. The research also established the extent to which teaching/learning resources influence KCPE performance. This was to determine whether the schools had enough teaching and learning resources such as sign language text books and hearing aids. When such resources would be lacking performance in national examinations would also be affected. Other theories related to the topic were also highlighted to determine what other researchers found out and whether their findings had some impact on the topic in searching for solution of the problem. All the findings would be used by the researcher to make recommendations and suggestions to the relevant authorities for intervention measures aiming at improving KCPE performance for learners with hearing impairment in special schools.

# CHAPTER ONE INTRODUCTION

#### 1.1 Background of the study

Education is very important to all persons all over the country and the world at large. All children have the right to education, regardless of their different diversities. The government is emphasizing on education for all policy to see to it that even the disabled are catered for. The hearing impaired children in Mombasa and Kwale counties are faced with the following problems in learning i.e. composition writing, reading, spelling and arithmetic (especially in reasoning).

Most educational institutions in Kenya today fight to ensure that they excel in examinations and appear on the Kenyan educational map among their pears. It is therefore evident that most if not all the hearing impaired learners are likely to get embarrassed after the national examination results are announced. According to the National report from the Ministry of Education (2009), the presence or additional child difficulties, language used in the home and socio-economic status appear to be more stable predictors of exams success than is the degree of hearing loss.

The report further explained that with the advancement of inclusive education, educational placement (i.e. main stream or special school) does not appear to influence reading performance when other factors are taken into account, although performance in examination especially before modifying examination structure for inclusion of materials, type of language, picture and sign formation in the examination papers from year 2006 has marked improvement of performance. According to Hilsbrough (2003) it has been observed that in many studies the degree of hearing loss itself does not correlate with education achievements. In those studies especially one carried out in New York in 2002, found out that where there is a relationship between the degree of hearing loss and education achievements the correlation may well be seen to other hidden factors. There would be seen to be more educationally meaningful ways to categorize hearing loss than the conventional means of better ear average (BEA) pure tone thresholds.

More facts emerged from the study which found out that deaf learners in general lag behind hearing learners in their achievements in Mathematics, reading, Science but appears less pronounced in social studies than for the first group.

School factors include teacher qualifications and effectiveness appear to have the greatest effect on Mathematics performance. Similar studies carried out in China by Chengli (2004) pointed out that other factors influential are gender and parental support in both studies by Hilsbrough and Chengli, with respect to gender; female deaf learners appear to out perform male deaf learners. This is so perhaps because they have more interests in learning than male who according to the report prefer practical subjects, rather than concentration on theory work. Other studies carried out in South Africa, Nigeria and Botswana (Africa) revealed the same pattern of subjects' performance, where the selection and choices of the subjects showed preference for social studies. The study was carried out in the coast province, but involved Kwale and Mombasa counties. Kwale is approximately 50 km from Mombasa County. It is accessible from Mombasa general post office, southwards, after crossing the Likoni Ferry. The region lies between latitude 39.1° E and 39.2 ° W longitudinally, and between longitude 3.1° S and 3.01° N. the district enjoys a warm climate as a result of its proximity to the Indian Ocean, where warm moisture is carried by winds westwards, but is attracted downwards providing a warm cover, but with powerful in flow of strong winds. Mombasa district lies between latitude 31.1° E and 39.3° W, attitudinally it lies between 31.3° S and 3.02° N.

Both Mombasa and Kwale experience rain almost for eight months of the year, but heaviest between April to May in both the counties. A number of progressive economic enterprises are carried out. They include modern banking systems, advanced agricultural enterprises such as farming in coconut and modern fishing enterprises, using latest mechanized boats and refrigeration services. In terms of ethnicity and cohesion in neighborliness, there is harmony between different ethnic groups that occupy the region.

#### 1.2 Statement of the problem

With mounting pressure on the attainment of vision 2030 being the latest development blue print from the government of Kenya, most administrators and teachers in special schools in order to capture this mood have tuned their focus on the over present challenge of poor performance of learners. Head teachers and teachers in special schools, such as schools for learners with hearing impairment in both Kwale and Mombasa Counties were more concerned with learner's underperformance. Complaints had been raised by parents of children with hearing impairment about the poor performance of their children, putting the blame on school administrators and teachers. Poor performance in special schools is evidenced by the KCPE results analysis obtained by hearing impaired learners at Ziwani and Kwale schools for the Deaf in Mombasa and Kwale Counties respectively for the last five years where out of 500 marks none of the two schools had obtained a mean score of more than 150 marks, that is, between 2007 to 2011 KCPE results analysis.

In 2007 Kwale School had a mean score of 109.10 while Ziwani School had 114.00 marks. By the year 2011 Kwale School for the deaf had a mean score of 117.00 marks while Ziwani School had 125.00 marks. None of the two schools have had a mean score of at least 250.00 marks. Such were the basis that promoted this study so as to find solution to improve KCPE performance.

#### 1.3 Purpose of the study

The purpose of the study was to investigate the factors influencing the academic performance of hearing impaired children in special schools in Coast region.

#### 1.4 Objectives of the study

The objectives of the study were:-

- i. To establish the extent to which school environment influence KCPE results of the learners with hearing impairment in special schools.
- ii. To establish the extent to which trained personnel on special needs education influence KCPE performance in special schools.
- iii. To investigate the extent to which social factors influence KCPE performance of learners with hearing impairment in special schools.

iv. To determine the extent to which teaching/ learning resources influence KCPE results in special schools for learners with hearing impairment.

#### 1.5 Research questions

This study was guided by the following research questions devised to support in gathering the information regarding the research topic.

- i. To what extent does school environment influence KCPE result of the learners with hearing impairment in special school?
- ii. How do teaching / learning resources influence KCPE results in special schools for learners with hearing impairment?
- iii. To what extent do trained personnel on special needs education influence KCPE performance in special schools?
- iv. To what extent do social factors influence KCPE performance of learners with hearing impairment in special schools in Mombasa and Kwale counties?

#### 1.6 Study hypothesis

- H<sub>1</sub> There is relationship between teacher's workload and KCPE performance
- H<sub>1</sub> There is relationship between class enrolment and KCPE results
- H<sub>O</sub> There is relationship between teaching staff and KCPE performance

#### 1.7 Significance of the study

If the findings of this study are put into consideration it would benefit the school administrators, teachers, management committees and the Government on how to strategize for better results of the learners. This would mean therefore persons with hearing impairment would compete equally for the job opportunities with others thereby uplifting their living standards.

#### 1.8 Basic assumptions of the study

The following were some of the assumptions expected to be encountered during the study:-

- i. This study assumed that the respondents would cooperate and assist the researcher in obtaining the data without hesitating.
- ii. It was assumed that the findings of the study would be implemented by the government and the responsible individual in the teaching fraternity so as to improve performance.
- iii. The information given by the respondents would assist the researcher in investigating the factors influencing KCPE results of children with hearing impairment.

#### 1.9 Delimitations

The research study was carried out at Kwale and Ziwani schools for the hearing impairment in Kwale and Mombasa counties respectively. It covered two special schools that had been doing KCPE out of the five schools in the counties. The scope of variables was teachers of the learners with hearing impairment, the school management committees and education officers. This was because these teams of professionals are the ones who interacted and handled day to day matters of the learners in schools.

#### 1.10 Limitations of the study

The following were some of the limitations were \encountered during the study.

#### 1.10.1 Poor infrastructure

The researcher used to commute from Kinango district where the state of the road was rough. There were no tarmac roads in the whole district, hence traveling took a lot of time before reaching Kwale and Mombasa where the research was conducted. Sometimes that would make the researcher not meeting the targeted people in time.

### 1.10.2 Resistance of the respondents

Some of the respondents could not willingly respond to the questionnaire. They wanted to be given a token claiming that they had very busy schedules and that the researcher

was preparing himself for a big gain, hence, he needed to pay something before being assisted

#### 1.10.3 Working environment

Since the introduction of counties, many officers in district offices especially TSC department were deployed and transferred to other counties. This resulted into reducing the number of personnel, hence, increasing workload where the researcher was assigned some office duties apart from teaching and assessing children with special needs. That forced the researcher to delay in conducting the researcher obligations.

#### 1.11 Definition of significant terms

Attention deficit : lack of concentration whenever one is doing an activity.

Cognitive abilities : mental process allowing individual to know, conceptualize

and remember.

**Developmental delay:** a big delay in cognitive –physical, social and emotional.

Dyslexia : severe reading difficulties

Express : say, talk, give verbal approach to someone to be understood

Morphology: inclusive of grammar and order of works in speech and

written form

Perception : process of recognizing and interpreting information

Received through senses

Receptive : receiving and recognizing information from a given source

Semantics : meaningful sentences construction in a given language.

Sight word : a word a learner recognizes instantly after coming across it.

Syntax : grammatical structure of a given sentence.

**Inclusive**: an area of specialization in special needs education where

all diversities of learners are integrated as one unit or class.

Hearing aids : Gargets fitted into the ears of an individual whose hearing is

affected to boost his/her hearing.

#### 1.12 Organization of the study

The organization of the study comprised of four chapters with detailed items. In chapter one the study had highlighted the background information which explained the need for such a study to be done. The statement of the problem which was the growing concern of poor performance in national examinations of learners with hearing impairment in special schools was also highlighted. Other items explained in chapter one were purpose of the study, objective, research questions, test of hypothesis, significance of the study, basic assumptions, delimitations, limitations and definitions of significant terms.

Chapter two discussed about literature review. The contents highlighted were theories of related literature from different studies which have been done earlier by other writers. Learning of children with hearing impairment could have different implications depending on the type of hearing impairment a learner has. Implications in learning, intervention strategies, conceptual framework and summary of literature were items captured in this report.

Under chapter three the study highlighted the following items, that is, research design, target population, sample and sampling size, research instruments and data collection procedures. Other items highlighted in this chapter were data analysis techniques, ethical consideration as well as operational definitions of variables.

In chapter four the study discussed on the data analysis, presentation and interpretation. Items discussed were the response rate, demographic profile of respondents, areas of specialization in special needs by teachers, duration of teaching, competence in sign language and class enrolment in the two schools. Academic problems faced by learners, education officers' supervision and how school management board influenced national examinations were also discussed. In each item a table was drawn showing categories, frequencies as well as percentages of the findings. Study hypothesis was also tasted and calculations done using chi-square.

Chapter five comprised of the summary of the findings, conclusions and recommendations. The items discussed were the discussions of findings and suggestions for further research. This chapter summarized the whole study and recommendations for the government and other stakeholders for implementation.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1. Introduction

This chapter gives a detailed literature on theories related to factors influencing learning of children with deafness. This section also deals with literature relevant to the study, causes and types of hearing loss, implications on learning and intervention strategies for a child with hearing loss.

#### 2.2 Theory related to factors influencing learning of the deaf children

Many theories have come up related to learning of children with special needs. One such a theory is perceptual motor which was developed by Michael Strauss (1067) and has now been adopted to explain many factors related to learning, away from such theories as once developed by Jean Piaget and Albert Bandura both in the 16<sup>th</sup> century. In this theory there is the act of making sense of what is heard, seen or felt, enabling understanding of environment, while motor refers to movement. The theory describes the interaction of various channels of perception with motor ability to enhance learning. According to this theory, children with perceptual motor problems will experience difficulties in forming concepts, learning academic subjects and executing cognitive skills such as talking, hearing in order to respond. They will therefore experience problems in reading, writing, talking and other language skills. It makes it difficult therefore to respond without hearing. In the conceptual frame work factors that influence academic performance are the nature of their handicap, (mild, moderate, and severe).

This has an effect on hearing impaired learners where the consequence is their poor academic performance. Learners with hearing impairment are said to be lagging behind three times lower than those without such a condition. The following factors have been known to influence learning as far as hearing impairment is concerned.

#### 2.2.1. Degree of hearing loss

According to the World Health Organization (WHO). Hearing loss is classified into four major categories:-

- i. Children with mild hearing loss (20-40 dB)
- ii. Children with moderate hearing loss (41-70 db)
- iii. Children with severe hearing loss (71-90 dB)
- iv. Children with profound hearing loss (More than 90 dB)

In all the cases except the profound hearing loss, others can use hearing aids and hear fairly well. In the 1<sup>st</sup> category 20-40 dB are found in normal schools. It is only the second one (41-70 dB) and the third 71-90 dB who are in special schools and communication is mostly using sign language. This makes them capable of learning using sign language and other convectional means of communication.

#### 2.2.2. Poor Language Development

Linguistic research by Ernest, (2001) explains that language can be defined as a code whereby ideas about the word are presented through a conventional system of arbitrary signals for communication. It can also be defined as a socially shared code of conventional system for representing concepts or ideas through the use of arbitrary symbols. Githanga (2003) explains that language development is a very important achievement of childhood and is the most fundamental characteristics of human being.

The process of language development starts at early childhood through interaction with adults and peers. The child develops a better understanding of the language (spoken) and with maturation the child gradually develops the capacity to express him/herself in the immediate environment. Gearheart (2001) cites that language develop out of certain basic universal linguistic structures present in human organisms as part of his native environment. Hill (2001) states that language acquisition device enables the child to process the incoming language where as other researchers say language represent verbal habits consisting of movement of speech muscles, where as some of the hearing impaired children have problems in the movement of the speech muscles. According to Erin (1982) language is important in everyday use by human beings because it is a major tool for

communicating and forming relationships. This is because it helps in retention and thinking. Most researchers have confirmed that language acquisition is facilitated through hearing. In ordinary circumstances, children with hearing impairment would be expected to acquire language from their parents but it is difficult to acquire language from their hearing parents. They cannot use spoken language effectively for day – to – day communication because they are unable to hear what they say and what other people are saying Garros and Baccher (2001), Evans (2000). Therefore these children will lack words to express thoughts, feelings, ideas, needs and desires like other children. Hence they need a special approach for language acquisition as they struggle to communicate. Oliver (2003),states that hearing of language is through association between stimulus and the response. These children have difficulties because they cannot speak the language of behavior, actions, have moods and attitudes as expected. The children have problems in trying through gestures, pantomime and body language and failure to achieve much leads to despair. It is this despair that constitutes a factor in their learning.

#### 2.2.3. Poor environmental accommodation

Kinaga (2001) review of the literature reveals that research on academic achievement shows that hearing impaired children lag behind academically. The role in which the school environment plays in academic achievement has also been taken into account. For instance, Kinaga (2002) states that "Education achievement and any other differences occur as a result of society's inability to adequately help deaf people develop and use their abilities rather than the result of inherent deficiencies in their abilities. The problem of the hearing impaired child can be created by the environment or those who are charged with his care rather than the child". The family climate also had a significant effect on a hearing impaired child's learning. According to Meadows (2003), 90% of hearing impaired children are born to hearing parents. As a result the home environment is predominantly oriented towards the restoration of hearing in order to make the deaf children worthy of integration into the hearing society.

#### 2.2.4. Educational placement and approach

According to Mibei (2003), a number of research studies have linked mainstream placement with higher achievement but many of these studies have not accounted for confounding factors, Even where other factors are taken into account, direction of cause and effect between placement type and achievement is often not known. Given the heterogeneity of the deaf learner population one difficulty element for researchers is matching groups of pupils in different placements, but it is highly likeable that placement is a factor influencing academic performance.

The few studies of high achieving deaf pupils have concerned with pupils in oral programmes but in no case can people be sure that the pupils are representative of the whole population. Other problems in research on educational approach have been the lack of clarity over terminology, the difficulty in gathering accurate information and the fact that bilingual programmes in places like Kenya, Uganda are relatively recent and still relatively few. Generally according to Mibei (2003), deaf children placed in schools for the deaf, have a better performance than their counter parts placed in "normal" schools.

#### 2.2.5. Test appropriateness for deaf learners

Some tests might not be appropriate because they fail to account for the different lives and experiences of deaf children. Moreover, there are problems in the administration of some tests in that the instructions can be unclear, scoring can be open to basic and the practice effect can influence the results. When coding data, the measured degree of association between any two factors is often an artifact of the method of measurement chosen. The convectional categories for testing may not be clear to deaf children (Monthly, 2003), when seeing low marks on tests, these children may lose interest and fail to perform better that means, this becomes a factor for poor performance as they fear to work hard as they believe they cannot improve.

#### 2.2.6. Teacher factor that influence academic performance

This refers to training level of teachers. According to Mileshvia (2001), where a teacher is incompetent in sign language and other convectional means of communication, deaf children's performance will be low in comparison to better use of sign language and other convectional communication methods. Lack of communication skills by teachers put deaf children at disadvantages as they would not be able to follow teacher's explanations.

#### 2.3 Types of hearing impairment

The malfunctioning of part of the ear or the hearing mechanism determines the type of hearing impairment. According to Martin (1975) audiologists and physicians classify the ear into conductive and sensory neural regions. The conductive part includes the out and the middle ear, while the sensorineural part comprises the inner ear and the region beyond that. However, a mixed hearing loss can occur when the malfunctioning is both the conductive and sensor neural regions. Martin (1975) states that in sensor neural hearing loss; the loss caused by air condition is as great as the loss caused by bone condition. In connection with the stated theory therefore, there are three types of hearing loss:-

#### A. Conductive hearing loss:

This occurs when there is interference in the outer and middle ear regions. If the sound waves are unable to travel through the normal system from the outer ear, middle ear to inner ear, blockage is perceived to exist in the outer or middle ear regions.

#### B. Sensorineural hearing loss:

This occurs when the inner ear is affected. This means that conduction of sound waves by air as well as bone is affected.

#### C. Mixed hearing loss:

It happens when both the middle and inner ear are affected simultaneously.

#### 2.4. Implications on learning

According to Myfair (2001), researchers have observed that deafness affects developmental areas such as language, speech, intelligence, educational achievement and psychological development.

#### 2.4.1. Language development

Walter (2000) compared the abilities of hearing and hearing impaired children in understanding printed English words. According to his findings, hearing impaired children performed at a level far below that of hearing children. For instance, a ten year old hearing child could understand at least

- i. 85% of the 2000 most frequently used words.
- ii. 73% of the 5000 most frequently used words.
- iii. 61% of the 10,000 most frequently used words.

In comparison, a ten year old hearing impaired child on the other hand could understand only.

- i. 32% of the 2000 most frequently used words.
- ii. 24% of the 5000 most frequently used words.
- iii. 22% of the 10000 most frequently used words, while

Moores (2000) cited a study conducted by Herder (1991) which analyzed compositions written by deaf children aged 11 to 17 years.

The compositions were compared with those of hearing children aged 8 to 14 years. The results were that deaf children performed dismally in comparison to those with "normal" hearing capacity. This means that the deaf child has approximately only 12% of vocabulary used by a hearing child. This can further be translated that from a given range of 2000 most commonly used words, by the hearing child, the deaf child only has 240 words (in the comparison).

#### 2.4.2. Written language

Writing is an expressive language since it shows how a person conveys a message to another person or group of persons. As with spoken language, the message has to be

clear in order to be understood by the receiver. He adds that hearing impaired children have a tendency of writing sentences that do not follow the required English or Kiswahili language structural pattern resulting into poor academic performance. For example, "the cat is running away" deaf children would write it as "away cat running".

#### 2.4.3. Reading problem

Reading is known as receptive written language, Keller (2009). It is a skill which enables the child to understand the written message.

Dechant (1981) a person who had a reading disability differs from other readers. Due to incompetence in sign in most of the teachers handling hearing impaired children, the reading skills are poorly taught resulting in the learners being incompetent, especially in reading comprehension. They lack skills to analyze words and hence do not know what a word means. They may lack skills to interpret and comprehend in information.

#### 2.4.4. Arithmetic problems

Lerner (1976), states that children have arithmetic problems as a result of problem with cognitive processes. Ordering or sequencing, knowing quantity, concepts, forms and counting are all important. Children who have problems with these concepts also experience problems in arithmetic. The hearing impaired children get a lot of problems in solving comprehension arithmetic. Much of this is contributed by inability to read and understand comprehension, thus contributing to poor academic performance experienced by the hearing impaired learners.

#### 2.5. Intervention strategies for a child with hearing loss

There is need for the government and other stakeholders to provide conducive learning environment in schools of children with hearing impairment. That can be done by ensuring that there are enough teaching staff in the schools. This would minimize teachers workload and meeting the standard teacher —pupil ratio of 1:12 as far as learners with hearing impairment are concerned.

The government should ensure there are skilled personnel dealing with matters of children with hearing impairment. It calls for the government to train teachers, school management board members and education officers on special needs education. Induction causes needs to be done by the government to equip the mentioned personnel with sign language and other skills. Only teachers who specialized in the department of hearing impairment should be deployed to such schools for quality education.

As far as social factors are concerned, the government needs to conduct seminars to the relevant people to create awareness on challenges facing learners with hearing impairment that would help the members think of solutions whenever they come across such challenges.

The government should also provide teaching/learning resources to special schools. Such resources are text books for sign language, hearing aids, teachers' professional documents, charts and other materials. This would enable both the teachers and learners have friendly learning environment, hence uplifting KCPE performance. Other intervention strategies mentioned by other writers on the same were also captured.

Ndurumo (1993) explains that these are children whose hearing loss have enough useful hearing left (residual hearing). This hearing ability can enable them to hear speech and acquire spoken language normally. However, for them to hear speech this can be done by:

- i. Speaking to him/her a bit louder than normal to them in quiet surroundings.
- ii. Placing them in front of the class or near the speaker.
- iii. Making sure that they look at the speaker's face, as they (some of them) can lip read.

Children who are hard of hearing usually suffer from conductive hearing impairment and they can be helped in the following ways according to Karanja (1993):

- i. Advise on suitable school placement.
- ii. Advise parents to seek medical help.

- iii. Utilize peers to assist the child with class routine such as sharing notes.
- iv. Provide the child with all details of the lesson in written form. The child's academic performance can be improved with proper classroom management and use of technical and teaching aids. Use of visual aids is a must for teaching children with hearing impairment.
- v. Advice the parents to have the child fitted with a suitable and effective hearing aid (if advised by a specialist). This enables these children to participate effectively in learning process.
- vi. Face the child when talking to him/her. Talk slowly and clearly in a good tone without mouthing words; they may use their sixth sense to detect what comes from your words.
- vii. Counseling the school community to accept the child. This now works very well and many people are now comfortable with them.
- viii. Appropriate referrals to the health centers for medical checkups and treatment

Whenever the above points are adhered to, the child would learn and develop the learning skills which in return would improve the performance during exams.

#### 2.6 Conceptual framework

Independent variables

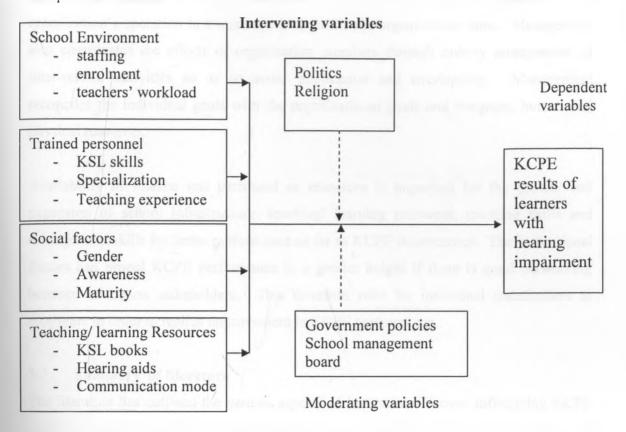


Fig 1 Relationship of institutional factors and KCPE performance of learners with hearing impairment

The conceptual framework consisted of the four research objectives i.e. school environment, trained personnel in special needs education, social factors as well as community politics and religion were also highlighted as intervening variables which were thought to be contributing factors towards KCPE performance.

Government policies as well as school management boards were put under moderating variables whereas KCPE results of learners with hearing impairment were considered to be dependent variables.

Management is the art of making effective use of resources to achieve organization's goals. It concerns planning, coordinating and implementing all aspects of an organization's operation in a manner which fulfils the organizations aims. Management also coordinates the efforts of organization members through orderly arrangement of inter-related activities so as to avoid duplication and overlapping. Management reconciles the individual goals with the organizational goals and integrates human and physical resources.

Availability of finance and personnel as resources is important for the growth and expansion of school infrastructure, teaching/ learning resources, teaching skills and management skills for better performance as far as KCPE is concerned. The institutional factors can propel KCPE performance to a greater height if there is good networking between education stakeholders. This therefore calls for individual stakeholders to cooperate in order to realize improvement in KCPE performance.

#### 2.7 Summary of literature

The literature has outlined the various aspects of institutional factors influencing KCPE performance with regards to learners with hearing impairment in special schools. It highlights factors that influence learning such as the degree of hearing loss and poor environmental accommodation.

It also highlights types of hearing loss and their implication on learning. Good KCPE performance requires skilled personnel who have undergone special training in the field of special needs education. This lies right from the teachers, school administrators, management board members as well as education officers in order to be able to communicate freely with the learners to enhance learning.

#### CHAPTER THREE

#### RESEARCH METHODOLOGY

#### 3.1. Introduction

This chapter explains the research methodology used in carrying out the study that helps in fulfilling the objectives. These objectives include investigating factors that influence performance of deaf children in their learning. The study highlights research design and approach, location where the study was undertaken, the target population and sample size, method of arriving at the sample size referred to as the sample procedure, instruments for data collection, validity and reliability of instruments, the procedure of data collection and finally how data was analyzed.

#### 3.2. Research design

This researcher employed descriptive survey research design. The descriptive survey method was appropriate since all children with hearing impairment in their special schools have common problems as they use the same curriculum and similar teaching strategies. According to Meadows (2003), 90% of hearing impaired children are born to hearing parents. As a result the home environment is predominantly oriented towards the restoration of hearing in order to make the deaf children worthy of integration in to the hearing society.

#### 3.3. Target population

The target population from various cadres was justified as they were able to provide relevant information on KCPE performance since they were familiar with challenges faced by learners with hearing impairment as they struggled to acquire learning. The researcher used stratified sampling technique.

#### 3.4 Sample size and sampling techniques

The targeted group comprised of four head teachers, forty school management committee members, forty teachers and sixteen education officers. After sampling those targeted were two head teachers, twenty school management committee members, twenty teachers and eight education officers as shown on table 3.1

Table 3.1: The targeted population and sample size

Category	Target population	Sample size
Head teachers and Deputies	4	2
School management committee members	40	20
Teachers	40	20
Education officers	16	8
TOTAL	100	50

The research targeted the stated groups above because they would give the correct information as they interact with the learners while performing their duties

#### 3.5 Research instruments

Primary data was collected using written interview schedules as well as questionnaires.

#### 3.5.1 Questionnaires

To achieve the objectives of this study, questionnaires were dispatched to respondents as shown in the sample size. Questions were simple with choices given in some, while other questions were open for respondents to give their opinions. Questions were used because they would be filled by respondents without necessarily being supervised by the researcher.

#### 3.5.2 Interview schedules

These were also administered to respondents to provide back up answers to questionnaires in their possession. They were also to address the objectives of the study. Each interview schedule had five questions.

#### 3.6 Validity and reliability of the instruments

Validity and reliability of research instruments were signified by carrying out a pre-test and followed by pieces of advice and the guidance from the project supervisors.

#### 3.6.1 Validity of the instruments

To ensure validity, enough time was given to respondents to give their views. The questionnaire was formulated in a simple manner which made it understandable and attention be given to the areas of study. It was then distributed to the respondents after having been consulted and agreed.

#### 3.6.2 Reliability of research instruments

In order to ensure reliability of the study, a piloting study was made on Kwale School for the deaf to establish the factors influencing academic performance. Similar questionnaire used at Kwale was administered at Ziwani School for the deaf Mombasa County. The instruments were deemed reliable if answers derived from them formed results that the study was intended to investigate. After analyzing the results from both Kwale and Ziwani schools which seemed to agree with the intended ones, the researcher continued conducting the research.

#### 3.7 Data collection procedure

The data was collected through questionnaires filled by the respondents. Questionnaires were taken to the schools by the researcher himself as well as the relevant offices to minimize the possibility of loosing some. Interviews were conducted by the researcher in person. After the questionnaire had been filled the researcher then collected them from the two schools as well as the offices. School management board members also kept the filled questionnaires in the two schools for collection by the researcher.

#### 3.8 Data analysis technique

After collecting data, it was coded into the statistical package for social sciences (SPSS). The analysis was performed using descriptive statistics where calculations were done and the results converted into percentages. Hypotheses were also drawn from the independent variables and calculated using Chi – square. The results were presented in the form of tables for the case of understanding.

#### 3.9 Ethical considerations

The research study followed the ethical principles of research. The research was carried out with authority from the University of Nairobi. The researcher also sought permission to collect data by TSC Kwale County management. The purpose and objective of the research study was explained to the respondents before actual interviews started. One respondent was interviewed at a time for privacy purposes. Name and identity of the individual were concealed. All documents and opinions expressed during the survey would be quoted with permission

# 3.10 Operational definition of variables

The operational definitions of variables have been analyzed as shown in the figure below.

Table 3.2 operational definitions of variables

bles	Indicator	Instrument used	Scale	Measurement	Tools of analysis	
endent variables						
l environment	Staffing	Interview	Nominal	Teaching skills	Tables	
	Enrolment	Questionnaire		Learners comfort	Percentage	
	Teachers' workload			Negative attitude cases		
ed personnel cial education	KSL skills Specialization	Interview	Nominal	Fluency in KSL, SEE and SE	Tables	
	Teaching experience	Questionnaire			Percentage	
factors	Gender Awareness Maturity	Questionnaire	Nominal	Level of awareness Drop out rate	Tables Percentage	
ing/ learning ces	KSL books Hearing aids Communication mode	Questionnaire Interviews	Nominal	Syllabus coverage Pupil – book ratio	Tables Percentage	
ening variables						
s, Religion	Bad politics Parental styles	Questionnaires Interviews	Nominal	Learners attitude	Tables Percentage	
ment policies management	Exam schedules Timing of exams Setting of exams	Questionnaire Interview	Nominal	Learners ability Exam tolerance	Tables Percentage	

# 3.10 Operational definition of variables

The operational definitions of variables have been analyzed as shown in the figure below.

Table 3.2 operational definitions of variables

bles	Indicator	Instrument used	Scale	Measurement	Tools of analysis
endent variables					
l environment	Staffing	Interview	Nominal	Teaching skills	Tables
	Enrolment	Questionnaire		Learners comfort	Percentage
	Teachers' workload			Negative attitude cases	
ed personnel ecial education	KSL skills Specialization	Interview	Nominal	Fluency in KSL, SEE and SE	Tables
	Teaching experience	Questionnaire			Percentage
l factors	Gender Awareness Maturity	Questionnaire	Nominal	Level of awareness Drop out rate	Tables Percentage
ing/ learning rces	KSL books Hearing aids Communication mode	Questionnaire Interviews	Nominal	Syllabus coverage Pupil – book ratio	Tables Percentage
ening variables					
s, Religion	Bad politics Parental styles	Questionnaires Interviews	Nominal	Learners attitude	Tables Percentage
nment policies management	Exam schedules Timing of exams Setting of exams	Questionnaire Interview	Nominal	Learners ability Exam tolerance	Tables Percentage

## **CHAPTER FOUR**

#### DATA ANALYSIS PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This section explained the finding of the study. The information was collected using questionnaires earlier given to respondents. Data was collected from four different groups of respondents i.e. teachers, head teachers, and their deputies, school management boards and education officers. It was then analyzed using statistical method of presentation where answers were categorized, their frequency recorded and again converted into percentages. The findings were presented into different sections as per the objectives of the study.

### 4.2 Response rate

The sample taken for this study was fifty (50) members. Out of this all responded giving a response rate of one hundred percent (100%). The data below shows the response rate of the teachers, head teachers, school management boards and education officers according to their gender in Mombasa and Kwale counties.

Table 4.1 Response rate

Category	Frequency	Percentage
Category Male	21	42
Female	29	58
Total	50	100

From the findings on table 4.1 there were twenty one male who responded by filling the questionnaires which represented forty two percent (42%) of the respondents. The female respondents were twenty nine which represented fifty eight percent (58%) of the total number of respondents. The research sought to establish gender presentation of respondents. From the findings, forty two percent (42%) of the targeted groups were male while fifty eight percent (58%) were female. This shows that gender parity was put under

consideration in recruiting and appointing of personnel in the different targeted groups where male and female were almost tallying.

## 4.3 Demographic profile of respondents

The study examined the demographic profile of the respondents. The research aimed at establishing the response rate of the respondents in terms of gender. It also established the age bracket of the targeted group. The research also sought to determine the working period of the respondents as well as their level of education. The aim of all this was to establish whether there is any relationship between the said factors and KCPE performance.

## 4.3.1 Respondents age bracket

This section sought to establish whether the ages of the teachers, school administrators, school management board members and education officers influence KCPE performance. The research sought to establish this in order to determine how active the members are in relation to age and duty performance.

Table 4.2 Respondents age bracket

Category	Frequency	Percentage	
25-30 years	4	8	
30-35years	8	16	
35-40years	16	32	
40-45years	8	16	
45-50years	10	20	
50 years and above	4	8	
Total	50	100	

According to the findings, eight percent (8%) of the members were aged between twenty five and thirty years. Those lying between age thirty and thirty five years were sixteen percent (16%) while those aged between thirty five and forty five and forty years were thirty two percent (32%). Other respondent s landed on the age bracket of between forty

and forty five years totaling to sixteen percent (16%) whereas those between ages forty five and fifty years were twenty percent (20%). A few members had an age bracket of fifty years and above, that is, eight percent (8%).

### 4.3.2. The working period of the workers.

The research sought to determine the duration in service either as a teacher, school administrator and member of the management board or an education officer so as to establish their experience in service.

Fourteen percent (14%) of the respondents have been serving the hearing impaired learners for up to five years where as none has been serving for less than a year. Twenty two percent (22%) and another fourteen percent (14%) have been serving the hearing impaired learners for between five to ten years and ten to fifteen years respectively. Forty four percent (44%) have served for between fifteen to twenty years while only six percent (6%) have served for twenty years and above.

Table 4.3 Duration in service.

Category	Frequency	percentage
Less than a year	Nil	Nil
One to five years	7	14
Five to ten years	11	22
Ten to fifteen years	7	14
Fifteen to twenty years	22	44
Twenty years and above	3	6
Total	50	100

The findings show that majority of the respondents have enough experience in service for between fifteen to twenty years. As the saying goes by, experience is the best teacher, most of the respondents seem to have interacted and networked with other education stakeholders for good length of time.

#### 4.3.3. Level of education

The research aimed at finding out the level of education of those working for the hearing impaired children in special schools. The findings were that thirty six percent (36%) had attained secondary level of education while none of the members had attained less than the secondary level of education. A big number of the targeted people amounting to forty six percent (46%) attained collage level while eighteen percent (18%) had attained university level of education.

Table 4.4 Level of education

Category	Frequency	Percentage	
Primary	Nil	Nil	
Secondary	18	36	
Collage	23	46	
University	9	18	
TOTAL	50	100	

The findings show that the majority of the respondents had enough information as far as educational matters are concerned.

#### 4.4 Teachers professionalism

The study examined the area of specialization in special needs education each respondent might have attained. This was to determine the level of competencies rendered to the hearing impaired learners by the teachers.

### 4.4.1 Areas of specialization in special needs education by teachers.

According to the findings, forty percent (40%) of the teachers had specialized in the area of hearing impairment. The area of learning difficulties and that of inclusive education had been attained by ten percent (10%) and fifty percent (50%) respectively. None of the teachers had specialized in visual, mental or physical impairment

Table 4.5 Area of specialization in special needs education by teachers

Category	Frequency	Percentage	
Hearing impairment	8	40	
Visual impairment	Nil	Nil	
Mentally challenge	Nil	Nil	
Physical challenge	Nil	Nil	
Learning difficulties	2	10	
Inclusive	10	50	
TATOL	20	100	

The findings show that majority of the teachers had specialized in the area of inclusive education. This shows that they were not fluently conversant with sign language resulting in poor communication skills hence poor performance in exams.

## 4.4.2. Duration of teaching in special schools of children with hearing impairment.

In terms of teaching experience by teachers, none of them had taught for less than five years in schools of children with hearing impairment. Twenty five percent (25%) of the teachers had experience of between five to ten years where as twenty percent (20%) of them had taught for a period between ten to fifteen years. Majority of the teachers, that is, thirty five percent (35%) had served for fifteen to twenty years while twenty percent (20%) had experience of twenty years and above.

Table 4.6 Duration of teaching.

Category	Frequency	Percentage
Less than a year	Nil	Nil
One to five years	Nil	Nil
Five to ten years	5	25
Ten to fifteen years	4	20
Fifteen to twenty years	7	35
Twenty years and above	4	20
TOTAL	20	100

The data in table 4.5 shows that almost all the targeted teachers had enough experience In dealing with hearing impaired learners in special schools.

## 4.4.3. Teachers weekly workload

This section assessed the teacher's workload on weekly basis. According to the research findings nine percent (9%) of the teachers had less than ten lessons per week; thirty two percent (32%) of the teachers had lessons between ten to twenty each in a week. Forty one percent (41%) had between twenty to thirty lessons while eighteen percent (18%) had between thirty to forty lessons.

Table 4.7 Teacher's workload in a week

Category	Frequency	Percentage
One to ten lessons	2	9
Ten to twenty lessons	7	32
Twenty to thirty lessons	9	41
Thirty to forty lessons	4	18
TOTAL	22	100

The findings show that most of the teachers had average lessons in a week where the maximum should be thirty five lessons in a week.

## 4.4.4. Competency in sign language

This section sought to establish whether teachers are competent when teaching using language. According to the findings therefore, none of them was not fluent in using sign language. Twenty five percent (25%) were moderately fluent while majority of them, that is fifty five percent (55%) claim to be very fluent in using sign language. Another twenty percent (20%) claimed to be very fluent in using sign language.

Table 4.8 Competency in using sign language

Category	Frequency	Percentage	
Not fluent	Nil	Nil	
Moderately fluent	5	25	
Fluent	11	55	
Very fluent	4	20	
TOTAL	20	100	

The findings reveal that majority of the teachers totaling to fifty five percent (55%) claim to be fluent in using sign language, hence, ability to analyze and interpret English and Kiswahili into sign language.

#### 4.5.5 Class enrolment

This section sought to establish the extent to which large numbers of learners with hearing impairment in a class influence academic performance. This study found out that fourteen percent (14%) and forty one percent (41%) of the teachers had class enrolment of between one to five and five to ten respectively. Thirty six percent (36%) had between ten to fifteen learners while only nine percent (9%) had between fifteen to twenty learners in their classes. None of them had class enrolment of twenty pupils and above.

Table 4.9 Average number of pupils per class

Category	Frequency	Percentage
One to five	3	14
Five to ten	9	41
Ten to fifteen	8	36
Fifteen to twenty	2	9
Twenty and above	Nil	Nil
TOTAL	22	100

According to the findings, most of the teachers had the average class enrolment. The standard ratio of a teacher to pupil is one is to twelve, specifically for classes of children with hearing impairment in special schools.

### 4.4.6. Academic problems faced by learners in classes.

This section sought to establish whether hearing impaired learners face problems in specific areas of study. The findings revealed that fifteen percent (15%) of the teachers had their learners facing arithmetic problems. Twenty five percent (25%) had their learners facing reading problems. The majority of teachers with a total of fifty five percent (55%) had their learners facing composition writing challenges while only five percent (5%) had their learners facing challenges when signing.

Table 4.10 Academic problems faced by learners

Category	Frequency	Percentage
Arithmetic	3	15
Reading	5	25
Composition writing	11	55
Signing	1	5
TOTAL	20	100

The findings show that most teachers had their pupils facing challenges on composition writing as well as reading problems. This might be because some teachers were not competent enough in delivering the content using sign language, hence failing the learners in grasping the same

### 4.5 School administrators professionalism

This section is intended to establish challenges faced by school administrators that may contribute to KCPE performance.

### 4.5.1. Teaching staff situation

This section sought to establish the number of teaching staff in each targeted school. This is to find out whether the staffing situation can be a factor influencing KCPE performance.

Table 4.11 Teaching staff situation

Category	Frequency	Percentage	
One to five	Nil	Nil	
Five to ten	Nil	Nil	
Ten to fifteen	11	50	
Fifteen to twenty	11	50	
Twenty and above	Nil	Nil	
TOTAL	22	100	

According to the teacher pupil ratio i.e. 1:12 as far as schools for the hearing impaired learners are concerned, they seem to be well staffed. None of the two schools had less than ten teachers or more than twenty teachers therefore, fifty percent (50%) of the respondents confirmed to have between ten to fifteen teaching staff and another fifty percent (50%) had between fifteen and twenty members

#### 4.5.2. Mode of communication used in school.

This section is intended to establish whether the mode of communication used in the school by teacher contributes to KCPE performance. Mode of communication is very important because exams are set using certain languages which needs to be practiced.

Table 4.12 Mode of communication used in schools

Category	Frequency	Percentage	
Speech	Nil	Nil	
Total communication	1	50	
Sign language	1	50	
TOTAL	2	100	

The above table reveals that fifty percent (50%) of the respondents confirmed to be using total communication as their mode of communication. Those using sign language as their mode of communication were also fifty percent (50%) while none of them use speech as their mode of communication.

According to the respondents, the version of sign language used during teaching is Kenya sign language (KSL). It was also revealed that teaching /learning resources in special schools are not enough at all. When asked about challenges facing their schools the administrators came up with the following; some scientific, geographical and historical terms do not have signs, late school admission by learners, lack of enough teaching /learning resources, lack of sign language books, time given for exams is not enough for learners with hearing impairment.

### 4.5.3. Rate of headship turnover in special schools.

This section sought to establish whether the rate of headship turnover in the schools stand as a contributing factor to KCPE performance.

Table 4.13 Headship turnover in schools.

Category	Frequency	Percentage		
Very high	Nil	Nil		
High	Nil	Nil		
Moderate	Nil	Nil		
Low	2	100		
TOTAL	2	100		

According to the data, a hundred percent (100%) of the respondents reveals that special schools headship turnover low. This shows that special schools head teachers are rarely transferred if any.

### 4.6 Education officer supervision

This section sought to establish whether the education officers are equipped and skilled enough in their work to influence KCPE performance in schools of children with hearing impairment.

# 4.6.1 Education officers training in special needs 30197

This area is intended to establish whether the education officers who handle matters connected with special needs education are specially trained to be effective in issues pertaining special needs education. This is to find out whether education officers supervision influence KCPE performance.

Table 4.14 Training in special needs

Frequency	Percentage	
Nil	Nil	
1	12.5	
7	87.5	
8	100	
		Nil Nil 12.5 7 87.5

The findings show that twelve point five percent (12.5%) of the respondents had undergone training in special needs education up to the university level. Eighty seven point five percent (87.5%) of the officers had not trained in special education although some attended workshops on special needs education.

## 4.6.2. Engagement in formulation of policies

This section assessed the participation of education officers in issues of policy making in their places of work. According to the research findings, seventy five percent (75%) of the officers were not in any way involved in policy making in their working areas. Twenty five percent (25%) of the officers were involved in policy making process.

Table 4.15 Formulation of policies

Category	Frequency	Percentage
No	6	75
Yes	2	25
TOTAL	8	100

The findings revealed that there were very few officers involved in policy making while many were not. That denied them chances of making their contributions towards conducive learning environment for the benefit of learners with hearing impairment

# 4.6.3. Awareness on challenges faced by learners with hearing impairment.

This section assessed the awareness of education officers on challenges faced by learners with hearing impairment in special schools. The findings established that fifty percent (50%) of the officers seemed to be very much aware of the said challenges while twenty five percent (25%) acknowledged knowing the challenges fairly well. The other twenty five percent (25%) were not aware of the said challenges as depicted in the table below.

Table 4.16 Awareness on challenges faced by learners

Category	Frequency	Percentage
Very well	4	50
Fair	2	25
Not at all	2	25
TOTAL	8	100

According to the data collected, most of the officers were aware of the challenges faced by learners with hearing impairment in special school. According to the findings none of the officers could understand Kenyan sign language neither do they attend trainings to develop skills in sign language.

## 4.7 School management board

This section is intended to establish whether the management board operations influence KCPE performance.

### 4.7.1. Number of management board meetings in a year.

This section sought to establish whether the operation of the school management board influence the KCPE performance. The findings revealed that fifty percent (50%) claimed to be meeting two times in a year while another fifty percent (50%) meet three times in a year.

Table 4.17 Management board meetings

Category	Frequency	Percentage
Two times	10	50
Three times	10	50
Four times	Nil	Nil
TOTAL	20	100

According to the findings, numbers of meetings conducted by management board in a year differ from one school to another; hence their effects on KCPE performance could not be confirmed.

### 4.8 Test of hypothesis

The research tested the following:

HO; there is no relationship between school environment and KCPE performance among children with hearing impairment.

H1; there is relationship between teaching staff situation and KCPE performance among children with hearing impairment.

The first objective of this study was to examine the relationship between school environment and KCPE performance among children with hearing impairment. To achieve this objective the research tested the following indicators: staffing, enrolment and teacher's workload. The chi-square test was performed to determine if the school environment influenced KCPE performance among children with hearing impairment. The results of this chi-square are summarized in tables 4.18, 4.19 and 4.20.

## a. Teacher's weekly workload

H<sub>0</sub> There is no relationship between teacher's weekly workload and KCPE performance among children with hearing impairment in Coast Region, Kenya.

H<sub>1</sub> There is relationship between teacher's weekly workload and KCPE performance among children with hearing impairment in Coast Region, Kenya.

Table 4.18: Chi-square Test-Relationship between Teacher's weekly workload and KCPE performance among children with hearing Impairment in Coast Region, Kenya

	Value	df	Asymp.	Sig.	(2-
			sided)		
Pearson Chi-Square	10.476a	2	.005		
Likelihood Ratio	11.301	2	.004		
Linear-by-Linear Association	7.230	1	.007		
N of Valid Cases	22				

a. 0 cells (0%) have expected count less than 5. The minimum expected count is 7.13.

The p of 0.005, which is less than 0.05 (Table 4.18), implies that the chi-square is significant and indicates there is a relationship between teachers weekly workload and KCPE performance among children with hearing Impairment in Coast Region, Kenya. To sum up, the data analysis suggests that teacher's weekly workload has an impact on KCPE performance among children with hearing Impairment in Coast Region, Kenya. The results therefore point to the acceptance of the alternative hypothesis and rejection of the null hypothesis.

#### b. Class enrolment

H<sub>0</sub> There is no relationship between number of pupils in a class and KCPE performance among children with hearing Impairment in Coast Region, Kenya

H<sub>1</sub> There is relationship between number of pupils in a class and KCPE performance among children with hearing impairment in Coast Region, Kenya.

Table 4.19: Chi-square Test-Relationship between number of pupils in a class and KCPE performance among children with hearing Impairment in Coast Region, Kenya

	Value	df	Asymp.	Sig.	(2-
Pearson Chi-Square	16.238a	2	.000		
Likelihood Ratio	15.121	2	.001		
Linear-by-Linear Association	12.187	1	.000		
N of Valid Cases	22				

a. 0 cells (0%) have expected count less than 5. The minimum expected count is 5.25.

The p of 0.000, which is less than 0.05 (Table 4.19), implies that the chi-square is significant and indicates there is a relationship between number of pupils in a class and KCPE performance among children with hearing Impairment in Coast Region, Kenya. The data analysis therefore suggests that class enrolment influence KCPE performance among children with hearing Impairment in Coast Region, Kenya. The results therefore point to the acceptance of the alternative hypothesis and rejection of the null hypothesis.

### c. Teaching staff situation

H<sub>0</sub> There is no relationship between teaching staff situation and KCPE performance among children with hearing Impairment in Coast Region, Kenya. H<sub>1</sub> There is relationship between teaching staff situation and KCPE performance among children with hearing impairment in Coast Region, Kenya.

Table 4.20: Chi-square Test-Relationship between Teaching staff situation and KCPE performance among children with hearing Impairment in Coast Region, Kenya.

					4
	Value	df	Asymp.	Sig.Exact Sig.	(2-Exact Sig. (1-
			(2-sided)	sided)	sided)
Pearson Chi-Square	4.889a	1	.027		
Continuity Correction	<sup>b</sup> 2.750	1	.097		
Likelihood Ratio	6.442	1	.011		
Fisher's Exact Test				.090	.045
Linear-by-Linear	4.667	1	.031		
Association	4.007	1	.031		
N of Valid Cases	22				

a. 0 cells (0%) have expected count less than 5. The minimum expected count is 5.00.

The p of 0.027, which is less than 0.05 (Table 4.20), implies that the chi-square is significant and indicates there is a relationship between teaching staff situation and KCPE performance among children with hearing Impairment in Coast Region, Kenya. To sum up, the data analysis suggests that teaching staff situation has an influence on KCPE performance among children with hearing Impairment in Coast Region, Kenya. The results therefore point to the acceptance of the alternative hypothesis and rejection of the null hypothesis.

## **CHAPTER FIVE**

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter gives the summary of the research findings, the conclusions and recommendations.

### 5.2 Summary of findings

The study established that school environment as a factor was not influencing KCPE performance. According to the accepted teacher to pupil ratio which was 1:12, schools of children with hearing impairment in Kwale and Mombasa Counties were not understaffed. Therefore, class enrolment as well as teacher's workload was low. This would not be a reason for poor performance by the learners.

The research also established that all teachers interviewed had enough teaching experience. The findings therefore showed that teaching experience was not a contributing factor towards poor KCPE performance. The findings revealed that some of the education officers were not aware with the challenges faced by learners with hearing impairment in special schools. The researcher could not understand that because those were the people who were charged with the responsibility in ensuring good performance of the learners in schools. This shows clearly that the learners were not served effectively by this education officers hence contributing to poor performance in examinations.

The research established that though all teachers were specially trained, some had specialized in other areas like inclusive education where sign language was not taught in detail. As a result of that such teachers were not competent in sign language leading to inability to interpret it to other languages like Kiswahili and English, hence poor KCPE performance.

The findings obtained were that some of the persons who were given responsibilities to serve children with hearing impairment had not attained any training in special needs education. That resulted on them not having basic skills in the Kenyan sign language.

That included the board members as well as education officers. This showed clearly that the said personnel could not interact with the learners effectively as they were lacking the skills of communication thereby not serving them as required.

The research also established that teaching and learning resources were inadequate in those schools. This was evidenced by lack of enough KSL books. Learners had no hearing aids fitted to them. It is known that such gargets help hearing impaired learners especially those with residual hearing to hear normally so as to enhance learning, thereby performing better during exams. It was therefore revealed by the research that teaching and learning resources influenced KCPE performance in those schools.

### 5.3 Discussion of findings

From table 4.1 on teachers specialization in the area of special needs education, a teacher specialized in the area of hearing impairment would know and intervene professionally knowing that these are children who despite their hearing loss may be having enough useful hearing left (residual hearing). This hearing ability can enable them to hear speech and acquire spoken language normally. However, for them to hear speech well, sound must be made loud enough. This can be done by:-

- I. Placing them near the front of the class or near the speaker.
- II. Making sure that they look at the speakers face.

With such knowledge, teachers cannot fail to offer the best intervention on learners with hearing impairment. As far as school environment is concerned, the staffing situation was not considered as an issue influencing KCPE performance. That was after the findings revealed that there were enough teachers in the two schools. It was also revealed that class enrollment as well as teachers workload did not influence KCPE performance in the targeted schools.

The findings revealed that school environment influenced KCPE results. That is to say, some teaching staff though specially trained, did not specialize in the area of hearing impairment. That could have contributed to lack of enough sign language skills, where they could not communicate fluently with the learners. That could have contributed to the

poor performance because all the subjects in those schools were taught using sign language. Apart from the teachers, the management board members and education officers had not undergone trainings in special needs education. That could minimize their ability in serving the learners due to lack of communication skills.

Another item which influenced KCPE performance was social factors. It was revealed that some of the Education Officers were not aware of the challenges faced by learner with hearing impairment as shown on table 4.16. That could minimize the ability of the officers to struggle and look for solutions to solve the learner's problems.

The findings also revealed that teaching/ learning resources influence KCPE results. It was revealed that sign language books were very few in those schools. Most of the subjects taught had their books not written in sign language. That hindered the learners from understanding the contents thereby resulting in poor KCPE results.

### 5.4 Conclusion of the study

There is potential for the improvement of KCPE performance despite the various challenges facing learners with hearing impairment. These challenges are evident from the way they strive to pool down KCPE performance.

Communication is a challenge starting from the grass root level where parents of children with deafness lack skills of communication with their children. Language being a socially shared code of conventional system for representing concepts or ideas through the use of arbitrary symbols, its development is a very important achievement of childhood and is the most fundamental characteristics of human being. The child develops a better understanding of the language and with maturation the child gradually develops the capacity to express him/ her. Hence, lack of communication from the start may hinder child's language development.

There is need for the government to continue maintaining the pace of staffing the special schools of children with hearing impairment so as to improve KCPE results. That would make the teachers have manageable workload

It would be good enough if only teachers who specialized in the area of hearing impairment would be deployed to schools of children with hearing impairment. That would make them be able to interpret the contents in sign language.

Both the schools management members and Education officers need to undergo induction courses on special needs education. That would enable them to be effective in their ways of delivering services, hence enhancing KCPE performance.

Text books need to be produced with signs for the learners to be able to read and understand them easily. That was after the findings revealed that there were no enough text books in the two special schools. The government should therefore ensure that there enough teaching / learning resources in the school.

#### 5.5 Recommendations

Issues arising from the findings call for a major paradigm shift in supervision and management of special schools of hearing impaired learners. The government should support the schools by all means through its agents and other stakeholders by listening and responding to grievances whenever raised by educational experts. Education officials need to embrace values that accommodate the various stakeholders in the education sector to improve KCPE performance in special schools of children with hearing impairment. The issues to be addressed include;

#### I. Hearing aids fitting

There are children whose hearing loss have enough useful hearing left (residual hearing). This hearing ability can enable them to hear speech and acquire spoken language normally. This can only be possible if parents would be advised to have their children fitted with suitable and effective hearing aids. This would enable the children to participate effectively in the learning process.

## II. Teaching/learning resources

Teachers should be advised to utilize peers to assist the hearing impaired children with class routine such as sharing notes in case of an inclusive setting. Learners should be provided with all details of the lesson in written form. The child's academic performance would be improved with proper classroom management and use of technical and teaching aids. The use of visual aids is a must for teaching children with hearing impairment. In that connection therefore, there is need for relevant teaching/ learning resources to be made available in special schools such as picture booklets with signs

### III. Sign language

It appears that the extent to which a child with hearing impairment successfully interacts with family members, friends and people in the community depends largely on the attitudes of others and the child's ability to communicate in some mutual acceptable way (Heward et al, 1988). There is need for the parent s, community and all other stakeholders to learn and know sign language for the benefit of children with hearing impairment to interact freely with others. This would enable the learners improve their academic standards after grasping the sign language at an early stage.

#### IV. Induction courses

There is need for teachers in special schools of children with hearing impairment to have induction courses in sign language. This would help them grasp new terminological signs as language grows every now and then. This would assist the teachers who teach In special schools but not specialized in hearing impairment develop communication skills in sign language.

### V. Supervision

Activities without proper supervision would end up producing poor results. Education officers dealing with matters of children with hearing impairment should have basic knowledge on sign language. Hence, it calls for them to attend short courses in sign language. This would help them communicate with the hearing impaired learners fluently whenever need arises, thereby enhancing their supervision in educational matters. Education officers should also be involved in policy making in their work places. This would easy their work in implementation, hence, achieving good performance.

#### 5.6 Suggestions for further research

Further research could be carried out to establish the factors that influence KCPE performance in special schools of learners with hearing impairment. The most difficult areas in this research concerns information on the actual causes of hearing impairment, especially facts on hereditary. More research is needed to explain the genetically and generic concepts, which most researchers usually do not explain.

#### REFERENCES

- Belavade, R. (1988) Social and economic factors: Disability, Prevention and

  Rehabilitation (proceedings of the 16<sup>th</sup> World Congress of Rehabilitation

  International: Tokyo Japan)
- Caros, et al (2001) Communication Difficulties Sussex, London, Eastern Press.
- Chengli, C (2004) *Deaf Children and Parenal Support*, Chungei, Iglo Press & Co. Tokyo, Japan
- Conners, C. (1973) "What parents need to know about stimulant drugs and special education" Journal of learning Disabilities. Boston: Houghton Migglin
- Cott, A. (1977) *The orthomolecular approach to learn disabilities.* San Rafael, C.A: Academic Theraphy Publications
- Dechant, B (2001) Language Deficiency, Gotrit, German Co. Ltd.
- Dechant, E (1981) Diagnosis and remediation of reading disabilities, Englewood Cliffs, N.J Prentice Hall
- Erin, J (2000) Language Acquisition. London, Oxford press
- Emest, M (2001) Language Development (General) Cairo, Sphinx Press
- Gearheart B.R (1985) Learning disabilities: Educational strategies. St. Lois: Times Mirror/Mosby
- Gearheart, M (2001) Mother Tongue in Language Development. London, Oxford Press.
- Hare, B.A and Hare, J.M (1979) Learning disabilities in Young Children. In S.G

Garwood (eds) Educating young handicapped children: A developmental approach. London: Aspen system

Hill, E and Blasch, B.B (1980) concept development. In R.L Welsh and B.B Blasch (eds) Foundations of orientation and mobility. New York: America Foundation for the Blind.

Hilsbrough, T (2008). Better Management of learning. London, Oxford Press

Karanja, N (1993) Conducive Hearing capacity, Nairobi, KISE Report

Kellogg, R.E (1977) "Listening". In P. Lamb (ed) Guiding children's language learning.

Dubuque, 10: William C. Brown

Kephart, J.G, Kephart, (1974) A journey into the world of a blind child. Exceptional children, London, Oxford Press

Kimaga, J (2002) Hearing Loss, Nairobi, E.A. P. House

Learner, J.W (1976) Children with learning disabilities. Boston: Houghton Migglin

Learner, M (1976) Arithmetic and Deaf Children. London, Printex Co.

Little, L.J (1978) *The learning disabled*. In E.J. Meyen (ed) Exceptional childen and youth: an introduction: Denveri: love

Mecidos C (2003) Orientation to Sign Language. London, Printex Co.

Milbei, C,C, (2003) Placement in Special Schools Newyork, Printex Co.

Mileshvic, M (2001) Convenient Communication, London, Printex Co.

Ministry of Edu. Report (2009) Special Schools Management Nairobi Government Printer.

Molly, B (2003) Data Arrangement in Studies. London Printex Co.

Moores, M. (2000) Participation learning, London Printex Co.

Mayfair, M (2001) Impairment Challenges, London, Oxford, Press.

Mylebust, H.R (1964) Psychology of deafness. New York: Grune and Stratton

Mc Carthy, E. F (1982) Task analysis. In pedia of special education, A reference for education of the handicapped and other exceptional children and adults (Vol. 3) New York: John Willey

Ndurumo, M.M (1985) Estimated number of special children between 4 and 15 years in Kenya. Kenya Institute of Special Education: Nairobi

Ndurumo, M.M (1993) Exceptional children developmental consequences and intervention (1<sup>st</sup> ed) Longman Kenya: Nairobi

Ndurumo, M. (1993) Learning Difficulties, Nairobi, KISE release.

North Cott, J (1973) Emotional Problems and Solutions. London, Printex Press

Oliver, L. (2003) Language by Association, New York, Thrine Press.

Republic report (June, 2010) Durban, Longman K. Limited

Rosentein, B (1961) Mature acceptance of deafness fore psychological and social development, London. Therapy publications

Vernon S.J (1967) Linguistic problems of deafness. Foundation of orientation: Tokyo, Japan

Weckler. W.T (1972) Conforming to normality on speech and speech reading. London.

Oxford Press

Wilkingson, J (2007) Disadvantaged Children, Nairobi, E.A.P.H.

World Health Org. Report (2006) Edition on S.N.E. Education.

### **APPENDICES**

#### APPENDIX 1

#### LETTER OF TRANSMITTAL

Rumba N. Rumba

P.O. Box 16 - 80405

Kinango

The TSC Director

P.O. Box 1

Kwale

Dear Sir/ Madam,

My name is Rumba N. Rumba, a master student at the University of Nairobi, Mombasa Campus. I am carrying out a study on the factors influencing KCPE performance of children with hearing impairment in special schools in Kwale and Mombasa Counties. As part of my course I required to submit a research project report in partial fulfillment of the requirements for the course. For this purpose, I am carrying out a study on institutional factors influencing KCPE performance of learners with hearing impairment in special schools in Kwale and Mombasa Counties. The purpose of the study is to find out, solutions on the factors contributing KCPE performance so as to make possible recommendations for better results. I am kindly requesting for permission to conduct the research at Kwale and Ziwani Schools for the hearing impairment.

Yours faithfully

Rumba N. Rumba

L50/66740/2010

# APPENDIX II LETTER OF TRANSMITTAL

Rumba N. Rumba P.O. Box 16 – 80405 Kinango

To the respondent,

Dear sir/madam,

I am a master student at the University of Nairobi, Mombasa Campus. I am carrying out a study on the factors influencing KCPE performance of children with hearing impairment in special schools in Kwale and Mombasa Counties. As part of my course I am required to submit a research project report in partial fulfillment of the requirements for the course. For this purpose, I am carrying out a study on institutional factors influencing KCPE performance of learners with hearing impairment in special schools in Kwale and Mombasa Counties. It is anticipated that the findings of the study would be essential in ensuring that KCPE performance in hearing impairment schools would improve. All the information provided would be treated with confidentiality and would only be used for the purpose of this study. Thank you for your support.

Yours Faithfully,

Rumba N. Rumba L50/66740/2010

## APPENDIX III

# **QUESTIONNAIRE**

## RESPONDENT'S DEMOGRAPHIC DATA

Kindly complete the questionnaire by ticking your most appropriate answer or giving your opinion. All responses will be treated with confidentiality. (Do not write your name)

SECTION	1: SOCIO	DEMOGRAP	HIC DATA

1.1	Indica	ate your gender			
	a	Male ( )			
	b. :	Female ( )			
1.2	What	age bracket do y	ou belong?	>	
	a.	25 - 30  yrs (	)		
	b.	30 - 35  yrs (	)		
	c.	35 - 40  yrs (	)		
	d.	40 - 45  yrs (	)		
	e.	45 - 50  yrs (	)		
	f.	50 and above (	)		
1.3	How	long have you be	en working	g?	
	a.	Less than a yea	r	(	)
	b.	One to five yea	rs	(	)
	c.	Five to ten year	rs .	(	)
	d.	Ten to fifteen y	ears	(	)
	e.	Fifteen to twen	ty years	(	)
	f.	twenty years an	d above	(	)

4	What is your academic background	ound?
	a. Primary ( )	
	b. Secondary ( )	
	c. College ( )	
	d. University ( )	
	e. Other. Specify ( )	
5	State the position you are holding	ng in the work
	•	
	TION II. TEACHEDS! DDOEE	CCIONIATICM
ال	TION II: TEACHERS' PROFE	SSIUNALISM
1	Which area of anacialization in	special needs education are you trained in?
I	•	
	a. Hearing impairment	( )
	b. Visual impairment	
	c. Mentally challenged	
	d. Physically challenged	
	e. Learning difficulties	( )
	f. Inclusive	( )
	How long have you taught in sc	hools of children with hearing impairment?
	a. Less than a year	( )
	b. One to five years	( )
	c. Five to ten years	( )
	d. Ten to fifteen years	( )
	e. Fifteen to twenty years	( )
	f. twenty years and above	( )

2.3	What is your workload in a week?						
	a.	One to ten lessons			(	)	
	b.	Ten to twenty lessons			(	)	
	c.	Twenty to thirty less	on	S	(	)	
	d.	Thirty to forty lesson	ns		(	)	
2.4	How c	competent are you in	tea	chin	g u	sing sign language?	
	a.	Not fluent	(	)			
	b.	Moderately fluent	(	)			
	c.	Fluent	(	)			
	d.	Very fluent	(	)			
2.5	What	is the average numbe	r o	f pu	pils	in your class?	
	a.	One to five	(	)			
	b.	Five to ten	(	)			
	c.	Ten to fifteen	(	)			
	d.	Fifteen to twenty	(	)			
	e.	twenty and above	(	)			
						6	
2.6	Which	academic problems	do	lear	nei	rs face in your class?	
	a.	Arithmetic			(	)	
	b.	Reading			(	)	
	c.	Composition writing	D'		(	)	
	d.	Signing	0		(	)	
	u.	0.88			(	,	

# SECTION III: SCHOOL ADMINISTRATORS' PROFESSIONALISM

3.1	How	many teaching staff	are 1	there in	your scho	ol?			
	a.	One to five	(	)					
	b.	Five to ten	(	)					
	c.	Ten to fifteen	(	)					
	d.	Fifteen to twenty	(	)					
	e.	twenty and above	(	)					
3.2	What is the mode of communication in your school?								
	a.	Total communicati	on	(	)				
	b.	Sign language		(	)				
	c.	Speech		(	)				
3.4	Are th	nere enough teaching	g / le	earning	resources	in y	our so	chool?	
	If you	ir answer is YES, lis	t the	e resour	rces?			-	
3.5	What	solution would you	pre	fer for a	academic h	elp	to hea	— Iring im	paired
	a.	Train more personi	nel i	in SNE		(	)		
	b.	Inclusive education	1			(	)		
	c.	Make KSL a nation	nal l	languag	ge	(	)		
	d.	Provision of the re	leva	nt T/L	resources	(	)		

.7	Brie	efly explain ho	w yc	u are	overcoming the challenges stated in question 3
.8	Wha	at is the rate of	hea	dship	turnover in the school?
	a.	Very high	(	)	
	b.	High	(	)	
	c.	Moderate	(	)	
	d.	Low	(	)	
.9	Wha	at are the terms	sofe	engag	ement for the school non-staff members?

Thank you

## APPENDIX IV

## **EDUCATION OFFICERS SUPERVISION**

# SECTION I: SOCIO DEMOGRAPHIC DATA

	1.1 Indica	ate your gender	
	a.	Male ( )	
	b.	Female ( )	
	1.2 What	age bracket do you belong?	
	a.	25 - 30  yrs ( )	
	b.	30 - 35  yrs ( )	
	c.	35-40  yrs ( )	
	d.	40-45  yrs ( )	
	e.	45 - 50  yrs ( )	
	f.	50 and above ( )	
.3	How long	g have you been in this office?	
	a.	Less than a year ( )	
	b.	One to five years ( )	
	c.	Five to ten years ( )	
	d.	Ten to fifteen years ( )	
	e.	Fifteen to twenty years ( )	
	f.	twenty years and above ( )	
	1.4 Are	you trained in special needs education?	
	If you	ar answer is YES, what is your professional background?	
	a.	College ( )	
	b.	University ( )	
	c.	Other. Specify ( )	
	1.5 State	te the position you are holding in the education office	

# **SECTION II: SUPERVISION ENGAGEMENT**

2.1	Are you engaged in formulation of policies in the area of special
	needs education?
	a. Yes ( )
	b. No ( )
2.2	How well do you know challenges faced by learners with hearing
	impairment in special schools?
	a. Very well ( )
	b. Fair ( )
	c. Not at all ( )
2.3	Do you understand Kenyan sign language?
	a. Yes ( )
	b. No ( )
2.4	Do you attend trainings to develop skills in sign language?
	a. Yes ( )
	b. No ( )
2.5	State how you do rate KCPE performance of schools for the deaf?
2.6	Are you rewarded for any achievement/ excellent performance?
	a. Yes ( )
	b. No ( )
2.7	What are the management issues you feel should be addressed by
	your employer to improve KCPE performance?

## APPENDIX V

## SCHOOL MANAGEMENT BOARD

## SECTION I: SOCIO DEMOGRAPHIC DATA

	1.1	Indicate your gender			
	a	. Male ( )			
	b	. Female ( )			
	1.2	What age bracket do you be	elong?		
	a.	25 - 30  yrs ( )			
	b.	30 - 35  yrs ( )			
	c.	35 - 40  yrs ( )			
	d.	40 - 45  yrs ( )			
	e.	45 - 50  yrs ( )			
	f.	50 and above ( )			
1.3	В Но	w long have you been in this	s boar	d?	
	a.	Less than a year	(	)	
	b.	One to five years	(	)	Wh.
	c.	Five to ten years	(	)	KIKUYU LIBRARY
	d.	Ten to fifteen years	(	)	NAIROBI
	e.	Fifteen to twenty years	(	)	WOB!
	f.	twenty years and above	(	)	
1.4	Wha	t is your academic backgrou	ınd?		
	a	. Primary (	)		
	b	Secondary (	)		
	C	c. College (	)		
	d	. University (	)		
	e	1	)		
	1.6	State the position you	are ho	oldin	ig in the management board

## APPENDIX V

# SCHOOL MANAGEMENT BOARD

# SECTION I: SOCIO DEMOGRAPHIC DATA

1.1 In	dicate your ge	nder						
a.	Male	( )						
b.	Female	( )						
1.2 W	hat age bracke	et do yo	ou b	elo	ng?			
a.	25 - 30  yrs	( )						
b.	30 - 35  yrs	( )						
c.	35 - 40  yrs	( )						
d.	40 – 45 yrs	( )						
e.	45 - 50  yrs	( )						
f.	50 and above	e()						
How	long have you	been i	n th	is b	oar	d?		
a.	Less than a y	year			(	)		
b.	One to five y	years			(	)		
c.	Five to ten y	ears			(	)	1. 11 (C.) Y ( )	
d.	Ten to fiftee	n years	6		(	)		
e.	Fifteen to tw	enty y	ears		(	)		
f.	twenty years	s and ab	oove	9	(	)		
What is	s your academ	ic back	gro	und	l?			
a.	Primary		(	)				
b.	Secondary		(	)				
c.	College		(	)				
d.	University		(	)				
e.	Other. Speci	ify	(	)				
1.6	State the p	osition	you	u ar	e h	oldi	ding in the management board	
	a. b. 1.2 W a. b. c. d. e. f. How a. b. c. d. e. d. e. d. e. f. Uhat is a. b. c. d. e.	a. Male b. Female 1.2 What age bracke a. 25 - 30 yrs b. 30 - 35 yrs c. 35 - 40 yrs d. 40 - 45 yrs e. 45 - 50 yrs f. 50 and above How long have you a. Less than a y b. One to five y c. Five to ten y d. Ten to fiftee e. Fifteen to tw f. twenty years What is your academ a. Primary b. Secondary c. College d. University e. Other. Specie	b. Female ()  1.2 What age bracket do ye a. 25 - 30 yrs () b. 30 - 35 yrs () c. 35 - 40 yrs () d. 40 - 45 yrs () e. 45 - 50 yrs () f. 50 and above () How long have you been in a. Less than a year b. One to five years c. Five to ten years d. Ten to fifteen years e. Fifteen to twenty ye f. twenty years and all What is your academic back a. Primary b. Secondary c. College d. University e. Other. Specify	a. Male () b. Female () 1.2 What age bracket do you be a. 25 - 30 yrs () b. 30 - 35 yrs () c. 35 - 40 yrs () d. 40 - 45 yrs () e. 45 - 50 yrs () f. 50 and above () How long have you been in the a. Less than a year b. One to five years c. Five to ten years d. Ten to fifteen years e. Fifteen to twenty years f. twenty years and above What is your academic backgro a. Primary ( b. Secondary ( c. College ( d. University ( e. Other. Specify (	a. Male () b. Female () 1.2 What age bracket do you belo a. 25 - 30 yrs () b. 30 - 35 yrs () c. 35 - 40 yrs () d. 40 - 45 yrs () e. 45 - 50 yrs () f. 50 and above () How long have you been in this b a. Less than a year b. One to five years c. Five to ten years d. Ten to fifteen years e. Fifteen to twenty years f. twenty years and above What is your academic background a. Primary () b. Secondary () c. College () d. University () e. Other. Specify ()	a. Male () b. Female () 1.2 What age bracket do you belong? a. 25 - 30 yrs () b. 30 - 35 yrs () c. 35 - 40 yrs () d. 40 - 45 yrs () e. 45 - 50 yrs () f. 50 and above () How long have you been in this boar a. Less than a year ( b. One to five years ( c. Five to ten years ( d. Ten to fifteen years ( e. Fifteen to twenty years ( f. twenty years and above () What is your academic background? a. Primary () b. Secondary () c. College () d. University () e. Other. Specify ()	a. Male () b. Female ()  1.2 What age bracket do you belong? a. 25 - 30 yrs () b. 30 - 35 yrs () c. 35 - 40 yrs () d. 40 - 45 yrs () e. 45 - 50 yrs () f. 50 and above ()  How long have you been in this board? a. Less than a year () b. One to five years () c. Five to ten years () d. Ten to fifteen years () e. Fifteen to twenty years () f. twenty years and above ()  What is your academic background? a. Primary () b. Secondary () c. College () d. University () e. Other. Specify ()	a. Male () b. Female () 1.2 What age bracket do you belong? a. 25 - 30 yrs () b. 30 - 35 yrs () c. 35 - 40 yrs () d. 40 - 45 yrs () e. 45 - 50 yrs () f. 50 and above () How long have you been in this board? a. Less than a year () b. One to five years () c. Five to ten years () d. Ten to fifteen years () e. Fifteen to twenty years () f. twenty years and above () What is your academic background? a. Primary () b. Secondary () c. College () d. University () e. Other. Specify ()

SECTION II: MANAGEMENT BOARD OPERATION
2.1 How many times do you meet in a year?
a. Two times ( )
b. Three times ( )
c. Four times ( )
2.2 State how you assist the school with resources and infrastructure?
2.3 Do you understand your responsibilities very well?
a. Yes ( )
b. No ( )
2.4 Do you attend trainings to develop management skills?
a. Yes ( )
b. No ( )
2.5 If your answer on question 2.4 is "yes", state who sponsors such
training?
2.6 What management issues do you feel should be addressed by the
Government to uplift the standard in KCPE results in the school?

Thank you