

**EFFECTS OF INSTRUCTIONAL MATERIALS TO LEARNERS WITH
HEARING IMPAIRMENT: A CASE STUDY OF ATHI RIVER
DISTRICT IN KENYA**

BY

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DECLARATION

Anam Vionne Akinyi, declare that the content of this document is my original work and is never been presented or submitted to any university, college or any institution of learning for any academic award.

Signed: Anam


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Date: 22nd APRIL 2011

APPROVAL

This is to certify that this research was supervised and is now ready for submission to the academic board for consideration and approval.

Signed:  _____

Mr. Oketcho Pius
Supervisor

Date: 22/04/2011

DEDICATION

wish to dedicate this work to my dear mother who supported me morally and financially and enabled me to do this research work. I further dedicate it to my beloved colleagues who cooperated in doing all the activities I allocated them.

ACKNOWLEDGEMENTS

I thank my almighty God for his continuous support through giving me strength, power, grace, wisdom and granting me this favor to be able to accomplish this piece of work.

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CHAPTER ONE

INTRODUCTION

0 Background of the Study

There are many definitions and classification systems of hearing impairment. By far the most common division is between deaf and hard of hearing. This would seem simple enough, except that different professionals define the two categories differently. The extreme points of view are represented by those with a physiological orientation versus those with an educational orientation. Hearing impairment: is generic term indicating a hearing disability that may range in severity from mild to profound; it includes the subsets of deaf and hard of hearing.

The record of the twentieth century in expanding educational opportunities is a source of shame (UNESCO, 1996). The growth in primary school enrolment in sub-Saharan Africa since 1960's have led to a serious deterioration in the quality of education. Warning of the falling quality have become even more persistent in recent years, as the financial squeeze and tighter budget have starved education system of essential operating inputs in terms of text books, physical facilities and support from stakeholders.

Instructional materials are materials that are used to aid in the transference of information from one to another. For example, a teacher may use instructional materials to aid in the learning of subject matter for a class. These instructional materials could include: Power Point presentations (visual aids), Books, Articles and Materials for project development. The list can go on and on. Some call them instructional materials, while others may call them learning or teaching aids.

Primary education is the key basic foundation for the socioeconomic and political development of any country. The only formal education that most of today's African child can hope to receive is the kind that ensures quality at all levels (UNESCO, 2005).

shortages of teachers, who are skilled in teaching learners with hearing problems, in most public schools could also be a major impact of instructional materials to hearing impairment. This is majorly due to mass influx of learners into schools as a result of free and compulsory primary education. This can make teachers unable to cope with the workload which is experienced in classrooms. hearing impairment has been greatly hindered since this factor has been given little consideration especially in Kenya (JNESCO, 2005). Teachers' Vs individual pupil's interaction is quite minimal. Due to this, poor performance has been experienced in most schools and failure to acquire elementary skills such as reading and writing. Therefore, the government ought to increase the number of teachers into classrooms to ensure quality instruction in the inclusive setting.

Poor learning outcomes have been experienced in Metkei division over the last decade. It is against this background that this research study will be set to determine impact of instructional materials on learners with hearing impairment by focusing on adequacy of teachers, learners and teachers' attitudes, physical facilities and parents' role in filling the gaps.

1.1 Statement of the Problem

According to the World Bank, there has been tremendous growth in the provision of free primary education in sub—Saharan Africa in the last fifteen years. Enrolment in primary schools in the region has increased greatly (Heneveid & Hellen, 1996). This expansion has put pressure on the quality of primary education as the number of learners continues to rock high levels. Due to this, it has reduced government's ability to support schools in terms of teachers, teaching/learning materials and physical infrastructure.

Poor learning outcomes have been experienced over the last one decade. It is against this background that this research study was set to determine factors the impacts of instructional materials on learners with hearing impairment.

2 Objectives of the study

This research is guided by two sets of objectives

2.1 General objectives

To find impact of instructional materials on learners with hearing impairments in Athi River District Kenya

2.2 Specific Objectives

- Establish characteristics of hearing impairments in Athi River District
- i) Establishing the impacts of instructional materials to learners with hearing impairments in Athi River District
- ii) Interventions to assist learners with hearing impairments in Athi River District

2.3 Research Questions

- i) What are the characteristics of hearing impairments in Athi River District?
- ii) What are the impacts of instructional materials to learners with hearing impairments in Athi River District?
- iii) What are the interventions to assist learners with hearing impairments in Athi River District?

1.4 Scope of the study

1.4.1 Time scope

The study was carried out between December 2010 and March 2011

1.4.2 Geographical scope

The research was conducted in Athi River District.

1.4.3 Subject scope

The study is about the impacts of instructional materials to learners with hearing impairments in Athi River District.

5 Significance of the Study

Be a guide to the government in establishing strategies for monitoring quality education in inclusive setting in public primary schools.

Make recommendation that would stimulate the government effort to find solutions to problems facing inclusive education.

-) Serves as a reference guide among other divisions within the district in terms of provision of instructional materials in our inclusive education setting in primary schools.
-) The teachers would be in-serviced on proper methods of handling children with disabilities. Teachers would be encouraged to develop positive attitudes towards SNE learners. Apart from being a role model, teaches would also find joy in their teaching career and accept any learner as unique individual with varied abilities.
-) The parents who are the key players in education will be well informed and be educated on the current issues related to child rights and their access to education. They will also be responsible for providing basic needs. Above all, they would start to treat learners with disabilities as equal with the rest of the children as the saying goes "disability is not inability".
- ii) Rise in issues that will require further research by other scholars of the curriculum implementation.

CHAPTER TWO

LITERATURE REVIEW

0 Introduction

The general purpose of this review is to provide an overview of impact of instructional materials on learners with hearing impairments in primary schools as established from previous studies.

The focus of this study is quality. It is therefore important to review literature in specific variables that can hinder the provision and access to quality education and learning in primary schools. Education (Ross and Mahick 1990) define quality in education as an improvement in the environment in which the learners work with aids to learning provided for that purpose by the school system. Hence, the improved environment could express itself as detectable gains in the knowledge, skills and values acquired by the student it focuses on the process of education in school.

This study sought to determine factors that hinder quality process and outcome. Inputs are very important in determining quality of learning environment. Frequent monitoring of learners process in conjunction with prompt constructive feedback are factors that enhance learners motivation and school effectiveness. (Blum 1990). Regular evaluation and feedback help teachers to recognize what learners know and where further instruction is needed. Thus, close monitoring helps to improve quality.

2.1 Characteristics of Hearing Impairments

The causes for hearing loss and the effects it has are simply too varied to lend credence to a typical case. People with hearing impairments have different learning styles and abilities. They do have one characteristic in common: Their ability to hear is limited and this disability may be reflected in other cognitive, academic, physical, behavioral, and communication characteristics.

Cognitive: There is considerable debate about the extent to which cognitive development is limited by hearing impairments. The environment of people who are deaf or hard of hearing is often qualitatively different from that of people who can hear. Much of what we think of as intelligence is developed through hearing and using language. It has been argued that people with hearing impairments do not think in an abstract way and that their intellectual functioning is limited. Moores (1987) puts the theories about the cognitive functioning of deaf learners into perspective:

Paul and Jackson (1993) believe that differences in the cognitive performance of learners who are deaf and of their hearing peers are more due to inadequate development of a conventional language system than to limited intellectual ability.

Academic: The severity of the hearing loss, the age of its onset, the socioeconomic status of the child's family, and the hearing status of the child's parents are related to the academic success experienced by learners with hearing impairments. Children and young adults who have mild hearing losses generally perform better academically than those with severe losses. Learners who are deaf from birth tend to have more difficulty acquiring academic skills than those who hear, then later lose their hearing. Learners with hearing impairments from families of high socioeconomic status and those who have hearing parents tend to experience fewer academic difficulties than learners from families of low socioeconomic status or those whose parents are hearing impaired.

Physical: Few physical characteristics are specific to those who are deaf or hard of hearing. The widespread belief that the individual compensates for deficiencies in one sense by developing extraordinary abilities in another is unfounded. People who are deaf or hard of hearing have senses of sight, smell, taste and touch like their peers who do not have hearing impairments.

A characteristic that does differentiate people with hearing impairments from their neighbors and peers is their functional hearing. Functional hearing refers to a person's ability to understand information presented orally and is related to how a person might

be taught. For example, a person with a moderate functional hearing loss might not be able to profit from a normal classroom presentation and would require some instructional adaptation to be successful.

Behavioral: Generalizations about the social, emotional, and behavioral functioning of learners who are deaf or hard hearing are based on the performance of these learners on standardized tests. But most of these tests are inappropriate for use with this group.

Moore (1987) describes two perspectives on the social, emotional, and behavioral functioning of those who are deaf or hard of hearing: One is that people with hearing impairments are deviant and experience many problems; the other is that people with hearing impairment are different and need access to services that encourage their optimal development. Based on a review of the research on the social and emotional functioning of people who are deaf, he concludes that: the evidence suggests that the social-emotional adjustment of the deaf is similar to that of the hearing, with great individual variation. Most deaf individuals cope with the reality of deafness as a life-long condition and lead normal, productive lives. This fact supports the contention that deafness itself has no direct impact, either negative or positive, on the development of a mentally healthy individual.

Recent evidence suggests that those who are deaf prefer to be with others who are deaf, that adults who are deaf tend to cluster in groups, socialize, and marry. There has been much discussion of deaf culture, a concept implying that people who are deaf experience and design their lives differently from the hearing people with whom they share the planet (Humphries, 1993). Accordingly, many people who are deaf see the experiences and signed language of deaf communities as the most important factors in their lives. People who are deaf teach one another how to function in society as well as how to get along with others. Sometimes, parents who are deaf want their children to be born deaf so they can share the culture.

ommunication: Learning to speak is difficult if you can't hear. Paul and Jackson (1993) argue that "most deaf learners have not learned either to speak or sign language at a highly competent level despite the advent and proliferation of signed systems . . .". Largely as a result of this inadequate development of a primary form of language many learners who are deaf experience difficulties in developing language and literacy skills needed for effective communication.

.2 Impact of Instructional Materials to learners with hearing impairment

Academic: Learners with hearing impairments from families of high socioeconomic status and those who have hearing parents tend to experience fewer academic difficulties than learners from families of low socioeconomic status or those whose parents are hearing impaired. This is because they are used to sign language. (Luetke Stahlman & Luckner, 1991)

Communication: As stated earlier, communication problems can seriously interfere with interpersonal relationships for learners with hearing impairments who receive all or part of their education in general education classrooms. Their inability to communicate with other learners can delay their language development. Moreover, deaf learners in ways that are different from those around them can inhibit their social interaction and development.

Interaction is essential to language development and much of language development and communication skills come from the interactions of young children and their parents or other caregivers. The hearing parents of children who are deaf interact differently with their children than the hearing parents of children who are who are hard of hearing. Children who are deaf are often passive participants in communication, as their parents or caregivers bombard them with language stimulation and dominate the communication process. As a result, the vocabulary and syntax of children who are deaf grow slowly.

captioning: In some cases where captioning or other information is not already available on audiovisual works or other types of media, it is necessary for the college to add captioning to make the information accessible to deaf or hearing impaired learners.

The publisher's response to providing captioning for these materials is varied. Some publishers want a written request from schools to caption their work which can take weeks and delay student access to class material. Others only want to give permission to caption the work if they are paid or are provided the newly-captioned version by the college. Furthermore, other publishers never respond to such requests. Regardless, the school must still provide access to the material to comply with state disability and federal ADA laws.

The schools are often put in an untenable position. On the one hand, they are required to provide all learners with disabilities access to instructional materials. On the other hand, they must comply with existing copyright laws. In either case, the schools are vulnerable to law suits. Currently, many publishers provide the schools permission to provide this important service so deaf and hearing impaired learners do not lose valuable instructional time because of not having access to critical course materials. Many copyright holders do not respond to the schools request for permission to caption.

This bill attempts to codify current practice in working with the publishers or copyright holders to provide captioning for materials in a timely fashion or providing the schools the permission to caption. In the case where a publisher or copyright holder does not respond or does not have the ability to caption in a timely fashion, the schools would have the authority to caption in time for learners to have access to these materials. The success of deaf and hearing impaired learners is significantly reduced if schools cannot provide access to captioned audiovisual materials being used in classroom instruction.

he inability to hear does not affect an individual's native intelligence or the physical ability to produce sounds.

ome Deaf learners are skilled lip readers, but many are not. Many speech sounds have identical mouth movements, which can make lip-reading particularly difficult. For example "p," "b," and "m" look exactly alike on the lips, and many sounds (vowels, for example) are produced without using clearly differentiated lip movements.

Make sure you have a Deaf student's attention before speaking. A light touch on the shoulder, a wave, or other visual signal will help.

Look directly at a person with a hearing impairment during a conversation, even when an interpreter is present. Speak clearly, without shouting. If you have problems being understood, rephrase your thoughts. Writing is also a good way to clarify.

Make sure that your face is clearly visible. Keep your hands away from your face and mouth while speaking. Sitting with your back to a window, gum chewing, cigarette smoking, pencil biting, and similar obstructions of the lips can also interfere with the effectiveness of communication.

Common accommodations for Deaf or hard of hearing learners include sign language interpreters, stenocaptioners, assistive listening devices, relay services, volume control telephones, signaling devices (e.g., a flashing light to alert individuals to a door knock or ringing telephone), priority registration, early syllabus, notetakers, and captions for films and videos.

2.4 Interventions to assist learners with Hearing Impairments

Reduce distance between student and speaker as much as possible, when using instructional materials so as to make the pupil get to understood.

Speak slowly and stress clear articulation rather than loudness when speaking.

udent turns head and learns toward speakers.

se face-to-face contact as much as possible. Use complete sentences to provide additional context during conversations or instructional presentations.

se visual cues when referring to objects in the classroom and during instructional presentation. Have classmates take notes during oral presentations for student to transcribe after the lesson.

Oral communication methods emphasize the development and use of skills in the areas of speech, speech reading, and residual hearing. Proponents of this method believe that the goal of education is the development of skills that foster full participation in mainstream (that is, hearing) society.

With sign systems, people with hearing impairments express ideas using manual and non-manual body movements instead of speech. The manual aspects of this form of communication are displayed by shaping, moving, and positioning the hands. Non-manual movements include other parts of the body—eyes, eyebrows, cheeks, lips, tongue, and shoulders—in the language being used.

Here it would be interesting to relate the oral-aural controversy that has existed ever since sign language has. Sign Language was founded for the first time in the eighteenth century in Europe. A Frenchman by the name of Charles Michel de l'Epee (born 1712), intensely religious minded and a priest by profession came across two twin sisters in Paris who were deaf-mute

Assistive listening and telecommunication devices take advantage of residual hearing or other senses to enable people with hearing impairments to communicate better. Hearing aids are the most widely recognized and used assistive listening devices. They are worn in the ear, behind the ear, on the body,

in eyeglass frames. Classroom amplification systems are another form of assistive listening device in which a microphone is used to link teachers to learners who wear a receiver that often doubles as a hearing aid.

Telecommunication devices are small keyboards with screens or printers that can be connected to telephones. Telecommunication devices for the deaf (TDDs) and text telephones enable people with hearing impairments to make and receive telephone calls. When a call is made using these devices, the incoming and outgoing conversation appears on the screen or printer. Computerized fax modems and regular fax machines enable people with hearing impairments to communicate without speaking or hearing by using the phone system at their home, school, or work.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This is the chapter in which it describes the research design, the study area, and the target population, sample size, sampling procedures; research instruments and methods of data collection and analysis that were used in this study.

3.1 Research design

This study used qualitative methods to investigate the impact of instructional materials on learners with hearing impairments. It was basically gender focused where females are to be studied in order to get a clear view on impacts among children.

3.2 The area and population of study

This study was conducted in centres located in Athi River District. Athi River district covered a total area of approximately 302km² and has an urban population of 22,000 and a total population of 48,260. Economic activities in this particular area included livestock and maize farming.

3.4 Sample framework

3.4.1 Sample Size

A total of eighty (80) respondents were interviewed. These were as follows: - 10 Headteachers, 20 teachers, 30 parents and 20 learners.

3.4.2 Sampling technique and Procedure

According to Mutai (2001) in purposive sampling, the researcher handpicks the cases to be included in his sample on the basis of his judgment of their typical in terms of their current enrolments.

It is through this method that would come up with sample that was satisfactory to his research problem.

Secondary data

Text books and other related works of outstanding scholars whether Published, Magazines, Written data sources included published and unpublished documents, Agency reports, newspaper articles, internet sources and so forth was referred to so as to give more light on issues of instructional materials and hearing impairments.

3.6 Data Analysis

Data was analysed qualitatively and quantitatively. Different data sets were used in analyzing data collected, i.e. where necessary SPSS package was used. Bar graphs were used to give a clearer outlook about instructional materials and hearing impairments and they were done in Microsoft Excel. Recommendations were made using the outcome of the result of the analysis.

3.7 Ethical Consideration

Bearing in mind the ethical issues, the researcher provided the respondents with the necessary information as regards the main purpose of the research, expected duration, procedures followed, and the researcher was in position to keep privacy and not disclose the confidentiality of respondents and researchers responsibility.

3.8 Limitations

The research study was faced by a number of problems and constraints and hence may not adequately meet the intended objectives to the required level.

Financial constraints have limited the researcher from having a thorough research process for instance; undertaking pretexts and piloting studies had to be foregone.

Again data collection and processing was done in bits because the researcher could not raise the required fund in lump sum as she had to find herself.

problem of distance between the researcher and his supervisor while in the field did impede proper continuous assessment of research, thus research process could only be dictated when it's already late.

The researcher faced a problem of time constraints. The time allocated for the study was not enough for a thorough investigation because the research was conducted with academic urgency in the two years while also the researcher was required to attend to other academic work.

3.9 Delimitations

This research which was facilitated by the following favorable factors; since the researcher was a resident of the area, he had accommodation hence less expenditure.

The researcher being a resident was familiar to the people whom she obtained information. The researcher did not find problems in transport because the infrastructure is good.

CHAPTER FOUR

Presentation and Discussion of Findings

4.0 Introduction

In this section, a core of the study is presented. Data collected from the respondents is analysed. The discussion is presented in accordance with research questions and objectives of the study.

4.1 Demographic Background of the Respondents

4.1.1 Sex

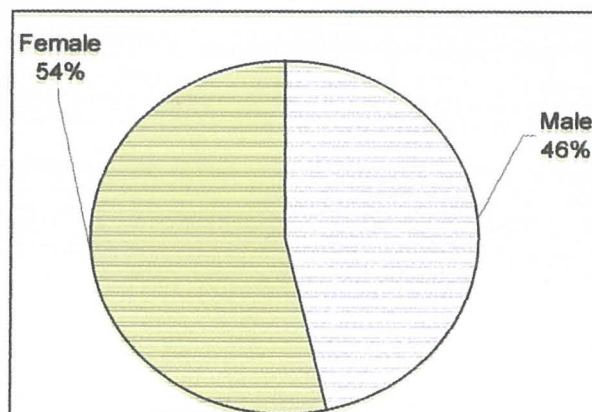
Table 1: The sex of the respondents

Sex	Frequency	Percentage
Male	37	46.25
Female	43	53.75
Total	80	100.00

Source: Field 2011

From the table 4.1, results indicate that majority of the respondents were female (53.75%) while only 46.35 were male.

Figure 1: Sex of the respondents



Source: Fieldwork 2011

1.2 Age

Table 2: Age of the respondents

Age brackets	Frequency	Percentage
Below 19	2	02.50
20 - 24	22	27.50
25 - 29	28	35.00
30 - 34	19	23.75
35 - 39	5	06.25
40 - 44	3	03.75
45+	1	01.25
Total	80	100.00

Source: Fieldwork 2011

From the table 4.2, majority of the respondents fall in the 25 -29 age group followed by 20 -34, 30 - 34, 35 - 39, 40 - 44, below 19 and 45+ with 35.00%, 24.50%, 23.75%, 6.25%, 3.75%, 2.50% and 1.25% respectively.

4.1.3 Marital status

Table 3: The respondent's marital status

Marital status	Frequency	percentage
Single	35	43.75
Married	25	31.25
Divorced	5	6.25
Never married	15	18.75
Total	80	100.00

Source: Fieldwork 2011

Table 4.3 results indicate that majority of the respondents were single followed by married, never married and divorced with 43.75%, 31.25%, 18.75% and 6.25% respectively.

1.4 Education background

Table 4: Education background of the respondents

Level	frequency	Percentage
Primary	8	10.00
Secondary	26	32.50
Tertiary	17	21.25
University	29	36.25
Total	80	100.00

Source: Fieldwork 2011

Table 4.4 shows that most of the respondents were university graduates with 36.25% followed by secondary graduates with 32.50%, tertiary and primary with 21.25% and 10.00% respectively.

1.1.5 Occupation

Table 5: The respondent's occupation profession

Occupation	frequency	Percentage
Farmer	3	03.75
Others	22	27.50
self employed	10	12.50
Civil servants	45	56.25
Total	80	100.00

Source: Fieldwork 2011

From table 4.5, it can be established that most of the respondents were civil servants with 56.25% followed by others with 27.50% followed by self employed and farmer with 12.50% and 3.75% respectively.

4.2 Characteristics of Hearing Impairment

Table 6: Characteristics of hearing impairment

Characteristics	Frequency	Percentage
Cognitive	25	31.25
Academic	15	18.75
Physical development	10	12.50
Behaviour	20	25.00
Communication	7	8.75
Others	3	3.75
Total	80	100.00

Source: primary data 2011

From table 6, it can be established that the common characteristic is cognitive with 31.25% followed by behaviour, academic performance, physical development, communication and others with 25.00%, 18.75%, 8.75% and 3.75% respectively.

4.3 Impact of Instructional Materials

Table 7: Impact of Instructional materials

Impact	frequency	percentage
Better Academic performance	17	21.25
Low level of communication	10	12.50
Time wasting in demonstrating	30	37.50
High level Interaction	10	12.50
Captioning	9	11.25
Others	4	5.00
Total	80	100.00

Source: Fieldwork 2011

from the study it can be established that the most impact of instructional materials to learners with hearing impairments is time wasting in demonstrating with 37.50% followed by better academic performance, low level of communication, high level of interaction, captioning and others with 21.25%, 12.50% and 12.50%, 11.25% and 5.00% respectively.

Through the informal interviews with the respondents it was discovered that teachers waste a lot of time in demonstrating how the instructional materials work in order to make the learner achieve or get what he or she is expected to learn.

1.4 Intervention

Table 8: Intervention

Intervention	Frequency	Percentage
Reduce distance while teaching	35	43.75
Speak slowly	16	20.00
Face-to-face	18	22.50
Telecommunication devices	7	8.75
Others	4	5.00
Total	80	100.00

Source: Fieldwork 2011

From the study it was established that most of the respondents gave reducing distance while teaching as the best intervention with 43.75% followed by face-to-face, speak slowly while demonstrating, telecommunication devices and others with 22.50%, 20.00%, 8.75% and 5.00% respectively.

CHAPTER FIVE

Discussion, Conclusion and Recommendation

.0 Introduction

This chapter focuses on the discussion of the results, conclusion and recommendation in relation to the purpose of the study, objectives and hypothesis of the study.

.1 Discussion

Through the study majority of the respondents were female (53.75%) while only 46.35% were male and they fell in the 25 -29 age group followed by 20 -34, 30 – 34, 35 - 39, 40 - 44, below 19 and 45+ with 35.00%, 24.50%, 23.75%, 6.25%, 3.75%, 2.50% and 2.25% respectively.

It was also found out that majority of the respondents were single followed by married, never married and divorced with 43.75%, 31.25%, 18.75% and 6.25% respectively. Most of the respondents were university graduates with 36.25% followed by secondary school graduates with 32.50%, tertiary and primary with 21.25% and 10.00% respectively.

5.1.1. Characteristics of hearing impairments

Through the study it was established that the common characteristic is cognitive with 31.25% followed by behaviour, academic performance, physical development, communication and others with 25.00%, 18.75%, 8.75% and 3.75% respectively.

5.1.2 Impact of instructional materials to learners with hearing impairments

From the study it was shown that the most impact of instructional materials to learners with hearing impairments is time wasting in demonstrating with 37.50% followed by better academic performance, low level of communication, high level of interaction, captioning and others with 21.25%, 12.50% and 12.50%, 11.25% and 5.00% respectively.

1.3 Intervention

From the study it was established that most of the respondents gave reducing distance while teaching as the best intervention with 43.75% followed by face-to-face, speaking slowly while demonstrating, telecommunication devices and others with 22.50%, 10.00%, 8.75% and 5.00% respectively.

1.2 Conclusion

Impacts of instructional materials to learners with hearing impairments are closely related to the support inputs into the system in relation to the raw materials (learner) and the finished product outcome of the success and achievement. These include the academic performance, communication, interaction, sign language.

1.3 Recommendations

The government should give out credits to the natives and promote financial institutions giving out small loans to people enabling them to develop the quality of education

They should develop a positive lovely attitude towards the people in Keiyo by identifying them as having equal rights and freedom like any other community member and that is their natural right to enjoy them freely so as to eliminate income inequalities.

Enhance sensitization of parents and communities, through public awareness campaigns and other communication strategies on the value of education, with a view to minimizing the impact of the practices that militate against it.

Professional interpreters should be made available and used on a regular basis for ethnic minority during the peace process.

Further more the government should set up a loan scheme. This scheme to be both for the learners and school owners. For learners can borrow the money and pay it after the

raduation especially at university level. While school owners can borrow money and pay it after a long period of time.

Private proprietors should ensure that a conducive study environment is catered for learners to perceive whatever has been taught to them. This will be realised when the best structures (classrooms) have been constructed.

REFERENCES

- David Bound et al (1999) The Challenge of Problem Based Learning
2nd edition Kogan sterling USA
- Fuller Bruce (1986) Raising school Quality in Developing Countries. Wood Bank
Washington USA
- Margaret Shart (1995) An introduction to Educational Psychology, Butter Frome
London, England.
- MOEST & UNESCO (2005) Challenges of Implementing Free Primary Education in
Kenya. rt press Nairobi - Kenya.
- Ponde U. (1989) The Challenge Quality_Jp Primary Education. A lililage Baden -
German
- Sifuna & Otiende (2006) An introductory History of Education. Nairobi University press
Nairobi — Kenya.
- UNESCO (2002): Education for All EFA Global Monitoring Report Paris France
- Newspaper: Daily Nation, July 17th 2004, pg 2, col: 1-21

APPENDICES

APPENDIX A: WORK PLAN

December 2010	1st week	Development of proposal
	2nd week	approval
	3rd & 4th week	Collection of data
March 2011	1st & 2nd week	Presentation, analysis of data collected
	3rd & 4th weeks	Submission

APPENDIX B: BUDGET

ITEMS	COSTS IN KShs.
Stationary	2,000
Printing / binding	1,000
Facilitation /meals	2,000
Transport	5,000
Miscellaneous	2,000
Total	12,000

APPENDIX C: QUESTIONNAIRES

I am a student at KIU, I am carrying out a research study on the topic: impact of instructional materials to learners with hearing impairments in Athi River District

The purpose of this study is to collect data on the topic. Your response will be treated with confidentiality and the information obtained is strictly for education purposes.

You are kindly requested to fill the questionnaire.

Tick where applicable)

1. Sex of the respondent

Male

<input type="checkbox"/>
<input type="checkbox"/>

Female

2. Age

3. Marital status of the respondent.....

Single

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Divorced

Married

Never married

4. Education level of the respondent.....

Primary level

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Secondary level

Tertiary level

University level

5. Occupation of the respondent

Farmer

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Business man/woman

Civil servant

Others

SECTION B: Characteristics of hearing impairments

1. What are the characteristics of hearing impairments?

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.....

2. After seeing them do you do help the learner with hearing impairments?

Yes ☐ No ☐

3. If yes what do you do?

.....

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SECTION C: Imapcts

9. What are the impacts of instructional materials to learners with hearing impairments?

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10. How have tried to eliminate or solves them?

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.....

.....

11. What are your recommendations to the improvement of quality education?

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THANK YOU FOR YOUR COOPERATION

