

**EFFECTS OF HEARING IMPAIRMENT ON ACADEMIC PERFORMANCE  
OF CHILDREN IN AN INCLUSIVE SETTING, RANEN  
ZONE, RONGO DISTRICT  
KENYA**

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## DEDICATION

I dedicate this noble piece of work first to my wonderful mother *Mrs. Patricia Otonya* who played a wonderful role in my Secondary Education. my first born daughter, *Benta Julian Otieno* and my son *Basil Omondi Otieno* for their polished discipline among other siblings. Not to forget is my life partner *Mrs. Pamela Otieno* for her tireless moral and material support and encouragement during my Diploma and Degree studies.

## DECLARATION

I, *Boniface Otieno Otonya* Registration Number *BED/13387/61/DF* do hereby declare that this project is my own original work. It is neither a duplication of a similar published work elsewhere nor has it been submitted for the award of Diploma or Degree in any other institution or University. I similarly declare that all the materials mentioned here which are not my own work have been given their due acknowledgement.

SIGNED ..  ..... DATED *27<sup>th</sup>* DAY OF *Aug.* *2008* .....

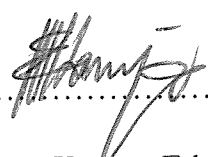
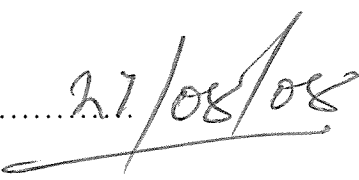
## ACKNOWLEDGEMENT

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## APPROVAL

This papers was supervised and set for approval before it was submitted to the institute of open and distance learning of Kampala International University.

By

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Mr. Kanya Edward

## DEFINITION OF TERMS

For the purpose of this study, the following terms are defined operationally.

**Hearing Impaired (H.I)** – one who hearing is below the normal hearing level.

**Inclusive Setting** – All learners participated in learning activities irrespective of diversity.

**Inclusive Education** – Education systems are made open to all learners and caters for individual differences.

**Impairment** – Education barriers

**Mainstream** – Regular class situation

**Diversity** – Individual differences both natural and artificial

**Segregated** – isolated from regular learners

**Hereditary** – Passed on from parent to child

**Handicapped** – Experiencing difficulties in the environment as a result of disability.

**Articulation** – Ability to speak in correct language context

**Rigid Curriculum** – Non – modified curriculum that does not cater for learners' diversity.

**Intervention** – Remedial measure for correction and minimizing impairment

**Deaf** – Unable to hear sounds and words. Communicate through sign language

**Stigma** – Misrepresentation of an idea or issue

**Stakeholders** – Supporters of special needs education

**Lower Primary** – Classes one to three

**Upper primary** – Classes four to eight

**Regular learners** – Children without hearing impairment



## **ABSTRACT**

This paper explores the relationship between H.I and academic performance of pupils in some of our public primary schools in Ranen Zone, Rongo District, Kenya. It employs both quantitative and qualitative analysis covering the entire zone which is about 68 square kilometers in area.

The research findings revealed that there were many H.I children in our regular primary schools as there was 100% response from respondents on this fact. The figures were bigger in lower primary than upper primary, signifying their drop out in upper classes due to frustrations. Infections were the major cause of H.I among learners represented by 67% and the majority of whom fell under moderate category. The attitude of regular learners, teachers and parents towards H.I. learners was found to be negative. In terms of academic performance they only managed to score between 20% and 39%, which is below average performance. Learning was based on non modified curriculum that only favored regular learners.

I recommend that curriculum be modified to cater for them, expectant mothers should attend clinics for pre-natal care to guard against H.I infections. All children should be immunized against infections of all kinds and the government should carry out census of H.I persons, involve them in day to day learning and budget for their welfare. These would enhance assessment, correct placement, medication as well as referrals. The government should also train more special need teachers and post them to our regular public schools to assist H.I learners in an inclusive setting. This would improve the academic performance of H.I learners and enable them compete fairly with the rest of the learners.

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Facilities such as hearing aid should be availed to aid their hearing in class and facilitate faster learning. This will definitely allow them to pass their K.C.P. E examinations and join good government high schools.

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## **CHAPTER ONE**

### **1.1 Introduction**

This chapter includes statement of the problems, purpose of the study objectives of the study and research questions, the scope of the study and significance of the study.

### **1.2 Statement of the problem**

Academic performance in Ranen Zone appears to favor majorly the gifted and talented learners who usually make their ways to good Government High Schools. The majority who are average are made to repeat classes several times to enable them perform well academically. In this respect, hearing impaired children largely remain an endangered species as they hardly score average marks and remain below average.

Learning occurs in an inclusive setting in which both impaired and non impaired learners are put together in the mainstream to learn. Lack of professionally trained teachers in special education coupled with understaffing seem to pose a big danger in the academic performance of the H.I learners. The kind of support given to these poor learners remain questionable both from home, school and by Government through the Ministry of Education. School academic performance is measured by the performance of talented learners without considering the fate of other learners H.I Children therefore seem to remain victims of circumstances and live in a world of their own. It remains to be survival for the fittest.

The researcher views this scenario as a stumbling block in the academic achievement of H.I learners and believes that all children have a right to education despite their individual

differences. Given an enabling environment academically H.I learners can perform and sky is the limit.

### **1.3 Purpose of the study**

To establish the relationship between H.I children and their academic performance The study also is to find out whether there are some structures and resources put in place to assist them in their learning process or not. The researcher wants to determine whether H.I learners are handled by qualified teachers and whether parents too are sensitized enough and have awareness in helping H.I children.

All the education stakeholders should be involved in addressing the issue with a view to finding a solution because H.I children like any other learner have their potentialities worth exploiting. In this era of Globalization, Science and Technology should be given room by addressing learners' diversity to acquire technological know how and enable the country use skills and talents of citizens for industrial development through inventions.

### **1.4 Objectives of the study**

#### **1.4.1 General Objectives**

To establish the effects of H.I on academic performance of children in an inclusive setting Renen Zone, Rongo, District, Kenya.

#### **1.4.2 Specific objectives**

1. Establish causes of H.I among children in Ranen Zone
2. Determine the attitude of other learners and teachers towards H.I learners
3. Establish whether parents and other stakeholders support H.I learners the same way they do to other children
4. Assess the standard of academic performance of the H.I learners
5. Identify some interventions strategies to assist H.I learners in an inclusive setting.

## 1.5 Null hypotheses

There is no significant relationship between HI and pupil's academic performance.

## 1.6 Scope of the study

This study was carried out in Ranen Zone Rongo District Kenya. *Ranen Zone* is a component of *Awendo Division* in *Rongo District Nyanza Province, Kenya*. It's name is derived from a hill known as *Ranen* which means "seen from far". It has a market and a shopping centre next to the hill along *Rongo – Migori* highway which runs from North (*Rongo*) to South ( *Migori*) . the zone is almost divided into two halves by *River Kuja* which flows from *Kisii highlands* from East down to *Lake Victoria* to the West . This creates Northern and Southern parts of the zone. It is sandy to the North with clay soils to the South. Sugarcane is the main cash crop. It is aproximetely 68 square kilometres

The zone has sixteen public primary schools, five private primary schools and four secondary schools which are evenly distributed all over the zone. The researcher used ten regular primary schools and completed the study in one year that is august 2007 to august 2008

## 1.7 Significance of the study

This study is to benefit the following disciplines:-

The Ministry of Education Science and Technology could be able to use these research findings to assist the Government put in place a policy that will effect the necessary adjustments in the education sector and be able to meet the needs of H.I children. This would enable H.I learners overcome their learning challenges and cope up with other learners.

The Zonal Quality Assurance and Standards Officer could be able to closely monitor the teaching and learning of H.I learners in our schools and advise the Ministry accordingly on the plight of H..I children.

Teachers could be able to use appropriate methods to assist H.I learners to overcome their learning barriers and improve their academic performance. The parents will be able to

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develop awareness through sensitization and come upon in force to support H.I children in all dimensions of their learning process. The learners will be able to co-exists and support each other irrespective of their individual differences and be able to remove stigma against all other impaired children and build on them to make further research studies on H.I learners' challenges with a view to improve their academic achievement.

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## **CHAPTER TWO**

### **2.0 LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents the theory and related literature from different authors on the relationship between HI and academic performance

#### **2.2 Theory**

According to Mwereria (2002), academic achievement of H.I learners must be based on support measures provided to them. Referrals should be done to H.I children with H.I problems once identified you may sometimes refer learners with difficult or health related problems to a doctor or assessment centre. It is at the assessment centre that audiometric tests, educational advice and suggestions from placement for learners with severe hearing difficulties is done. At times, the assessors may refer the learners for medical attention. Auditory training (listening experiences) refers to the process of helping a learner to identify and be aware of environmental sounds around him/her. Auditory training is therefore essential to all the learners who have hearing loss. Many of the learners who have hearing problems may develop good listening skills just by taking part in daily classrooms conversations. Others may require carefully monitored individual instruction, because environmental noise or the severity of the hearing loss hinders their natural auditory training. The aim of auditory training is to help the child with hearing impairment to make maximum use of his/her remaining auditory senses to the maximum capacity in language/use and regardless of the degree of hearing loss. It also enables the learner to be aware of environmental sounds. A variety of materials are used in auditory training. These materials are sometimes referred to as noise makers which include music from radios,



ringing bells, doors and drawers closing, ringing telephone, sound of taped birds singing, taped animals sounds and passing vehicles, clattering of kitchen utensils, people's voices, taped music from a band, guitars drums, shakers, rattles and running water.

A child with H.I may not recognize most of these noise makers. You may therefore play the sound and make him/her be aware of it by explaining what the sound is or asking him/her to confirm when he/her hears or does not hear it. Finally let him/her touch any vibrating object to help him/her connect sound production with vibrations (sources) .

Sound amplification is very important and it refers to making sound loud enough for the learners to hear. It is one of the most important inventions used to help learners with H.I using methods for techniques such as talking loudly and providing a hearing aid.

Acoustic treatment of the environment involves controlling sound level in an environment to enable learners to obtain a favourable listening condition. In acoustic treatment all sources of outside and inside noises have to be reduced and / or controlled. Most of the inside noise can be reduced substantially by careful selective of a quiet classroom with quiet heating systems, ventilators and other equipments which must be used in the room. The rooms which are acoustic treated may have carpets to reduce noises made by foot traffic, mounting of absorptive material on the surfaces of the walls and the ceiling. Absorptive materials are usually soft and porous. They reduce reverberations and noise level.

### **Related literature**

According to Warunguru (2002) H.I children should be treated like any other child in the family in all aspects of socialization and discipline. They need to develop self esteem, confidence and personality. They should be encouraged to follow family rules, receive equal amount of attention, take part in all activities, share with others, seek help and get as much as possible from life. Inclusion of H.I learners should start from the beginning of life

rather than having an individual segregated first and then later brought back into the mainstream.

Actually H.I children have a right to education just like any child and their impairment should not be an escape goat. In this chapter, the researcher presents literature related to the problem and the need to address their challenges. This chapter finally ends with a conclusion on the literature review.

### **2.3 Identification of H.I learners**

Conventional wisdom has it that human beings are neurologically wired to read and learn to do it automatically. But an on going comprehensive study by the national institute of Health (N.I.H) is telling a far different story. Begin in the 1960's the N.I.H. study shows that 4 in 10 children have such grave difficulty that they fall behind early in school and stay behind. In the most extreme cases, children appear to have abnormal activity in the parts of the brain that process phonemes the basic sounds that correspond to the letters of the alphabet. The simplest rules of language elude them. When asked for a word that rhymes with "cat" for example they have no idea what the question means they stumble over words like "it" and "the" the disorders such as hearing impairment affect children of all cultural backgrounds and intelligence levels. It strikes those who were read to as infants as well as those who grew up without a book in sight.

Connecticut (1999)

Children who are deaf may be able to perceive some sound but are unable to use their hearing to understand speech. Deaf children develop speech and language skills mainly through their sense of sight. Children who are hard of hearing on the other hand, have significant hearing loss that makes special adaptations necessary. It is possible however, for these children to respond to speech and other auditory stimuli. Children who are hard of

hearing develop their speech and language skills mainly through the sense of hearing. Jersey (2003)

It is very important to identify child's hearing loss early in life to ensure as near normal development as possible. H.I children have difficulty in understanding directions, hearing high pitched sounds, understanding spoken sentences, participating in group discussions and development. As a result, they develop communication barriers, withdrawal and feeling of inferiority. The child's grammar and vocabulary may be grossly affected due to several consonants and word endings missing in his/her speech. This language is not easy to follow because it is full of grammatical errors and the child may be better understood through gestures. KISE (1993)

Characteristics include asking for pardon or repeating what has been said, frequent ear infections, poor articulation of sounds, difficulty in group discussions, difficulty in hearing and saying frequency speech sounds such as /ssh/t/k/ch. There are also problems of participating in oral activities cupping ear in the direction of sound and stares at the speakers face. Mwaura (2002)

H.I children have been described as dead, deaf and dumb, deaf mute. Acoustically handicapped and auditorally handicapped. Some of the indications include failure to acquire spoken language and speech flow problems. Ndurumo(1993)

## **2.4 Causes and types of Hearing Impairment**

People with hearing impairments can be divided into two groups the deaf and the hard of hearing. Those who are deaf, or profoundly hard to hearing, have hearing disability so severe that they have little useful hearing even if they use hearing aids. Although almost all persons who are deaf perceive some sound, they cannot use hearing as their primary way to gain information. People who are hard of hearing can process information from sound usually with the help of a hearing aid.

Although the degree of hearing loss is important, the age when the hearing loss occurs is also important. Individuals who become deaf before they learn to speak and understand language are referred to as prelingually deaf. They either are born deaf or lose their hearing as infants. According to data gathered by the commission on the education of the Deaf (1988), approximately 95 percent of all children and youth who are deaf are prelingually deaf. Those whose hearing impairment occurs after they have learned to speak and understand language are called postlingually deaf. Many are able to retain their abilities to use speech and communicate with others orally.

There are two general types of hearing loss, conductive and sensor neural. Conductive hearing losses are due to blockage or damage to the outer or middle ear that prevents sound waves from traveling (being conducted) to the inner ear. Generally, someone with a conductive hearing loss has a mild to moderate disability. Some conductive hearing losses are temporary; in fact, we have all probably experienced a conductive hearing loss at some point in our lives. For example, you may have experienced a temporary loss of hearing due to change of air pressure when flying in an airplane or riding in a car in the mountains. Preschoolers often experience a conductive hearing loss when they have head colds. Because of the high frequency of head colds among children, at any one time, between 50 and 80 percent of youngsters attending kindergarten through fifth grade may have a mild hearing loss. The infection causes excessive fluid to accumulate in the middle ear, interfering with the conduction of sound waves there. With a mild loss, the individual can still hear almost all speech sounds and can hear most conversations (Boone, 1987) if the hearing loss was caused by a head cold; once the ear infection clears up, the hearing difficulties also disappear. Many conductive hearing losses can be corrected through surgery or other medical techniques. Deborah(1995)

H.I may result due to hereditary infections during pregnancy, Rhesus incompatibility and Aresia including infectious diseases, tumours, trauma, excessive noise and old age.

KISE (1993)

According to World Health Organization (WHO) approximately 10% of all children in Kenya are handicapped. Further more, it estimated that at least 5% of the children in regular schools have some special educational needs. Of these about 1 in every 1000 children have some kind of hearing impairment. It is therefore estimated that Kenya has about 300,000 cases of persons with H.I. Mwaura (2002)

Hereditary is the leading cause of pre-natal H.I in Kenya and childhood measles is leading in post natal H.I followed by Meningitis , fever and Otitis Media. H.I may occur at different times in life at different stages which include pre – natal, peri-natal stage and post-natal stage. Ndurumo(1993)

Some of the causes for problems in this area are minor. The ear canal may be plugged by wax, by infection, or by some object that lodges there. More serious i\s a malformed auricle or a canal that is blocked by a fleshy bump. Occasionally the canal itself is completely closed or nonexistent. All of these conditions respond to medical treatment, although the congenital malformations that require surgical procedures usually cannot be dealt with until the child has passed the preschool years. As a result there may be delay in language development because the child does not hear enough during the crucial developmental years. William(1978

More serious problems occur in the middle ear. The most frequent of these in young children is continuing infection that causes the middle ear to fill up with fluid, replacing the air that usually surrounds the ossicles, thus preventing proper movement of these bones. Although most of these cases respond well to medical treatment, not all do. If continuing



infection and resulting decrease in auditory stimulation persists, there can be damage to the auditory nerve. William(1978)

Genetic or inherited deafness can be dominant, recessive, or sex-linked trait. The best estimates of the percentage of deafness that is genetic in origin vary between 50 percent and 55 percent, the remainder is non genetic in cause . according to Nance (1976) 84 percent of all genetic cases are the result of recessive genes. 14 percent dominant genes, and 2 percent sex linked. Deaf adults tend to marry each other, and many will have deaf children. If two hearing parents carry recessive genes, they may have hearing impaired children. The mother who carries a sex linked gene may pass that on to her children.

Hearing impairments that are not genetic in origin are called adventitious and are most frequently acquired in two ways, either by disease of the mother during pregnancy or by a viral disease contracted by the child. Of all diseases, spinal meningitis has the most serious impact on hearing but any or the childhood diseases such as measles, mumps, chickenpox can result in a permanent hearing loss. Rubella, or German measles, when contracted during the mothers pregnancy, causes not only hearing loss but other problems as well. There may be eye cataracts, a faulty heart condition, or learning disability. It is hoped that vaccine now has this virus under control. Hearing loss to a lesser extent can be caused by the administration to the child of certain myelin drugs and occasionally is the result of a severe blow to the head, sufficiently strong to damage the bony structure of both ears.

WILLIAM (1978)

## **2.5 Intervention strategies**

No matter how hard we try, it is almost impossible to keep the deaf from signing. While a child is still at home the parents can forbid and punish the child for signing, in oral schools teachers can make the child keep his hands behind his back. But once a deaf person gets out on his own he will naturally revert to signing.

You will often find that many deaf are sloppy and lazy in their use of signs. This is partly because they are not taught proper signing in school. However, there are some deaf people who sign gracefully and beautifully, just as there people with beautiful speaking voices who enunciate more clearly than others. Also, there are deaf people who seem to have a special talent for “singing” they can make a song come to life as they gracefully sign the song with rhythm. Basak (2005)

Students who are different enough from their classmates require special adapted instructional materials and practices to help them maximize their school success. Increasingly, students with special needs are being educated in general education classrooms for part or all of the school day such students often show greater academic achievement better self concepts and more appropriate social skills than students with special needs who are educated in self contained classrooms or separate facilities

Jeanne (2003)

Speech is an orderly combination of sounds expressed orally and received through the ears. It is a medium through which language is expressed. The sense of hearing is actively involved in enabling the child to perceive spoken language, listening to parents and picking up bits of conversation incidentally. When a child has H.I, the most noticeable symptoms is defective speech sounds, not because there is any thing wrong with the organs but because he/ she does not hear these sounds and therefore could not produce them. (KISE, 1993)

Inclusive setting describes a situation in which all learners including those with special needs participate in all activities in a community that recognizes and addresses the need of each learner as much as possible. The family climate also has a significant effect on the H.I child's learning. Meadow (1980)

The main challenges relating to access, equity and quality in the provision of Education to children with disabilities include lack of clear guidelines in the implementation of inclusive education policy, lack of reliable data on children with special needs, inadequate tools and skills in identification and assessment of disability and a common curriculum that is not tailored to meet special needs. (M.O.E. – Kenya 2007)

Problems associated with inclusion include lack of supportive policies laid down by the Government. Although the government of Kenya collected information on the disabled during 1989 census, it was not exhaustively analyzed or used in policy making.

( Nyong'o, 2005)

Students with vision or hearing impairments whose disabilities can be ameliorated with assistive devices are not uncommon in the school population. Regular education can usually meet their individualized needs appropriately. However, students with visual and / or hearing disorders whose problems cannot be resolved with technological aids need the procedural protections afforded by law. They should receive special services from birth ( or age of diagnosis) through age 21, in the least restrictive environment, free of charge, with semi annually updated individualized family service plans (IFSPs) until age 6, and annually updated individualized education plans (IEPs) and eventually individualized transition plans (ITPs) qualify for these intensive specialized educational programs are small. Karen(1998-1999)

Language is fixed set of symbols used for thinking and communication. It can be expressed through speech, writing and signing. Human beings communicate through language to pass on thoughts, emotions and ideas. Language development in H.I children therefore is of paramount importance and this is the major challenge faced by H.I learners. The composition written by H.I is relatively rigid, immature and simple. (Moors, 1978)



Interaction of Parents should be involved in school matters in an inclusive setting through assessment process of learning with special needs, giving information and advice on SNE matters within the school and without. They should be similarly being involved with school life and planning for intervention measures for learners with special needs. Parents should also be involved in guidance and counseling of SNE learners as well as organizing for trips and visits to special programs to create awareness. (Mwangi, 2003)

In terms of communication, children with H.I fall into three categories namely; mild to moderate impairment that should be provided with a suitable hearing aid to facilitate effective communication through spoken language. The other category is pre linguagually deaf who should be encouraged to use spoken language already known to them for self expression. Post – linguagually deaf is the third category that becomes deaf after acquiring some spoken language. They should be encouraged to read lips as you speech reading. If they know to read and write you can communicate with them through reading and (Ogututu, 2002)

Some cultural beliefs and practices have made people treat those with disability with stigma. Some communities regard disabilities to be caused by demons, curse, witchcraft, punishment from God and mistakes of our ancestors. Creating awareness is of urgent concern to remove stereotypes. (Shaduma, 2003)

Inclusive education refers to the philosophy of ensuring that school centres of learning and educational systems are open to all children. This will enable learner to be included in all aspects of school life. It also means identifying, reducing or removing barriers within and around the schools that may hinder learning, inclusive education is meant to cater for learners' diversity, therefore an inclusive school includes a large diversity of learners and modified curriculum is used. (Warunguru 2002)

Negative attitude of teachers and other stakeholders towards H.I children and inaccessible environments. Communication barriers between the teachers and the learner. Community and parents are not actively involved in supporting H.I children and lack of hearing aids, teaching aids and human resources. Teachers and schools are not supported by appropriate policies and legislation. Poor quality of training teachers, classroom repletion and school desertion. Rigid methods of teaching, rigid curriculum and evaluation criteria.

(Waruguru, 2002)

Inclusive education enables the child to remain as he/she is by learning in the natural environment. Inclusive learning is child centre and child focused with a skilled and knowledgeable class teacher. The system is able to include all children in the learning process irrespective of their individual differences and enables children to develop self esteem. It is least restrictive and spreads evenly for all whose right to education is realized and actualized. (Waruguru, 2002)

Assessment is done to special needy children to find their problems for appropriate interaction. Collaborative learning or co – operation approach is used to enable learners share experiences and benefit from each other by doing activities together. Supportive services such as resources should be made available to the learners. Parents and community at learners should be involved through sensitization to support special needs learner (Waruguru, 2002)

Disabled children were mostly hidden at home with nothing to do, they had been shunned by society and family. It is high time that Kenya National Examination Council considered standard means for people with disabilities some of whom can be interacted with normal students. (Wagama, 2007)

## CHAPTER THREE

### 3.1 Introduction

This chapter contains the outline of methods and procedure the researcher used to obtain a relevant data pertaining to the academic performance of H.I learners in an inclusive setting from selected regular primary schools in Ranen Zone, Rongo District in Kenya, it includes the design, research environment, population, data collection procedures and the limitations.

### 3.2 Research design

This study employed both qualitative and quantitative analysis to determine the academic performance of H.I learners in an inclusive setting from the selected regular primary schools. The data was collected numerically recorded and presented in explanation with the aid of percentages, tables and histograms.

### 3.3 Research environment

This study was conducted in ten sampled schools out of sixteen public schools in the Zone. *Ranen* Zone is divided into three bases namely; *Yago* based to the South with seven schools, *Kwoyo* based to North with five schools and *Nyakuru* base to the West with four regular schools.

*Yago* and *Kwoyo* bases are endowed with a tarmac highway crossing the Zone from *Kisii* town to the North down to *Migori* town to the South. *River Kuja* divides *Nyakuru* base into two halves with two schools in both sides. The river lacks adequate bridges across it and communication is difficult in the base. There is done big market also named *Ranen* at the foot of the hill along the *Kisii – Migori* highway within *Yago* base.

### 3.4 Research Population

Table 3.1: Summary of teacher and parent population by sex as at 2<sup>nd</sup> March 2007 for ten Sampled Schools

Teachers from the selected schools						Parents per school	
BASE	SCHOOLS	M	F	TOTAL	Questionnaires returned	total	Returned
<i>YAGO</i>	Yago Primary	3	5	8	7	4	3
	S/ Kagak	4	1	5	5	4	4
	Primary	3	1	4	4	4	4
	N/ Kuja	2	4	6	4	4	4
	Primary			5	5	4	2
	Ranen primary						
<i>KWOYO</i>	Kwoyo	3	2	4	4	4	3
	Primary	2	2	5	5	4	4
	Koyier primary	5	-	5	4	4	4
	Saria Primary	3	1	4	4	4	3
	Nyang'inja						
	Primary						
<i>NYAKURU</i>	Nyakuru	4	1	5	5	4	4
	primary	4	-		4	4	4
	Nyambija			4			
	primary						
	<b>TOTAL</b>	<b>33</b>	<b>17</b>	<b>50</b>	<b>45</b>	<b>40</b>	<b>35</b>

### **3.5 Research instruments**

This study utilized a researcher devised instruments which are questionnaires in respect of teachers from sampled public schools and questionnaires for H.I learners' parents from the communities around the sampled schools.

### **3.6 Data collection procedure**

The researcher prepared transmittal letters to the Head teachers of the schools to be visited to ask for permission. Prepared questionnaires to be taken to the teacher respondents and parents particularly to enable the researcher gather information on H.I.

#### **3.6.1 Respondents**

Teachers from each sampled school were the respondents, thus some from the lower classes and others from upper classes. Parents became respondents from each school community. There were a total of 80 respondents; 45 teachers and 35 parents.

### **3.7 Limitations**

Limitations included the distance from the school at one end of the Zone to the other and poor communication network. There were very few bridges crossing River Kuja to enable one make it from the Northern part of the Zone to the South. Thus there was no direct shortcut across the river except through the tarmac road bridge. The clay soil to the South was impassable during wet weather and it took time to accomplish a journey between schools. Negative responses were likely to generate from certain respondents as one of the limitations.

## CHAPTER FOUR

### 4.0 Presentation and analysis

#### 4.1 Introduction

This chapter is composed of raw data taken from respondents as was recorded in order of the research questions and objectives. The analysis and interpretation of data was done based on two categories of questionnaire. The first questionnaire targeted 45 teachers of H.I learners and the second targeted 35 H.I learners' parents from the ten sample school communities.

Table: 4.1 HI Pupils in Schools

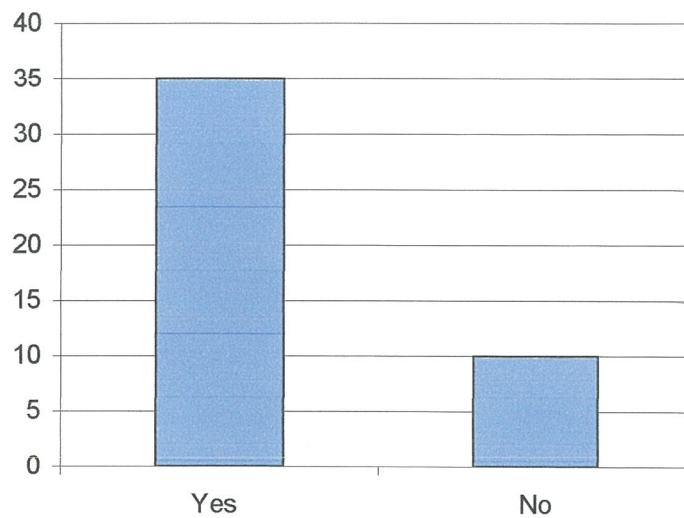
Category	Frequency	%
Yes	45	100
No	0	0
Total	45	100

All teachers from the sampled schools gave it that there were HI cases in their schools

Table 4.2: Children cupping their ears towards the source of sound

Category	Frequency	%
Yes	35	78
No	10	22
Total	45	100

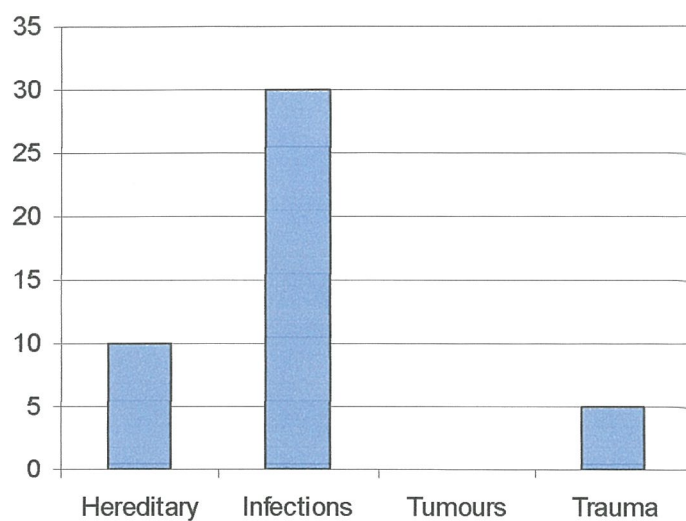
Table 4.2



Majority of the teachers accepted that there were learners in the school who cupped their ears towards sound source representing 78%. However 22% responded negatively to the question.

**Table 4.3: Causes of H.I among learners**

Category	Frequency	%
Hereditary	10	22
Infections	30	67
Tumours	0	0
Trauma	5	11
<b>Total</b>	<b>45</b>	<b>100</b>

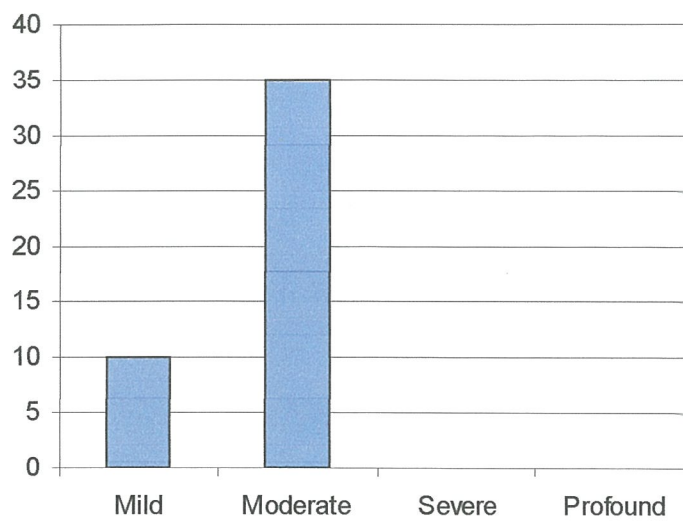


Majority of teachers believe that infections are the major courses of HI among pupils, with a percentage of 67. Followed by heredity 22%, and trauma with 11%. Tumour was not significant.



**Table 4.4: categories of HI learners present in the school**

Category	Frequency	%
Mild	10	22
Moderate	35	78
Severe	0	0
Profound	0	0
<b>Total</b>	<b>45</b>	<b>100</b>

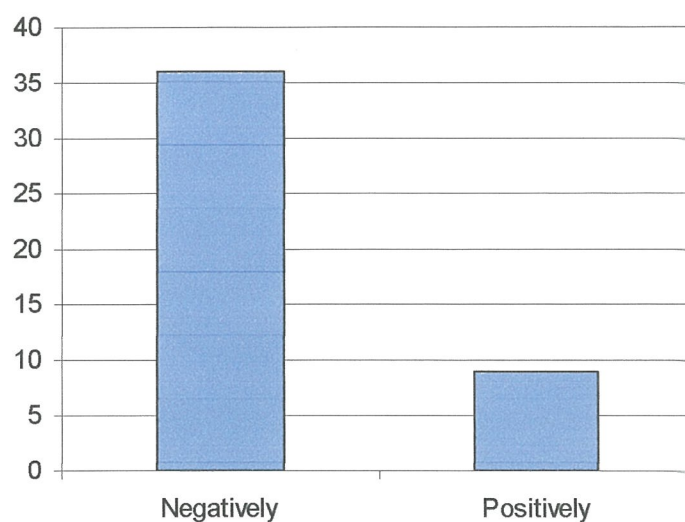


Most of the respondents suggested that moderates is the dominant category of H.I in our schools is represented by 78%. This was followed by mild which is 22% and lastly severe and profound cases which had no representation.

**Table 4. 5 Response of regular learners, teachers and parents towards H.I learners.**

**Response**

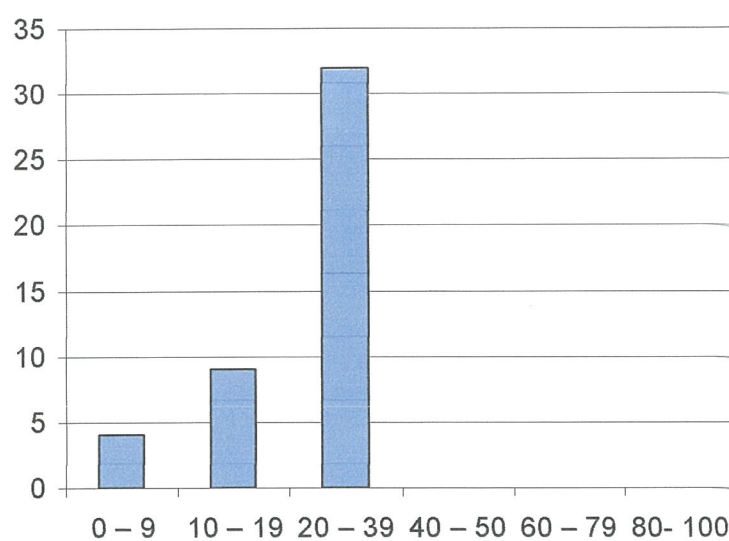
Category	Frequency	%
Negatively	36	80
Positively	9	20
<b>Total</b>	<b>45</b>	<b>100</b>



A large number of respondents said there was a negative response by regular learners, teachers and parents towards H.I learners which represented 80%. Only 9 respondents said H.I learners got positive response representing 20%.

**Table 4. 6 General level of performance of H.I learners in the schools.**

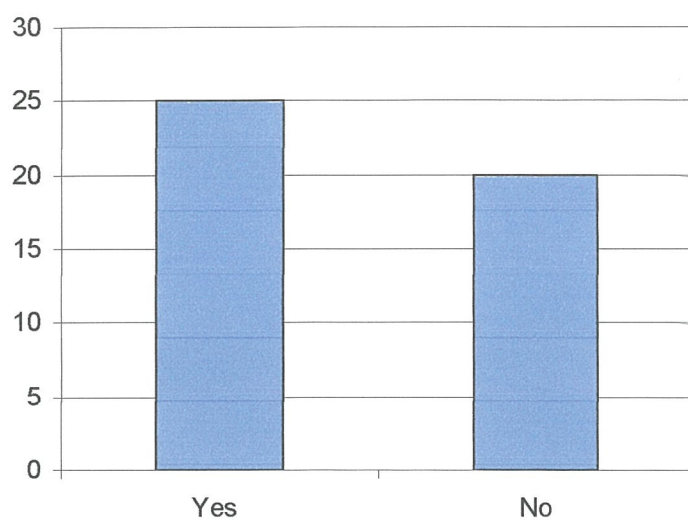
Category	Frequency	%
0 – 9	4	9
10 – 19	9	20
20 – 39	32	71
40 – 50	0	0
60 – 79	0	0
80- 100	0	0
<b>Total</b>	<b>45</b>	<b>100</b>



Majority of respondents, that is 71%, suggested that the general score point of H.I learners ranged between 20 – 39 which was below average. 9 or 20% said they scored only 10 – 19 and 4 or 9% said they could only manage to score 0 – 9.

**Table 4. 7 Schools which have received special need grants.**

Category	Frequency	%
Yes	25	56
No	20	44
Total	45	100



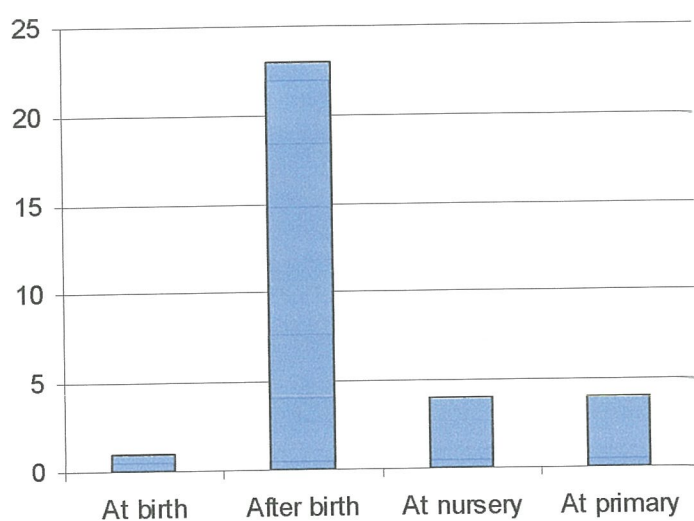
**Observation:**

Half of the respondents (56%) agreed that some special need grants had been injected into the schools whereas 20 (44%) said No.

## Parent's Response:

**Table 4. 8 Time of detection of H.I in children.**

Category	Frequency	%
At birth	1	2
After birth	23	72
At nursery	4	13
At primary	4	13
<b>Total</b>	<b>32</b>	<b>100</b>

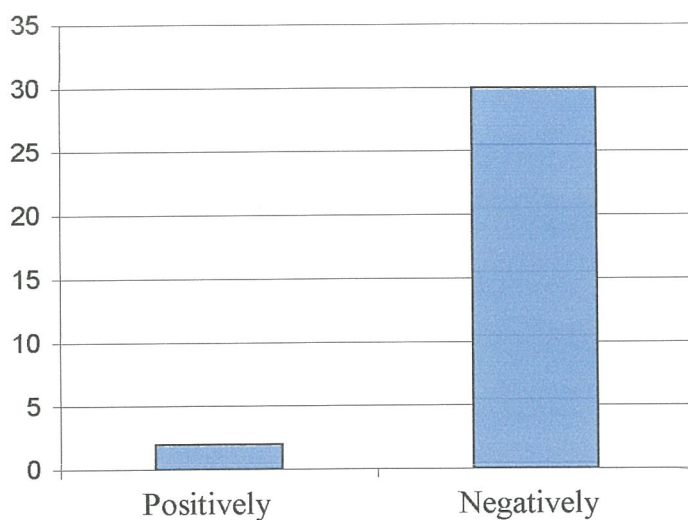


Most of the parents 23 (72%) said H.I was detected after birth, concurring with teacher respondents. At birth had 2% and at Nursery and Primary had 4 respondents each having 13%.

**Table 4.9 How H.I pupils relate to other children and the community members.**

**Response**

Category	Frequency	%
Positively	2	6
Negatively	30	94
<b>Total</b>	<b>32</b>	<b>100</b>

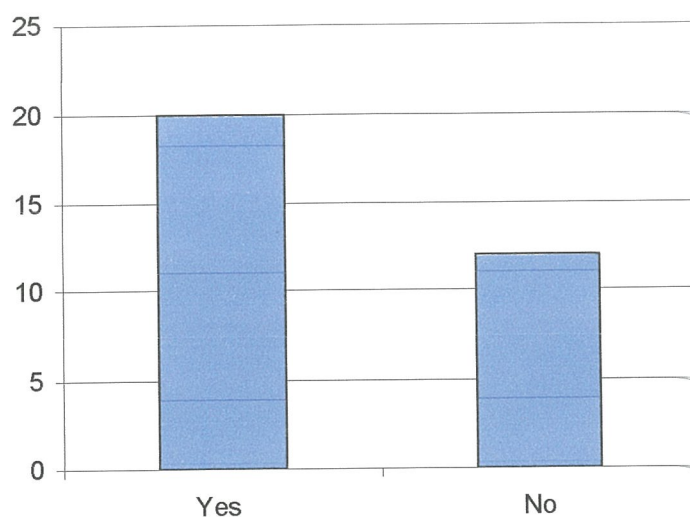


The majority of parents or 94% said H.I learners relate negatively in the community. Only 6% said H.I children responded positively towards others in the community.

**Table 4.10 Immunized children against measles and polio.**

**Response**

Category	Frequency	%
Yes	20	63
No	12	37
Total	32	100



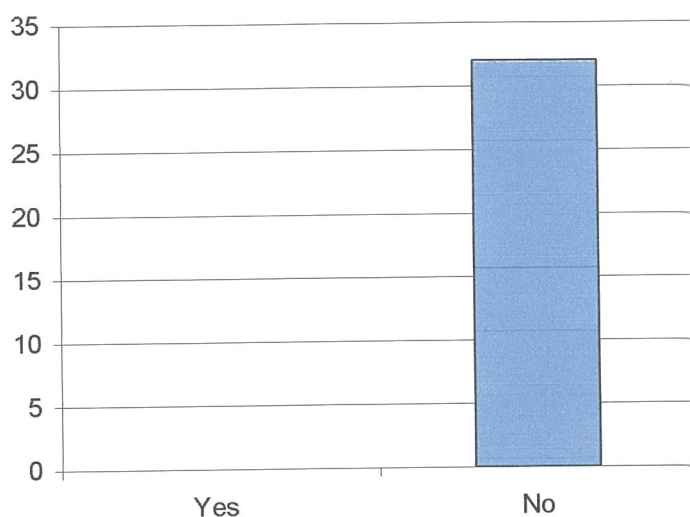
A large number of respondents which was 63% agreed that H.I children got immunized as required. 37% said No which might contribute to a good number of H.I learners in our schools.



**Table 4 .11 Assistance given to H.I learners at schools.**

**Response**

Category	Frequency	%
Yes	0	0
No	32	100
Total	32	100



One hundred percent of the respondents said no any kind of assistance had ever been given to H.I learners at school. None of them had knowledge of any help given to the children. This reveals the true state of H.I learners in the mainstream class.



## **CHAPTER FIVE**

### **6.0 Discussion, Conclusion and Recommendation**

#### **Introduction**

This chapter comprises of discussion, conclusion and recommendations.

#### **6.1 Teacher response discussion**

All of the visited Primary schools had children who complained of ear ache represented by 100%. Non of the respondents denied that they had no such children in their school. This indicates that there are many H.I children learning in our regular primary schools unattended to. They want to pursue their education just like any other learner in the society but apparently they seem not to get the right support in the inclusive setting. This leads to their under performance in their academic work thus scoring minimal grade or below average.

Infections took the lead as the major cause of H.I represented by 67% . These could be due to lack of immunization of children against diseases such as rubella or German measles and polio. This calls for awareness creation in the society to enable expectant mothers attend clinic and actually deliver in health centers to get babies immunized. Hereditary courses followed infections then trauma and no cases of tumours were sited. The level of H.I. revealed that majority of the children fell under moderate category. This means assessments and placement can save them including referrals . Lack of these undertakings must have led to abundant drop out cases of pupils in our regular primary schools.

Observation revealed that regular learners, teachers ands parents had a negative response towards H.I. learners. This confirms stigma and stereotypes displayed towards H.I children.

Thus there is lack of awareness in the society in handling these children. In terms of academic performance it was revealed that the highest score point for H.I learners was between 20 – 39 represented by 71%. 9% scored 10 – 19 while 9% managed 0-9 marks.

In other words they hardly scored above average and hence frustration and drop out of school before completing primary education. This implies that H.I learners hardly benefit from an inclusive setting as regular learners through a non – modified curriculum.

About half of the respondents said they had never seen any special need grant in their schools while 56% said some came from the government. It appears that the impact of the grant on H.I learners had not been felt. Either the fund was too little or misappropriated. Perhaps the support requires some review alongside improvement through follow up.

## **6.2 Parents response discussion.**

Most of H.I detection by parents in their children happened after birth. There could be a problem with pre – natal and post – natal care by concerned parents. Creation of awareness in the society should be done on health care such as child immunization to prevent infectious diseases which could result in hearing impairment such as measles and polio.

The majority of H.I learners related negatively to other children and community members. This kind of reaction could be activated by nature of approach given to the children by others in the society. Perhaps they are molested, mocked and isolated giving rise to their frustration.

Most of the H.I children were immunized against measles, polio and TB. However, 37% denied the fact and this represent a large number of population endangered due to lack of immunization resulting into Hearing Impairment.

None of the H.I, children had ever received any help from their schools. This is a further indication that H.I learners are an endangered species who live in the world of their own and not planned for by the government through the Ministry of Education. All the stakeholders need to be mobilized towards lending a helping had to these poor children to enable them achieve their educational goals.

### **6.3 Conclusion**

H.I children exist virtually in all our public primary schools as revealed by the research in our zone. Unfortunately they go unattended to as they remain passive in the main stream of an inclusive setting.

Lack of identification, assessment, medical interaction and material support create a non enabling environment in supporting their education and hence could only score marks below average frustrating their learning efforts. Lack of awareness in their communities has created negative response towards them and vise – versa. Some parents had hidden them from going to schools in favour of other siblings without impairment costing them their dear education. Thus H.I has been able to develop from mild, moderate, severe and then profound levels without any intervention measure taken. At mild or moderate category, it is possible to correct the impairment and enable the victim live a normal life like the rest.

In a nutshell, H.I children have a right to life education. They have vast potentials worth exploiting by the concerned stakeholders for the benefit of themselves, their society and the nation at large. This would reduce their rate of drop out from primary schools, enabling

them improve their academic standards and be in a position to compete fairly with the rest of the learners in joining good government high schools, tertiary institutions and employment.

Otherwise over forty years after independence Kenya is still losing potential professionals to be such as teachers, doctors, professors and other vast talents and skills in the name of abandoned HI learners. This scenario should have no room in the present times. Kenya's dream of industrialization by 2030 might be a nightmare if diversity is not addressed in education system to exploit all learners potential.

#### **6.4 Recommendations.**

I recommend that expectant mothers attend pre-natal Clinics to enable them be immunized against infectious diseases and treatment. I also recommend that Postnatal care should be taken by mothers to prevent infection that would result into hearing impairment. Immunization of all categories should be given to babies to protect them against infections such as Rubella or German measles.

I too recommend that more trained teachers in special need education should be produced by the government and posted to our schools as they would help in enhancing awareness both at school and at home through sensitization as the implementers on the ground. They would be in position to provide individual special attention to H.I learners in the inclusive setting in our regular primary schools.

They can teach regular learners to change their negative attitude toward HI learners they can also address parents during parents day at school or in meetings chaired by Assistant chiefs and chiefs as well as politicians in their communities of work. This would generate supportive measures towards HI learners and create enabling learning environment. Qualified teachers are in position to identify HI learners and take them to the assessment

centres . This would give room for quick intervention before things run out of hand or before the impairment reaches severe or profound stages .

I recommend that H.I problems should be addressed at the early stages when they are still manageable, otherwise, it becomes expensive at late stages so the earlier the better which allows for proper class placement and use of hearing aid or medical intervention.

I also recommend that the government should make policies that address the plight of HI learners and plan for them in budgeting and provision of hearing aid material among others. Curriculum in use in the inclusive setting should be modified to accommodate HI learners instead of the general one. Sample subject scheme should be availed to enhance curriculum implementation to cater for diversity. The correct number of HI persons should be determined through accurate census to be used by the government in its day today planning.

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## APPENDIX A

### TRANSMITTAL LETTERS FOR THE HEAD – TEACHER

OCT. 22, 2007

MR/ MRS/ MISS .....

THE HEADTEACHER

..... PRIMARY SCHOOL

P.O. BOX .....

.....

Dear Sir/Madam,

I am a graduating student in BED – Special Needs Education at Kampala International University. I am carrying out a research on hearing Impaired Learners in certain public schools of which yours is one.

I'm requesting you to grant me permission to contact two of your staff members as my respondents for that matter. Sorry for inconveniences if any and I look forward to your consideration and co operation. I may call in a week's time and thanks in advance. God bless.

Respectfully yours,

BINIFACE OTIENO OTONYA

**STUDENT**



## APPENDIX B1

### QUESTIONNAIRE TO PARENTS ON HEARING IMPAIREMENT (H.I)

#### LEARNERS FROM TEN SAMPLE COMMUNITIES

Dear Parents,

I kindly request you to complete this questionnaire to assist me carry out a study on challenges faced by learners with H.I in an inclusive setting in Ranen zone, Migori District.

Any information filled in the questionnaire will be treated with the greatest confidentiality.

Welcome !

#### QUESTIONS

1. When did you detect H.I in your child?

At birth

After birth

At nursery level

At primary level


(Tick the appropriate )

How does he/she relate to other children and the community members?

Positive

Negative

2. Was the child immunized against Measles and Polio at the age of nine months?

Yes

No

3. Has he/she received any assistance from Schools?

Yes

No

Please briefly explain:.....

.....

.....

.....

6. What is the general level of performance of H.I learners in your school?

0-9 ☐ 10-19 ☐ 20-39 ☐ 40-59 ☐ 60-79 ☐ 80-100 ☐

7. a) Has your school ever received any special need grant

Yes ☐ No ☐ (Tick as appropriate )

b) If Yes from which source?

Government ☐ Harambee ☐ NGO ☐ Sponsor ☐

Please briefly explain :.....

.....

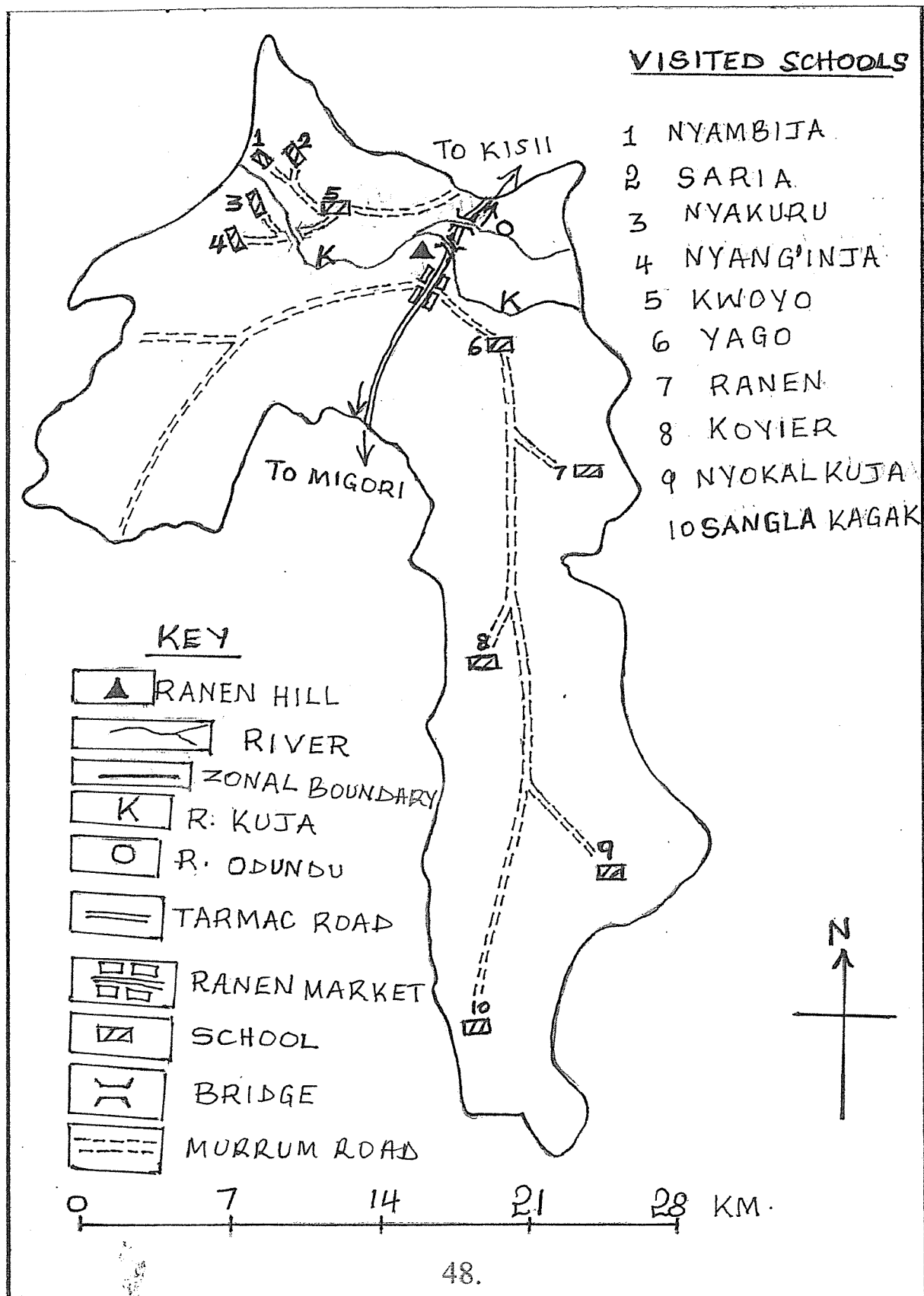
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# MAP OF RANEN ZONE.



SOME OF THE VISITED SCHOOLS IN RANEN ZONE

