

757

**TEACHING METHODS AND ACADEMIC PERFORMANCE AMONG
LEARNERS WITH HEARING IMPAIRMENT IN SELECTED
SCHOOLS IN CENTRAL DIVISION KITUI
DISTRICT KENYA**

BY

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**A RESEARCH REPORT SUBMITTED TO THE INSTITUTE OF OPEN
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OF THE REQUIREMENTS FOR THE AWARD OF
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DECLARATION

I, Gladys Okeng'o do declare that this research report is my own work and that it has not been presented to any other university for a similar award.

Signed.....

Student

Date.....16-12-09

DEDICATION

From the core of my being, I dedicate this work to my beloved husband Samwel
Nyarango, Sons; Joab, Simeon, Zack and Angel Billiah

APPROVAL

I certify that , Gladys Okeng'o carried out this research under my supervision.

A handwritten signature in blue ink, appearing to be 'Tindi Seje', written over a horizontal dotted line.

MR. TINDI SEJE

A handwritten date in blue ink, '15TH DEC. 2009', written over a horizontal dotted line.

DATE

ACKNOWLEDGEMENT

In the first place, I highly acknowledge the almighty God, for all he has done in my life up to this level of academic epitome. I also extend my heart felt gratitude to my beloved parents who helped me to appreciate the sweetness of education.

I am sincerely grateful to all those who sacrificed their valuable time out of their kindness to assist me in all ways possible during the study. I extend my special thanks to all my lecturers and mostly my Supervisor Mr. Tindi seje who willingly devoted a lot of time to give me the best guidance and concentration, which has enabled me to complete this work successfully.

May God richly bless in you.

DEFINITION OF KEY TERMS

Academic performance: How children do in school either good or bad. This includes coping with the environment of the school and interactions with other children.

Hearing impairment: individuals who are deaf or hard of hearing.

Inclusion- The goal of integrating students with disabilities into the same classrooms, community activities and resources, and home settings as students who do not have disabilities.

Teaching methods- tactics and approaches used to teach pupils in school more especially children with hearing impairment so that they understand better and therefore perform well in academics.

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ABSTRACT

The purpose of the study is to determine Teaching Methods and Academic Performance among Learners with Hearing Impairment in Selected Schools in Central Division Kitui District Kenya. The specific objectives of the study were to; Determine Teaching Methods and Academic Performance among Learners with Hearing Impairment in regards to: Classroom seating, Sign Interpreters and Note takers, Non-Verbal Communication, Visual Materials and Sign Language. The methods of data collection were questionnaires and interviews. The study revealed by 50% of the respondents that seating arrangements help learners with hearing impairment be comfortable as they study and therefore understand what they are being taught. 47% of the respondents agreed that note takers help children with hearing impairment understand what they are being taught. However they revealed that it was expensive. 57% of the respondents agreed that non-verbal communication can help support their confidence with spoken language. 72% of the respondents also agreed that visual materials are important for children with hearing impairment. 54% of the respondents agreed that signs are important for children with hearing impairment. The study recommended that School facilities should be provided in schools so that children with hearing impairment understand what they are taught and that teachers are able to teach effectively.

More teachers should be trained to get competent teachers who can effectively use teaching methods that can help children with hearing impairments understand what they are taught.

The school environment should be made conducive for the children with learning impairment for example the class should not be overcrowded.

CHAPTER ONE

Introduction

1.1 Background of the study

Hearing impairment is the educational term for individuals who are deaf or hard of hearing to the extent that they require special services to achieve optimally in the school environment. Individuals who are deaf cannot process linguistic information with or without a hearing aid. Individuals who are hard of hearing have the residual hearing to use linguistic information with the use of a hearing aid. (Schirmer, Barbara R. 2001)

Hearing loss occurs along a broad continuum ranging in degree from slight to profound. Individuals with severe and profound hearing loss generally are characterized as *deaf*, whereas individuals with lesser degrees of impairment, including those with unilateral hearing loss (i.e., involving only one ear), are characterized as *hard of hearing*. Childhood hearing loss of any type and degree, if unmanaged, is likely to have a negative impact on the development of spoken and receptive language, the ability to read and write, and academic achievement. For example, a 1998 study of 1,218 children with minimal hearing loss showed that 37 percent had failed a grade. Similarly, studies have shown that children with unilateral hearing loss are ten times more likely than normally hearing children to fail a grade. The vast majority (94–96%) of children with hearing loss are hard of hearing rather than deaf. For these children, speech may be *audible* (i.e., detectable) but not *intelligible* enough to allow them to hear one word as distinct from another. (Schirmer, Barbara R. 2001)

There are approximately 50,000 school-age deaf children in the United States, a figure representing a dramatic decline since the early 1970s. An additional 5 million school-age children are permanently hard of hearing and at educational risk. An estimated 1.5 million more suffer from conductive, usually temporary, hearing loss.

Historically, approaches to educating children who are deaf have been based on emotion and personal philosophy rather than positive outcome; in contrast, the education of children who are hard of hearing has largely been ignored. Educational practices in the United States can be linked directly to the teachings of European educators active during the eighteenth and nineteenth centuries. Of note, in 1770 French cleric Charles-Michel de l'Épée founded a school in which he emphasized the use of sign language and finger spelling (i.e., a *manual* approach). Around the same time, schools were established in England by members of the Braidwood family, who emphasized the use of spoken language and speech reading without sign language (i.e., an *oral* approach). (Hallahan et al. 2000.)

Regardless of teaching method, students with hearing impairment experience difficulties acquiring the language of the hearing society. Educators pay very close attention to the age of onset of the hearing impairment and the degree of hearing loss because each is closely associated with the severity of language delay. The earlier the hearing loss occurs and the more severe the hearing loss, the more severe the language delay. For many years, professionals believed that deficiencies in language among individuals with hearing impairment were related to deficiencies in intellectual ability; this is not the case. Unfortunately, results of research indicate that students with hearing impairment are behind their hearing peers in terms of academic achievement. Reading is the academic area most affected, wherein students with hearing

impairment experience only one-third the reading growth of their hearing peers. They also lag behind their peers in mathematics. Ratcliffe, C. (2004) it is upon this background that the study was undertaken.

1.2 Problem Statement

Teaching methods involving total communication philosophy have not been used in teaching learners with hearing impairment in selected schools in central division, Kitui district. This has led to poor academic performance among learners with hearing impairment. Teachers and learners have not been able to provide the necessary resources to these learners hence their potential has not been utilized maximally. Because of the hearing loss, hearing-impaired children need to have things carefully explained on a one-to-one basis. That includes practical and small things such as what you are going to do, what you are going to buy or where you are going. It can take time, but it is necessary. Hence need for the study.

1.4 Objectives of the study

General: The study was to determine Teaching Methods and Academic Performance among Learners with Hearing Impairment in Selected Schools in Central Division Kitui District Kenya.

Specific objectives.

1. Determine Teaching Methods and Academic Performance among Learners with Hearing Impairment in regards to:
 - 1.1. Classroom seating
 - 1.2. Sign Interpreters and Note takers
 - 1.3. Non-Verbal Communication
 - 1.4. Visual Materials
 - 1.5. Sign Language

1.5. Scope of the study

The study was carried out in Central Division Kitui District Kenya. **Kitui District** is an administrative district in the Eastern Province of Kenya. Its capital town is Kitui. The district has a population of 515,422 (1999 census) and an area of 20,402 sq km [he district has two local authorities: Kitui municipality and Kitui county council. Kitui district is divided into eight administrative divisions: Central (Kitui), Kabati, Chuluni, Mutitu, Mwitika, Mutomo (Ikanga), Ikutha and Yatta.the study was limited to teaching methods and academic performance of learners with hearing impairment. The study was carried between September 2008 and November 2008.

1.6 Significance of the study

This research is significant to the following;

The study will bring out the diversity of approaches employed by different teachers and at different levels of the impairment of the children and this will form a database for the approaches. Facility need will be assessed and where necessary prescribed and availed to the learners. This will help in future in adopting cheap and efficient ways of dealing with the problem to help learners in their study.

The study will also help the education planners, curriculum developers and policy makers in making better arrangements for learners with hearing impairment.

The findings will also help teachers develop positive attitudes in the use of teaching methods involving learners with hearing impairment.

It will also act as a reference tool for the government in making future plans for the needs of learners with hearing impairment. The findings will also help solve challenges faced by teachers while teaching learners with hearing impairment and improve communication between the learners, teachers and the parents.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter discusses the related literature to the study. It focuses Teaching Methods and Academic Performance among Learners with Hearing Impairment

2.1. Classroom seating and academic performance of Learners with Hearing Impairment.

When a learner who is hard of hearing or deaf is placed within a general education classroom, seating arrangements are crucial. Providing a learner with a “preferred” seat in the classroom can allow for more interaction with the teacher and peers. (Tvingstedt, 1995 if the learner is sitting in the front of the classroom with all the other students behind them, it may be easier to follow the conversation when the teacher is talking, but more difficult when other learners are speaking. Learners relying on speech reading would need to turn around when a classmate begins to talk.

When using preferred seating, the student should be able to see not only the teacher clearly but the classmates as well. One form of preferred seating is the set up the seats in the classroom in a “U” shape. This would allow the students to be able to see each other clearly, as well as see the teacher (Tvingstedt, 1995). Another way of setting up the classroom would be in groups. This would mean organizing the desks into small groups of about four or five students. If the room is structured into groups, the students would be able to see most people clearly, and they could easily turn to see the rest of the class (Tacchi, 2005). The teacher might also ask the student where he/she would like to sit. This would allow the students to choose a seat from which they feel they can communicate and learn to the best of their ability (Keller,

2004). The student should be allowed to change to another location in the room as flexibly as possible for better viewing of the teacher and peers (Waldron, 2005). Through the use of preferred seating, a teacher can set up the classroom to allow all students equal access to the conversations and curriculum.

2.2. Sign Interpreters and Note takers and academic performance of Learners with Hearing Impairment.

Students who are hearing impaired or deaf may have either a note-taker or a sign interpreter in the classroom to assist in their learning. It is very important that the teacher and the child's support staff member work together to help the child gain full access the curriculum. The interpreter's role in the classroom must be clearly defined prior to entering the classroom, so that situations do not arise out of misunderstanding. Easterbrooks, (1998)

The teacher and the interpreter can assure student success in the classroom through constant communication and monitoring of the student's progress (Easterbrooks, 1998; National Deaf Children's Society [NDCS], 2004; British Colombia Ministry of Education [BCME], 2001).

The use of a note-taker in the classroom provides the student with the freedom to follow the lesson and receive visual cues from the teacher. A student who has a hearing impairment or is deaf may have difficulty taking notes and listening at the same time; however, with the use of a note-taker, the problem is eliminated.

2.3. Non-Verbal Communication and academic performance of Learners with Hearing Impairment.

Body language, facial expressions, and gestures are all an essential part of daily conversation that is often taken for granted. All three of these

things can help relate how the speaker is feeling to the listener. For many students who are hard of hearing or deaf, non-verbal communication becomes critical. It provides extra support to help determine what has been said. Teaching students the importance of non-verbal communication can help support their confidence with spoken language. It is not only important to teach the uses of body language, facial expressions, and gestures in the classroom, but to model them as well. Teachers should use non-verbal communication techniques on a daily basis to help support subject content (Peake, 2005). Pointing out and explaining non-verbal cues also allows students to expand this awareness into social situations outside the classroom.

2.4. Visual Materials and academic performance of Learners With Hearing Impairment.

Because students rely primarily on visual representations such as the use of an overhead, posters, videos, or notes on the board will be important teaching tools. While using these visual representations, the teacher must make sure that he/she is clearly pointing to the information focused on in the discussion and then give the student a few minutes to process the information. The teacher must also take into account that the visual material cannot be too overwhelming or the student will be unable to process the information quickly, and therefore may fall behind (NDCS, 2004).

The overhead can be used to display visual images or an outline of the material to be covered. The teacher is still able to face the classroom while lecturing, allowing the student to access the information on the overhead, as well as to see the teacher while he/she is talking (Chang, Richards, & Jackson, 1996). Posters are a good way of representing information in a lesson and should be used as frequently as possible. The teacher, however, needs to remember to clearly point to the poster

and the specific parts that are being used to reinforce the verbal message (NDCS, 2004).

Videos can be used in the classroom provided that they include closed-captioning and/or the teacher has provided the student with a summary of the material to be covered in the video. It is important to provide both forms of information to the student, so that he/she will be able to turn to the handout for clarification. The student should also be allowed to access the video either before or after the lesson, in order to pre-view or re-view the video's contents. It is also important for the lights to remain partially on during the viewing of the video, so that student is able to take visual cues from the teacher or interpreter if necessary. The teacher may also want to stop the video occasionally to check for understanding of the material (NDCS, 2004; Battat, 1998).

The classroom teacher may also want to consider writing information on the board during a lesson. The teacher can use the board for recording the main ideas of the lesson, a list of key topics to be covered, or for recording the daily schedule. This allows the student to reference the board if confused as to what is being taught or expected. The teacher can also use the board to write a list of concepts to be covered in each lesson. This allows the student to follow along and have a sense of where the lesson is heading and what material is included. By writing the schedule in a prominent place in the classroom, students will be able to access the information easily and make reference to it as necessary. In addition to the schedule, it is also important that the teacher write down any announcements and assignments on the board. This will allow all students to quickly check and see what he/she need to be working on, as well as to locate important information (NDCS, 2004; Battat, 1998).

The teacher might limit the time spent on lectures and focus attention on teaching through hands-on activities. This allows the student to interact

with the lesson in a manner that does not cause fatigue. It can be exhausting for the student to follow along with a lesson either through the use of an interpreter, speech reading, or his/her own hearing. The use of hands-on activities gives the student a break, benefits the entire class, and does not single out a specific student as needing accommodations in order to learn (NDCS, 2004).

2.5. Sign Language and academic performance of Learners with Hearing Impairment.

Before a child can begin to read, it is critical to be fluent in the language. To promote fluency, students should be immersed in the language and be able to comprehend what is said to them on a daily basis. A child must be able to interact and converse with peers and others. For some children with hearing impairment, this may mean teaching a visual language (sign language) (French, 1999). When a teacher has a student who relies on sign language as the primary mode of communication, it will be important for the teacher to learn a few basic signs. One way to go about learning basic sign language would be to ask the interpreter who is helping the student or ask the student personally. If the student is comfortable, he/she might be willing to teach classmates some signs as well. The use of signing in the classroom, can make the student feel more comfortable and at home while at school (Tacchi, 2005). Teaching all students in the class as many signs as possible on an ongoing basis also creates a respect by hearing students for sign language as a method of communication.

2.6. Research questions

1. What is the relationship between Classroom seating and Academic Performance among Learners with Hearing Impairment?
2. What is the relationship between Sign Interpreters and Note takers and Academic Performance among Learners with Hearing Impairment?
3. What is the relationship between Non-Verbal Communication and Academic Performance among Learners with Hearing Impairment?
4. What is the relationship between Visual Materials and Academic Performance among Learners with Hearing Impairment?
5. What is the relationship between Sign Language and Academic Performance among Learners with Hearing Impairment?

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter discusses the methods the researcher used to collect data. It focuses on research design, Population and area of study, Sampling and sampling procedure, Data collection methods, Data collection procedure and Data analysis

3.1 Research Design

This study followed a descriptive research design. Both qualitative and quantitative methods were used. The quantitative technique was used to collect and analyze data on teaching methods and academic performance of learners with hearing impairment as well as different responses from teachers. Qualitative technique involved getting information from the teachers through interviews and editing it and finally making the conclusions in regards to teaching methods and academic performance of learners with hearing impairment.

3.2 Area of study

The research was carried out in central division in Kitui district Kenya.

3.3 Sampling and sampling procedure

The study included ideas from teachers in selected schools in central division in Kitui district.

3.4 Data collection methods

Questionnaires were used to gather information and follow up interviews were used to get information from teachers. The questionnaires were used because of the advantage of obtaining data within a short time. It also had an element of privacy so respondents were able to express themselves freely. Observation was also done on the children.

3.5 Data collection procedure

The researcher obtained an introductory letter from the institute of Open and distance studies and was handed to the head teachers before distributing questionnaires, carrying on interviews and observing the learners. This enabled the researcher to go to the field to carry out the study. The researcher personally distributed the questionnaires to the teachers and collected them and also collected them. In the process of collecting them the researcher interviewed some teachers face to face and also went to class to observe the learners as they studied.

3.6 Data analysis

Data was categorized according to the research variables. Data was then coded on sheets from which it was keyed into the computer. Quantitative data generated from questionnaires was computed into frequency counts and percentages using the formula below;

$$\text{Percentage (\%)} = \frac{F}{\text{Total number of respondents}} \times 100$$

Where F = $\frac{\text{number of respondents}}{\text{Observed}}$

Data from questionnaires, and in-depth interviews was not standardized hence requiring categorization. Such data was presented in a descriptive form and was used to discuss the results of quantitative data.

CHAPTER FOUR

FINDINGS AND INTERPRETATIONS

4.0 Introduction

This chapter is a presentation, interpretation and discussion of the field results. The results are presented in tables and in form of frequency counts and percentages. The results and discussions are centered on the set objectives of the study.

4.1 Profile of the respondents

Table 4.1: Profile of the respondents.

Respondents	Frequency (f)	Percentage (%)
Sex		
Male	40	57
Female	30	43
Total	70	100
Age		
18-24	6	9
25-30	12	17
31-35	35	50
36 and above	17	24
Total	70	100
Academic level		
Certificate	32	46
Diploma	35	50
degree	4	5.7
Total	70	100

Source: field data

Ninety (90) questionnaires were distributed to the teachers and 70 were filled and returned this therefore represents 78 % of the total number of questionnaires that were distributed.

The study covered 90 randomly selected students of whom 40(57%) were male and 30(43%) were female

The age category of the respondents were divided into four groups that is 18-24 years were 6[9%], 25-30 yrs were 12(17%), 31-35 yrs were 35(50%) and 36 yrs and above were 17 representing (24%) of the respondents.

The academic level of the respondents was divided into three categories that is certificate, diploma and degree. 32(46%) of the respondents had certificates, 35(50%) had diplomas and 4(5.7%) of the respondents had degrees.

Interviews were also carried on with some teachers as questionnaires were collected back.

4.2 Teaching Methods and Academic Performance of Learners with Visual Impairment

4.2.1 Classroom seating And Academic Performance of Learners with Visual Impairment

The first objective of the study was to find out the relationship between Classrooms seating And Academic Performance of Learners with hearing Impairment. To achieve this, respondents were asked questions related to the study. Data collected was analyzed under the question: What is the relationship between Classroom seating And Academic Performance

of Learners with Visual Impairment? The results are presented in the subsections below;

The respondents were asked whether the way learners with hearing impairment seat in class improve their academic performance and their response was summarized in table 4.2 below

Table 4.2: Opinion on whether the way learners with hearing impairment seat in class improve their academic performance.

The way learners with hearing impairment seat in class improves their academic performance	Agree	Disagree	Not sure	Total
Frequency (f)	35	15	20	70
Percentage (%)	50	21	29	100

Source: primary data

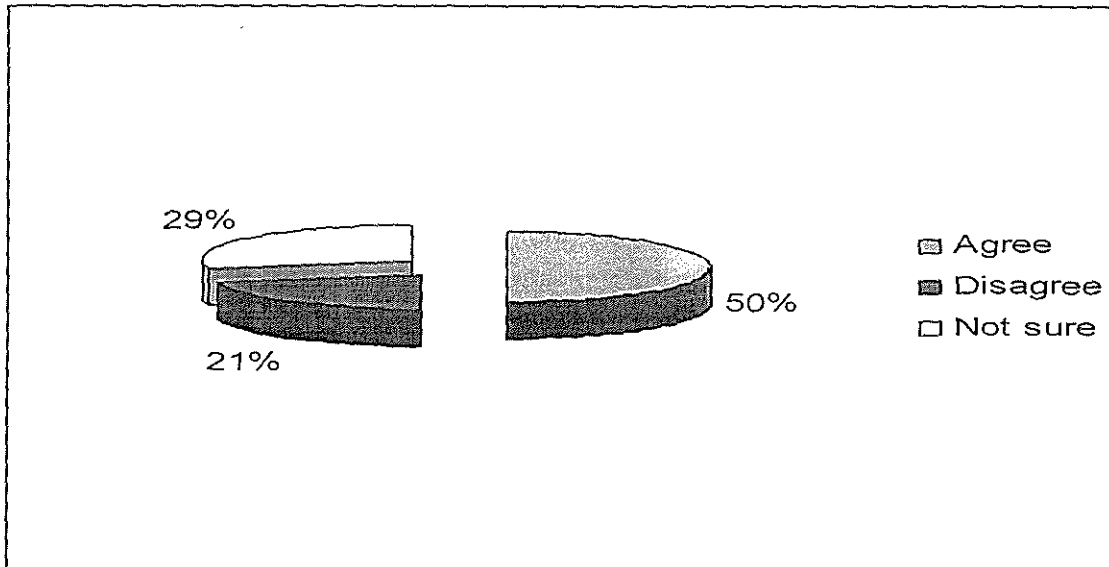
Table 4.2 indicates that 35(50%) of the respondents agreed, 15(21%) disagreed while 20(29%) of the respondents were not sure.

According to the teachers who were involved in interviews seating arrangements are important because they make children comfortable. However the teachers complained in a class where the class is crowded it becomes difficult to arrange children in seats that are convenient with them.

The data in table 4.2 was analyzed using a figure and figure 4.1 summarizes the analysis of the Opinion on whether the way learners

with hearing impairment seat in class improve their academic performance.

Figure 4.1: Opinion on whether the way learners with hearing impairment seat in class improve their academic performance.



Source: primary data

The figure indicates that 35(50%) of the respondents agreed, 15(21%) disagreed while 20(29%) of the respondents were not sure.

The respondents were asked whether providing a learner with a preferred seat in the classroom can allow for more interaction with the teacher and peers and below was their response

Table 4.3: opinion on whether Providing a learner with a preferred seat in the classroom can allow for more interaction with the teacher and peers

Providing a learner with a preferred seat in the classroom can allow for more interaction with the teacher and peers	Agree	Disagree	Not sure	Total
Frequency (f)	42	18	10	70
Percentage (%)	60	26	14	100

According to the table 42(60%) of the respondents agreed while 18(26%) disagreed and 10(14%).

According to the teachers providing children with the seats they want makes them comfortable and therefore this gives chance to interact freely in class and hence improve on their academic performance.

“.....children with visual impairment need feel freeing the environment they are in and hence by letting them choose where to sit you make them like the environment” (Interview with a teacher)

The respondents were asked whether Setting up the classroom in groups helps children understand what they are being taught **and** below was their response:

Table 4.4: Opinion on whether Setting up the classroom in groups helps children understand what they are being taught

Setting up the classroom in groups helps children understand what they are being taught	Agree	Disagree	Not sure	Total
Frequency (f)	28	40	2	70
Percentage (%)	40	57	3	100

Source: primary data

Table 4.8 shows that 28(40%) of the respondents agreed while 40(57%) disagreed and 2(3%) of the respondents were not sure.

The teachers revealed that groups are convenient but it becomes difficult to set them in groups when the class is large. The teachers revealed that a big size class is difficult to handle because children would shout and controlling them becomes impossible. Pupils therefore do not understand what they are taught especially children with hearing impairment.

4.2.2 Sign Interpreters and Note takers and academic performance of Learners with Hearing Impairment.

The second objective of the study was to find out the relationship between Sign Interpreters and Note takers And Academic Performance of Learners with hearing Impairment. To achieve this, respondents were asked questions related to the study. Data collected was analyzed under the question: What is the relationship between Sign Interpreters and

Note takers And Academic Performance of Learners with Visual Impairment? The results are presented in the subsections below;

The respondents were asked whether note takers help visually impaired children understand what they are being taught and their response is as follows:

Table 4.5: Opinion on whether note takers help visually impaired children understand what they are being taught

Note takers help visually impaired children understand what they are being taught	Agree	Disagree	Not sure	Total
Frequency	33	30	7	70
Percentage (%)	47	43	10	100

Source: primary data

Table 4.5 indicates that 33(47%) of the respondents agreed while 30(43%) disagree and 7(10%) of the respondents were not sure.

The teachers revealed that note takers make it easy for hearing impaired children to understand but the teachers revealed that it is expensive to hire note takers and it becomes more difficult in a regular school.

The respondents were asked whether the use of a note-taker in the classroom helps a child follow the lesson and receive visual cues from the teacher and below was their response

Table 4.6: Opinion on whether the use of a note-taker in the classroom helps a child follow the lesson and receive visual cues from the teacher

The use of a note-taker in the classroom helps a child follow the lesson and receive visual cues from the teacher	Agree	Disagree	Not sure	Total
Frequency (f)	45	15	10	70
Percentage (%)	64	21	14	100

Source: primary data

According to the table 45(64%) of the respondents agreed, 15(21%) disagreed and 10(14%).

According to the teachers using effective teaching methods helps children understand what they are being taught and in turn this improves academic performance of pupils and therefore note takers help children with visual impairment follow what they are taught.

The respondents were asked whether Hearing impairment may have difficulty taking notes and listening at the same time hence the note taker helps them and below was their response:

Table 4.7: Opinion on whether Hearing impairment or may have difficulty taking notes and listening at the same time hence the note taker helps them.

Hearing impairment have difficulty taking notes and listening at the same time hence the note taker helps them.	Agree	Disagree	Not sure	Total
Frequency (f)	30	30	10	70
Percentage (%)	43	43	14	100

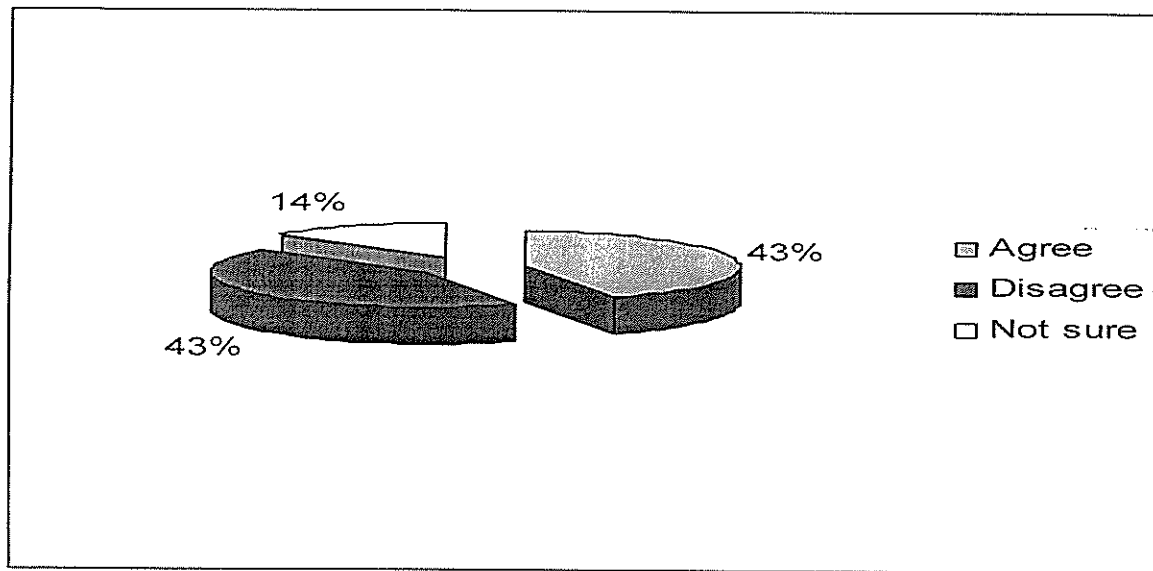
Source: primary data

Table 4.7 shows that 30(43%) of the respondents agreed while 30(43%) disagree and 10(14%) of the respondents.

The teachers revealed that note takers make it easy for hearing impaired children to concentrate in class because they concentrate on listening only and not writing because it makes it difficult for the them to do both writing and listening.

he data in table 4.7 was analyzed using a figure and figure 4.2 summarizes the analysis of the Opinion on whether the way learners ith hearing impairment seat in class improve their academic performance.

Figure 4.2: Opinion on whether Hearing impairment or may have difficulty taking notes and listening at the same time hence the note taker helps them.



Source: primary data

The figure shows that 43% of the respondents agreed while 43% disagree and 14% of the respondents.

4.2.3 Non-Verbal Communication and academic performance of Learners with Hearing Impairment.

The third objective of the study was to find out the relationship between Non-Verbal Communication and academic performance of Learners with Hearing Impairment. . Data collected was analyzed under the question: What is the relationship between Non-Verbal Communication and academic performance of Learners with Hearing Impairment? The results are presented in the subsections below

The respondents were asked whether Pointing out and explaining non-verbal cues allow learners to expand their awareness into social situations and this was their response:

Table 4.8: Opinion on whether Pointing out and explaining non-verbal cues allows learners to expand their awareness into social situations.

Pointing out and explaining non-verbal cues allows learners to expand their awareness into social situations.	Agree	Disagree	Not sure	Total
Frequency (f)	21	39	10	70
Percentage (%)	30	56	14	100

Source: primary data

The table shows that 21(30%) of the respondents agreed while 39(56%) disagreed and 10(14%) were not sure.

The respondents were asked whether teaching students the importance of non-verbal communication can help support their confidence with spoken language and below was their response

Table 4.9: Opinion on whether Teaching students the importance of non-verbal communication can help support their confidence with spoken language.

Teaching students the importance of non-verbal communication can help support their confidence	Agree	Disagree	Not sure	Total
Frequency (f)	40	25	5	70
Percentage (%)	57	36	7	100

Source: primary data

The table shows that 40(57%) of the respondents agreed while 25(36%) disagreed and 5(7%) were not sure.

According to the teachers confidence building helps children with hearing impairment and therefore teachers need to teach them non verbal communication to support their confidence.

The respondents were asked whether Non-verbal communication provides extra support to children with visual impairment and helps them determine what has been said and below was their response

Table 4.10: Opinion on whether Non-verbal communication provides extra support to children with visual impairment and helps them determines what has been said.

Non-verbal communication provides extra support to children with visual impairment and helps them determine what has been said.	Agree	Disagree	Not sure	Total
Frequency (f)	23	39	8	70
Percentage (%)	33	56	11	100

Source: primary data

Table 4.10 indicates that 23(33%) Of the respondents agreed while 39(56%) disagreed and 8(11%) of the respondents were not sure.

The teachers revealed that a conducive home environment is one which encourages children to study and does not give those many chores to do especially for girls.

4.2.4. Visual Materials and academic performance of Learners With Hearing Impairment.

The fourth objective of the study was to find out the relationship between Visual Materials and academic performance of Learners With Hearing Impairment.. . Data collected was analyzed under the question: What is the relationship between Visual Materials and academic performance of Learners with Hearing Impairment? The results are presented in the subsections below:

The respondents were asked whether Visual materials help children with visual impairment understand what they are being taught and below was their response

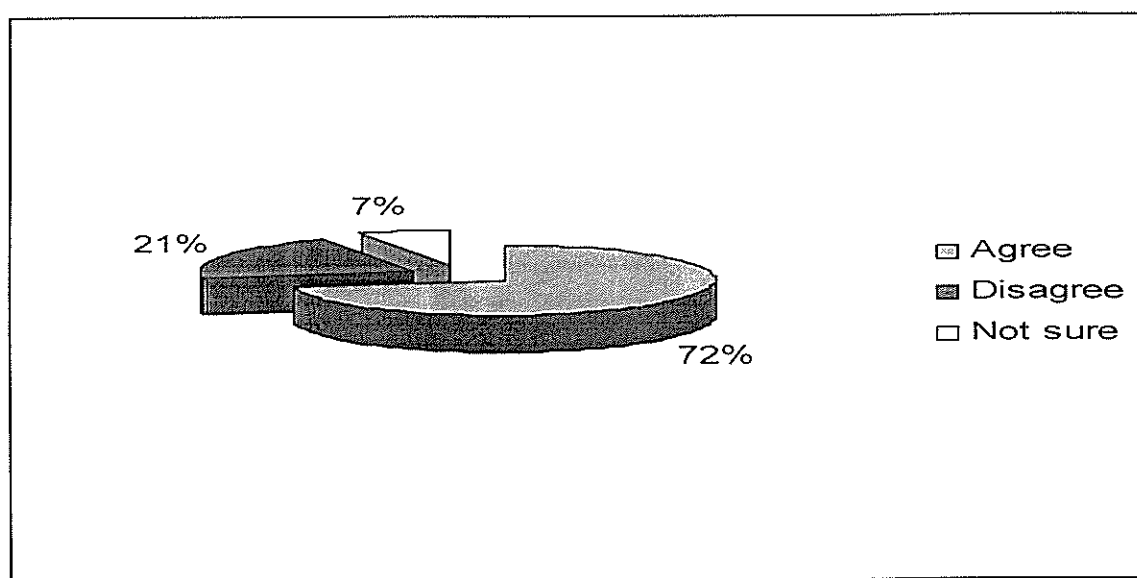
Table 4.11 opinion on whether Visual materials help children with visual impairment understand what they are being taught.

	Agree	Disagree	Not sure	Total
Visual materials help children with visual impairment understand what they are being taught.				
Frequency (f)	50	15	5	70
Percentage (%)	72	21	7	100

Source: primary data

The data in table 4.11 was analyzed using a figure 4.3 and summarizes the analysis of the opinion on whether Visual materials help children with visual impairment understand what they are being taught.

Figure 4.3; opinion on whether Visual materials help children with visual impairment understand what they are being taught.



The table and figure indicate that 50(72%) of the respondents agreed, 15(21%) disagreed and 5(7%) of the respondents were not sure.

According to the teachers visual materials are very important because they elaborate more on what they are being taught.

Respondents were asked whether Videos help children understand what they are being taught. And their responses are summarized in table 4.5 below;

Table 4.12: Opinion on whether Videos help children understand what they are being taught.

	Agree	Disagree	Not sure	Total
Videos help children understand what they are being taught.				
Frequency (f)	40	20	10	70
Percentage (%)	57	29	14	100

Source: Primary Data

The results in table 4.4 showed that 40(57%) of the respondents agreed, while 20(20%) disagreed and 10(14%) of the respondents were not sure.

The teachers in interviews held with them revealed that even though videos are a very effective method for hearing impairment they are expensive. It was observed that schools that had visual impairments were very few and most of them were special needs schools.

The respondents were asked whether Posters are a good way of representing information in a lesson and below was their response

Table 4.13: Opinion on whether Posters are a good way of representing information in a lesson.

Posters are a good way of representing information in a lesson.	Agree	Disagree	Not sure	Total
Frequency (f)	40	25	5	70
Percentage (%)	57	36	7	100

Source: primary data

The table shows that 40(57%) of the respondents agreed while 25(36%) disagreed and 5(7%) were not sure .In most schools visited posters were available and according to the teachers they are effective.

4.2.5 Sign Language and academic performance of Learners with Hearing Impairment.

The fifth objective of the study was to find out the relationship between Sign Language and academic performance of Learners with Hearing Impairment. Data collected was analyzed under the question: What is the relationship between Sign Language and academic performance of Learners with Hearing Impairment? The results are presented in the subsections below:

The respondents were asked whether Sign language helps children understand what they are being taught and below was their response

Table 4.14: Opinion on whether Sign language helps children understand what they are being taught.

Sign language helps children understand what they are being taught.	Agree	Disagree	Not sure	Total
Frequency (f)	38	20	12	70
Percentage (%)	54	29	17	100

Source: primary data

The table shows that 38(54%) of the respondents agreed while 20(29%) disagreed and 12(17%) were not sure.

The respondents were asked whether signing in the classroom can make the student feel more comfortable and at home while at school and below was their response

Table 4.15: Opinion on whether signing in the classroom can make the student feel more comfortable and at home while at school

Signing in the classroom can make the student feel more comfortable and at home while at school.	Agree	Disagree	Not sure	Total
Frequency (f)	33	30	7	70
Percentage (%)	47	43	10	100

Source: primary data

The table shows that 33(47%) of the respondents agreed while 30(43%) disagreed and 7(10%) were not sure.

The teachers revealed that signs create a bond between the teacher and the pupil and therefore make the learner comfortable.

The respondents were asked whether signs create a respect by hearing students for sign language as a method of communication and below was their response

Table 4.16: Opinion on whether signs create a respect by hearing students for sign language as a method of communication.

Signs creates a respect by hearing students for sign language as a method of communication.	Agree	Disagree	Not sure	Total
Frequency (f)	36	28	6	70
Percentage (%)	51	40	9	100

Source: primary data

The table shows that 52(36%) of the respondents agreed while 28(40%) disagreed and 6(9%) were not sure.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings and their Relevance

This chapter presents discussions, conclusions and recommendations of the research findings of the previous chapters. They are discussed in relation to the research carried out (library research, structured interviews, questionnaires and observation) that was used to guide the study and where applicable related literature has been used to support the argument of the research.

5.1.1 Summary of findings on classroom seating and Academic Performance of Learners with Visual Impairment.

The findings revealed by 50% of the respondents that seating arrangements help learners with hearing impairment be comfortable as they study and therefore understand what they are being taught.

According to Tvingstedt, 1995 when a learner who is hard of hearing or deaf is placed within a general education classroom, seating arrangements are crucial. Providing a learner with a “preferred” seat in the classroom can allow for more interaction with the teacher and peers. If the learner is sitting in the front of the classroom with all the other students behind them, it may be easier to follow the conversation when the teacher is talking, but more difficult when other learners are speaking. Learners relying on speech reading would need to turn around when a classmate begins to talk.

5.1.2 Summary of findings on Sign Interpreters and Note takers and academic performance of Learners with Hearing Impairment.

It was revealed by 47% of the respondents that note takers help children with hearing impairment understand what they are being taught. However they revealed that it was expensive.

According to Easterbrooks, (1998) Students who are hearing impaired or deaf may have either a note-taker or a sign interpreter in the classroom to assist in their learning. It is very important that the teacher and the child's support staff member work together to help the child gain full access the curriculum. The interpreter's role in the classroom must be clearly defined prior to entering the classroom, so that situations do not arise out of misunderstanding.

5.1.3 Summary of findings on Non-Verbal Communication and academic performance of Learners with Hearing Impairment.

The study revealed by 57% of the respondents that non-verbal communication can help support their confidence with spoken language. According Peake, (2005). Teachers should use non-verbal communication techniques on a daily basis to help support subject content

5.1.4 Summary of findings on Visual Materials and academic performance of Learners with Hearing Impairment.

The study revealed by 72% of the respondents that visual materials are important for children with hearing impairment. According to NDCS (2004) Posters are a good way of representing information in a lesson and should be used as frequently as possible.

5.1.5 Summary of findings on Sign Language and academic performance of Learners with Hearing Impairment.

54% of the respondents agreed that signs are important for children with hearing impairment. According to (Tacchi, 2005) teaching all students in the class as many signs as possible on an ongoing basis also creates a respect by hearing students for sign language as a method of communication.

5.2 Conclusions

Basing on the case study classroom seating is important for children with visual impairment.

The study revealed that note takers help children with hearing impairment concentrate on the lessons.

The study revealed that non-verbal communication can help support their confidence with spoken language

The study revealed that visual materials are important for children with hearing impairment.

Finally the study revealed that that signs are important for children with hearing impairment.

5.3 Recommendations

From the ongoing discussion, the following are the recommendations that were made.

School facilities should be provided in schools so that children with hearing impairment understand what they are taught and that teachers are able to teach effectively.

More teachers should be trained to get competent teachers who can effectively use teaching methods that can help children with hearing impairments understand what they are taught.

The school environment should be made conducive for the children with learning impairment for example the class should not be overcrowded.

5.4 Areas for further research

More research should be done on the topic of teaching methods and academic performance of learners with hearing impairment.

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APPENDIX A

TRANSMITTAL LETTER



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OFFICE OF THE DIRECTOR
INSTITUTE OF OPEN AND DISTANCE LEARNING (IODL)

DATE:

TO WHOM IT MAY CONCERN:

Dear Sir/Madam,

RE: INTRODUCTION LETTER FOR MS/MRS/MR

The above named is our student in Institute of Open and Distance Learning (IODL), pursuing a Diploma/Bachelors degree in Education.

He/She wishes to carry out a research in your Organization on:

.
.

Case Study:

The research is a requirement for the award of a Diploma/Bachelors degree in Education.

Any assistance accorded to her regarding research will be highly appreciated.

Yours faithfully,

MR. MUHWEZI, JOSEPH
HEAD, IN-SERVICE

APPENDIX B
QUESTIONNAIRE FOR THE TEACHERS

Dear respondent

I am a student of Kampala International University carrying out an academic research on the topic "Teaching Methods and Academic Performance among Learners with Hearing Impairment in Selected Schools in Central Division Kitui District Kenya." as a case study. You have been randomly selected to participate in the study and are therefore kindly requested to provide an appropriate answer by either ticking the best option. The answers provided will only be used for academic purposes and will be treated with utmost confidentiality.

NB: do not write your name anywhere on this paper.

PERSONAL INFORMATION

GENDER

Male ☐ Female ☐

ACADEMIC LEVEL

Certificate ☐ diploma ☐

Degree ☐

3. Hearing impairment or is deaf may have difficulty taking notes and listening at the same time hence the note taker helps them.

2.3. Non-Verbal Communication and academic performance of Learners with Hearing Impairment.

1. Pointing out and explaining non-verbal cues allows learners to expand their awareness into social situations.
2. Teaching students the importance of non-verbal communication can help support their confidence with spoken language.
3. Non-verbal communication provides extra support to children with visual impairment and helps them determine what has been said.

2.4. Visual Materials and academic performance of Learners with Hearing Impairment.

1. Visual materials help children with visual impairment understand what they are being taught.
2. Videos help children understand what they are being taught.
3. Posters are a good way of representing information in a lesson.
- 4.

2.5. Sign Language and academic performance of Learners with Hearing Impairment.

1. Sign language helps children understand what they are being taught.
2. Signing in the classroom can make the student feel more comfortable and at home while at school
3. Signs create a respect by hearing students for sign language as a method of communication.