

The effect of instructional methods on hearing-impaired students' academic performance at CJSM Ngoma Inclusive School, Huye District, Southern Province, Rwanda.

By:

Jean Sauveur NIYORUMURI

Registration number: 221028316

THE THESIS PARTIALLY SUBMITTED IN COMPLETION OF THE MASTER OF EDUCATION IN SPECIAL NEEDS EDUCATION, SCHOOL OF INCLUSIVE AND SPECIAL NEEDS EDUCATION, COLLEGE OF EDUCATION, UNIVERSITY OF RWANDA

Supervisor: Dr. HABINSHUTI Gonzague

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DECLARATION

I, Jean Sauveur NIYORUMURI, hereby declare that the research I have done is entirely original to me and hasn't been submitted anywhere else. And the reference lists I used are available on the last pages. Moreover, I have acknowledged the people who have contributed with different ideas in my study.

Signature:

Date:.....

Jean Sauveur NIYORUMURI

Registration number: 221028316

Supervisors' Statement

As the university's supervisor, we have given our approval for this study's submission for evaluation.

Signature:.....

Date:.....

Dr. Gonzague HABINSHUTI

University of Rwanda's Special Needs and Inclusive Education School

DEDICATION

This research is dedicated to my:

God the Creator

My parents

My sisters the same as brothers

My fellow workmates

To my neighbors

To all my friends

ACKNOWLEDGEMENT

I would like to express my heartfelt gratitude for the unwavering support and encouragement you have provided me throughout my research journey. Your contributions have been invaluable, and I am truly grateful for your belief in me.

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LIST OF ACRONYMS

SN	Special Needs
IE	Inclusive education
KICD	Kenya Institute of Curriculum Development
HI	Humanity and inclusion
ESSP	Education sector strategic plan
CPD	Continuous professional development
MINEDUC	Ministry of Education
REB	Rwanda Basic Education Board
NIDCD	Deafness and other communication disorders national institute
UDL	universal design for learning
CTS	Captioned Telephone Service
CART	Communication Real-Time Translation
TDD	Telephone for the Deaf
TTY	Teletypewriter voice-to-text software
TDD	Telephone for the Deaf

ABSTRACT

This study's objective was to determine how educational methods at CJSM Ngoma Inclusive School in Huye district, Rwanda, have an impact on hearing-impaired students' academic performance. The investigation that underlies this study had the following objectives: Identify the instructional methods that are currently being used to teach hearing impaired student at CJSM Ngoma Inclusive school; Determine the effectiveness of the instructional methods currently being used to teach to teach hearing impaired students at CJSM Ngoma Inclusive school; Explore alternative instructional methods that could potentially improve the academic performance of hearing impaired students at CJSM Ngoma Inclusive school; Provide recommendations for improving the academic performance of hearing impaired students at CJSM Ngoma inclusive school based on the findings of the study. All hearing-impaired students were the target population for the study. at CJSM Ngoma inclusive school at Huye district. Descriptive survey design was the type of research that underlies this investigation. Instruments which are questionnaires, interviews and observation schedule list were used in collecting data. To choose students, simple random sampling used with purpose for Hearing impaired and hearing children. Key participants in my study were Head teacher, deputy head teachers, teachers, students who have hearing loss, and hearing students from CJSM Ngoma inclusive school. In content validity Unclear instructions, questions in groups, and questions with improper wording were opened and cross-checked. The test-and-retest method was used to establish reliability that involve distributing the same questionnaires to the same respondents at intervals of two weeks, comparing the results. In all 498 respondents were took part in the study. The data compiled using frequencies and percentages. The final chapter presented a brief and summary of the findings based on the presentations and establish conclusions as well as recommendations focused on the findings from chapter four.

TABLE OF CONTENTS

DECLARATION	i
DEDICATION	ii
ACKNOWLEDGEMENT	iii
LIST OF ACRONYMS	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
CHAPTER ONE	1
1.0 INTRODUCTION	1
1.1 BACKGROUND	1
1.3 Goals and questions for the study	4
1.5 Conceptual framework	6
1.6 Theoretical framework	7
1.7 Limitations	8
1.8 Delimitation	8
1.9 Operational definitions	8
1.10 Summary of Background	9
2.2 Technology for learners with hearing impairment	12
2.4 Hearing-impaired students' seating in the classroom	19
3.2 Research Factors(variables)	24
3.5 Sample size and sample method	26
3.6. Research Tools	26
3.7 Validity	27
3.8 Dependability (Reliability)	27
3.9 Data Gathering Techniques	28
3.10 Analyses of Data	28
3.11 Considerations for Logistical and Moral Issues	29

CHAPTER FOUR: RESULTS PRESENTATION, ANALYSIS, AND DISCUSSIONS	30
4.0 OVERVIEW	30
4.1 SECTION A: Demography of teachers of learners with hearing impairment	31
4.2 SECTION B: The effect of instructional methods on the academic performance of students with hearing impairment.....	43
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION.....	75
5.0 Introduction	75
5.1 Summary	75
5.2 Conclusion.....	75
5.3 Recommendations.....	76
5.3 Recommendations for additional study.....	76
REFERENCES.....	78
THE APPENDICES.....	82
THE APPENDIX	82
AN OUTRAISING LETTER	82
ASK THE HEAD TEACHER	83
ASK THE TEACHER'S QUESTIONS	84
QUESTIONNAIRES FOR LEARNERS WITH AND WITHOUT HI	86
AGENDA FOR LEARNERS' OBSERVATIONS.....	88

LIST OF FIGURES

Figure 1: conceptual framework	6
Figure 2: Teachers’ Gender of learners with hearing impairment at CJSM Ngoma Inclusive School	31
Figure 3: Teachers ages at CJSM Ngoma Inclusive School	32
Figure 4: The highest academic degrees attained	33
Figure 5: The highest level of professional achievement	35
Figure 6: Teachers who have improved their professional qualification	37
Figure 7: Teachers who are trained on teaching learners with hearing impairment	38
Figure 8: Teachers with hearing difficulties	40
Figure 9:Trained teachers in special needs education with qualification	41
Figure 10: Resources and teaching aids available to help students with hearing impairment	43
Figure 11: Educational materials used to improve the academic performance for students with hearing impairment	45
Figure 12: Technologies that aid in improving academic performance for students with hearing impairmen	46
Figure 13: The use of captions to the hearing impaired students’ academic performance	48
Figure 14: School and home settings, Students with hearing impairments do not engage in equal play with their hearing peers	49
Figure 15: Learning in an inclusive environment is enjoyable for students with hearing impairmen	51
Figure 16: The effect of seating arrangement on academic performance of students with hearing impairments	52
Figure 17: The impact of visual aids on performance of Students with hearing impairment	53
Figure 18: Administrative system improves both the academic performance of students with hearing impairment and their hearing peers	55
Figure 19: Giving students with hearing impairment access to the necessary tools and resources in the classroom boosts their academic performance.	56
Figure 20: Gender of learners with and without hearing Impairment at CJSM Ngoma Inclusive school	57
Figure 21: Ages of students with and without hearing impairment at CJSM Ngoma Inclusive school	58
Figure 22: Grade of students with and without hearing impairment at CJSM Ngoma Inclusive school	59
Figure 23: Hearing ability of both students with and without hearing impairment at CJSM Ngoma inclusive school	60
Figure 24: Influence of learning resources and instructional materials on the academic performance of students with hearing impairment	61
Figure 25: Learning resources as major factor in improving academic performance for students with hearing impairment	63
Figure 26: Use of technology in improving academic performance for students with hearing loss ..	64
Figure 27: Use of captions on the performance of students with hearing impairments	65
Figure 28: At school and home, students with and without hearing impairment do not engage in equal play	66

Figure 29: Students with and without Hearing impairment benefit from learning together in an inclusive environment	68
Figure 30: The academic performance of learners with hearing impairment is improved by seating arrangement	69
Figure 31: Students with hearing impairment perform better academically when visual aids are available in classroom	71
Figure 32: Effective administration system lead to the performance of Students with hearing impairment	72
Figure 33: Tools and resources boost academic performance of learners with Hearing impairment	73

LIST OF TABLES

Table 1: The intended audience	25
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CHAPTER ONE

1.0 INTRODUCTION

The focus of this study emphasized on how teaching strategies affect hearing-impaired students' academic performance at CJSM Ngoma Inclusive School in Huye District. It employed a variety of strategies to produce this performance. The operational definitions of key terms, as well as the study's purpose, objectives, research questions, significance, delimitation, and limitations, were also emphasized in this investigation.

1.1 BACKGROUND

An investment in the future is education for students. Almost every nation in the world is doing everything in their power to ensure that as many of its citizens as possible are literate. Despite the fact that every child is different, students with special needs need a little bit more care and attention than regular students (Sthitaprajnya. P., 2022).

Deaf children have historically performed poorly in reading and other academic subjects within the USA. The academic success of students who are Deaf and Hard of Hearing has consistently lagged behind that of their contemporaries, particularly when it comes to reading and math. Additionally, Numerous people who are hard of hearing and Deaf are at a significant disadvantage in postsecondary education due to their low academic achievement. (Tina J. Herring, M. Lynn Woolsey, 2020).

Additionally, the American authors mentioned in the first paragraph stated that the reason behind there is an urgent need for an explanation for the poor academic and employment outcomes for those with hearing loss. For kids who are Deaf and Hard of Hearing, this might be especially true. in regions where there may not be a well-established educational infrastructure for students with disabilities, such as Southeast Asia, Africa, and South America (Tina J. Herring and M. Lynn Woolsey,2022).

In fact, the aforementioned authors went on to say that using response cards, choral responding, and peer tutoring are three effective teaching methods. that are advised for teachers. These three methods have been shown to encourage participation in class discussions from both typically developing and disabled students. These general education teaching methods can be easily

implemented, even by inexperienced instructors, for international deaf students in countries that may rely on volunteers who lack the fundamental qualifications.

In Kenya, the learners' role in the pedagogical process traditionally consisted of being a passive recipient while the teachers' role was to transmit knowledge and skills. The environment in the classroom should resemble a busy workplace with a range of activities and sound levels depending on the type of work being done. Kenya Institute of Curriculum Development (KICD) developed teaching techniques for learners with hearing impairment in inclusive education setting (KICD,2020).

Learners should conduct research, communicate, and create knowledge using a variety of technologies. The shift from teacher-centered to learner-centered pedagogy has been made possible in part by technology. Discussion, field trips, cooperative learning, and the use of graphic organizers are some additional suggested teaching strategies. In addition to technology. According to these findings, College students who are hard of hearing and Deaf performed better when solving problems when they were explained and visualized before being solved step by step. In a related investigation in Kenya (Ogada, 2022).

The results of a study on teaching English composition to students with hearing impairment in the province of Nyanza revealed that repetition, discussion, questioning, guided writing, and demonstration were the most frequently employed teaching methods. The study also showed that learners who are Deaf use the least effective strategies, such as dramatization and peer teaching, which may be the reason for their poor performance in English composition writing. Maintaining a positive learning environment in the classroom requires a positive attitude (Ting & Gilmore, 2022).

More than 446 000 Rwandans are disabled and live in the country. They routinely fare worse than others in terms of health, educational success, economic, political, and cultural participation, poverty rates, dependency levels, and legal protection. (UNDP,2022).

This suggests that there are a significant number of disabled kids not attending school. Statistics also reveal that 154 of the 91,193 students enrolled in higher education institutions have special educational needs. Initiatives from private organizations, primarily religious institutions and charities, were the first to focus on the education of students with hearing impairment. Signs and

spoken language in the local language (Kinyarwanda) were used to deliver instructions. (ESSP 2018/19 – 2023/24).

A small number of hearing impaired students were enrolled in public schools and received support from the special school because they were thought to be able to function in the mainstream settings. These kids overcame many obstacles, including the lack of support services like sign language interpreters and teachers who weren't qualified to teach this group (Inclusive and special needs Education policy,2019).

Addressing educational needs to all children with disabilities, Rwanda has adopted an inclusive education strategy. The needs of Deaf and hard-of-hearing children in terms of language, communication, and visual learning must be met by teachers using new methods. The following are some suggested tactics, but they're not exclusive: When communicating or teaching, face the learner and look directly at them; call the learner by name or otherwise gain their attention before speaking; Place a learner in front during teaching and learning activity, near their peers, or close to the area where you stand while instructing most of the time; Remember that speaking louder won't help; instead, speak naturally and clearly; Although you shouldn't overdo it, some students might benefit from a slight slowdown in your lip movements; Use body language, gestures, and facial expressions to (CPD Diploma for Primary School Teachers in Inclusive Education, 2020).

Other methods for instructing students who have hearing impairments include: Set up the classroom so that all of the students are seated in a U shape, spend some time instructing one-on-one, look the child in the eye when speaking to her or him (if the child has a hearing impairment), speak slowly and clearly without being too loud, use brief, simple, and clear sentences, and be consistent in your language use, Use precise imitations and gestures, ask the child to repeat what they have understood if they have an oral language, At the conclusion of each day, jot down the important words from the lessons and give them to the child. if an audiologist is available, collaborate with them to teach and encourage the child to use their residual hearing. (REB, 2020).

The students at CJSM Ngoma inclusive school come from a variety of social and economic backgrounds. Due to parents of hearing students withdrawing their children from school due to the including children with special educational needs, this school is experiencing a crisis with enrollment. Some of them might feel uncomfortable watching their children attend an inclusive school where students with disabilities are enrolled.

There are complaints about low educational standards, a scant amount of content was covered, the notion that difficulties are innate, also numerous other things. In spite of everything of this, if teachers are employing effective instructional strategies, it is advantageous for students with hearing impairment to learn alongside their peers who have normal hearing. They can increase their vocabulary, self-esteem, and sense of self-actualization thanks to it.

1.2 Problem statement

Like other policy instruments, the current National Strategy for transformation (NST1 2017-2024), Education Sector Strategic Plan (ESSP - 2019/2024), Special Needs and Inclusive Education policy and its Strategic Plan (2019-2024) were designed to specifically address the special educational needs of all learners with disabilities including hearing disabled children in their inclusive education by using different instructional strategies (SNIE Strategic Plan, 2019)

Learners with hearing impairment face challenges in the classroom that affect their academic performance. These challenges include difficulty in receiving and processing auditory information, which can lead to difficulties in understanding and following instructions, keeping up with lectures, and participating in class discussions.

However, it is not clear which instructional methods are most effective in this context. Therefore, the goal of this study is to examine how instructional methods affect students with hearing impairments' academic performance at CJSM Ngoma Inclusive School, Huye District, Southern Province, Rwanda, with the aim of identifying effective strategies that can be used to improve their educational outcomes.

1.3 Goals and questions for the study

1.3.1 Goal of the study

General goals

My thesis General goal was determining the impact of instructional strategies on the academic performance of learners with hearing impairment at CJSM Ngoma Inclusive school, Huye District, Southern province, Rwanda.

Specific objectives

The study sought to:

- i. Determine captions that enhance academic results of hearing-impaired students at CJSM Ngoma's inclusive school, Huye district.
- ii. Identify technologies that enhance hearing impaired students' academic performance at CJSM Ngoma Inclusive School, Huye district.
- iii. Assess visuals that increase academic progress of hearing-impaired students at CJSM Ngoma's inclusive school, Huye district.
- iv. Recommend classroom sitting arrangement that improve the Academic results of hearing-impaired students at CJSM Ngoma's inclusive school, Huye district.

1.3.2 Research questions

- i. Which captions at CJSM Ngoma inclusive school in Huye district improve the educational success of hearing impaired students?
- ii. What technological developments have helped hearing-impaired students perform better academically at the CJSM Ngoma Inclusive School in the Huye district?
- iii. How does the seating arrangement in the classroom at CJSM Ngoma inclusive school in the Huye district have an impact on hearing-impaired students' academic performance?
- iv. How do visual methods used at the CJSM Ngoma inclusive school in the Huye district affect the academic performance of students with hearing impairment?

1.4 Significance of the study

Many people consider this study to be important. First, these instructional techniques will be beneficial for students with hearing impairment because, they will help them to learn effectively without any limitation related to the teaching and learning.

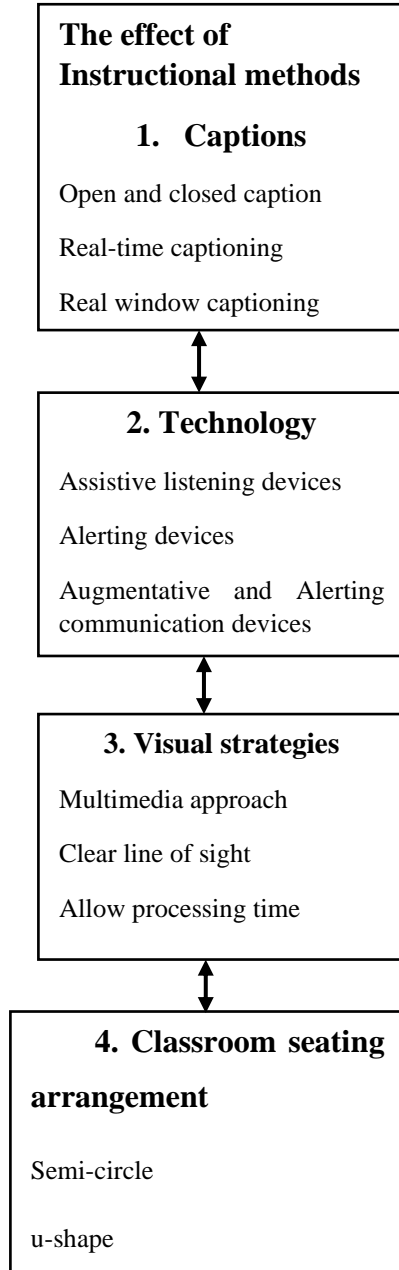
Secondly, Rwanda Basic Education Board (REB): is going to be aware of different instructional strategies used to help learners with hearing impairment in all different schools of our country.

Thirdly, Ministry of Education (MINEDUC) will also be aware of different strategies that are used to assist hearing-impaired students. This will help in the planning as well as making budget to

assist in well implementation of those teaching and learning strategies to make a more accessible educational system for students with hearing loss in our nation.

1.5 Conceptual framework

Independent Variables



Dependent Variables

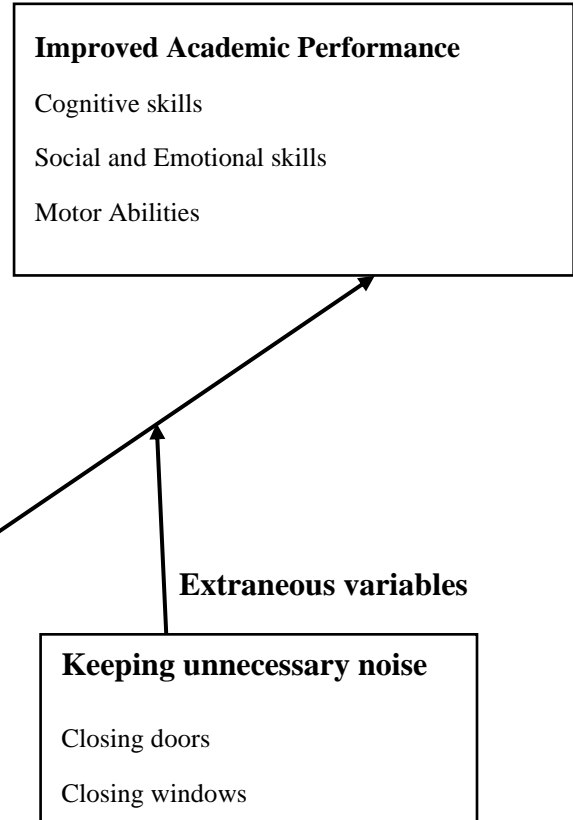


Figure 1: conceptual framework

Source: Researchers' own model (2023)

Figure 1.1 shows how instructional strategies and students with hearing impairments' academic performance are related.

Figure 1.1 shows how Instructional methods impact the effectiveness of hearing impaired students in the classroom. After using appropriate educational methods in classrooms the performance of students with hearing impairment will increase. Those strategies are captions, technology, visuals and classroom arrangement. Learners with hearing impairment will perform different skills such as: social and emotional skills, cognitive skills, motor abilities and intrinsic motivations. Sign language is not used as a strategy due to that is daily means of communication in this school.

1.6 Theoretical framework

The study was based on Benjamin Bloom (1956) as revised in (2001) Instructional theory. The schools of thought typically fell into two categories: cognitive and behaviorist. It is the field that focuses on how to organize information to support human education, especially among young people.

Bloom's taxonomy, which makes use of the best teaching strategies and techniques for evaluating student performance, revitalizes educational practices compared to traditional methodology for learning, which followed the generalization theory. It stresses the fact that every student is an individual learner with different skill sets and abilities and that their knowledge and understanding differ (Mary Clotilda,2022).

To promote more sophisticated thinking techniques in the classroom, the instructional theory approach was created. The Bloom's Taxonomy approach involves assessing and evaluating ideas, methods, procedures, and principles rather than simply memorizing facts. Despite several objections, Bloom's Taxonomy is still extensively applied in educational settings today. It is used by institutions to enhance their curricula, exams, and teaching strategies (Mary Clotilda,2022).

To explain the significance of instructional methods on hearing-impaired students' academic performance, the Instructional theory (cognitive and behaviorist) based on revised Bloom taxonomy used. Due to that students with hearing impairment at CJSM Ngoma Inclusive school were able to define some concepts, to explain the lessons, they were able to solve different problems, they were able to organize different plays, they were able to select the important topics and students with hearing impairment were able to develop new ideas as the instructional theory emphasizes on.

1.7 Limitations

My study was limited by a small sample of only one selected school in Huye district. Also it was not possible to interview all teachers and both children with and without hearing impairment due to the limited time. My study was limited by financial means due to the insufficient funds. I did not use efficient transport from Gisagara District to Huye district where I conducted my study, was long journey that require the investment. And when I was writing my thesis sometimes I met with the issue of lacking the internet connectivity as financial barrier.

1.8 Delimitation

The study was conducted only at CJSM Ngoma, Huye District in Southern province of Rwanda. It focused on only to the children with hearing impairment, teachers, deputy head teacher in charge of studies and head teacher of these learners with hearing impairment.

1.9 Operational definitions

Instructional strategies are methods teachers employ to assist students in comprehending lessons, developing their independence in academic pursuits, and becoming strategic learners.

Academic performance is understood to be the student's learned material that is assessed by a teacher through grades and/or learning goals established by students and teachers and to be accomplished over a predetermined time period.

The inability to hear sound is referred to **Hearing Impairment**. Any part of the hearing mechanism could have been damaged, or it could have developed improperly, leading to this.

You can hear better in noisy or crowded environments if you use **assistive hearing technology**. Whether you wear hearing aids or have cochlear implants, you can use hearing assistive technologies.

The process of **captioning** involves converting the audio from a live event, a movie, a video, a CD-ROM, a television broadcast, a webcast, or other productions into text and displaying that text on a screen, monitor, or other visual display system.

Assumptions

In my study all participants gave me the truthful and objectively reliable information. Every participant provided the information required without doubt.

1.10 Summary of Background

Overall, the instructional techniques used in America and other western African nations used Choral responding, response cards, and peer tutoring as some strategies used in inclusive education to improve the academic performance of students with hearing impairment. According to Tina J. Herring and M. Lynn Woolsey's research, in 2022 used these three strategies can both benefit typically developing and disabled students by increasing active student response during class. College students who are hard of hearing and deaf in Kenya were able to solve problems more effectively thanks to discussions, field trips, cooperative learning, and the use of graphic organizers (Ogada, 2022). Other methods for instructing students who have hearing impairments include: setting up the classroom so that the students are seated in a U shape. The first chapter also discusses the study's significance, conceptual and theoretical frameworks, limitations, delimitations, operational definitions, and assumptions, along with the goals and inquiries of the study.

PART 2: LITERATURE REVIEW

2.0 Overview

The following section, I reviewed research as a result of instructional strategies based on The academic success of Deaf students in inclusive classrooms. Captions and academic performance, technology and academic performance, academic achievement and visuals, and classroom design and hearing-impaired students' academic performance will all be covered.

2.1 Captions for hearing-impaired students

On a television, computer, mobile device, or movie screen, captions are words that describe the audio or sound portion of a program or video. When a program has captions, deaf or hard-of-hearing viewers can follow the action and dialogue at the same time. Captions can even help people with hearing loss who are not Deaf hear spoken words better because hearing, like vision, is influenced by our expectations (when you have an idea of what someone may be about to say, their speech may seem more clear). Captions can also identify the speaker or the nature of the sound effects to help viewers understand a news story, political debate, or a program's plot (National, 2017).

Since then, captions have allowed hearing-impaired and deaf people to watch television. The Public Broadcasting Service initially made some of the more well-known programs available via special broadcasts. Today, news, public affairs, and sports programming are all available with closed captioning on network, public, and cable television, the internet, and in movie theaters. The need for captions has made them obsolete as a novelty. Individuals, groups, and educational institutions can now easily create captions thanks to a wide variety of commercial vendors and specialized software (NIDCD, 2017).

According to research, the use of captioning increases vocabulary and reading comprehension while giving students access to academic and cultural experiences (Rowland; Jelinek & Jackson, 2017). Despite the positive effects of captioning for English-speaking students with sensory impairments that have been documented in the literature, little is known about its effects on Spanish-speaking students with sensory impairments. However, studies have shown that captioning is beneficial for non-disabled kids whose mother tongue is Spanish.

2.1.1 Types of captions

The National Institute on Deafness and Other Communication Disorders has created various types of captions to assist deaf and hard-of-hearing people in various contexts. (NIDCD, 2017).

a. Captions, both open and closed

"Open" or "closed" captions are both acceptable". Open captions are always visible and cannot be turned off, in contrast to closed captions, which can be turned on and off by the viewer (using the menu settings on any television).

Closed captioning is available on digital television sets, including high-definition television sets, manufactured after July 1, 2002. The viewer can change some digital captioning menus' font style, text size and color, and background color.

b. The moment captioning

Real-time translation or captions are created as an event is happening for communication access. A stenotype machine with a phonetic keyboard and specialized software is used by a captioner; they are frequently trained as stenographers or court reporters. A computer almost immediately translates the phonetic symbols into English captions. There is a very slight delay because each word needs to be heard and understood by the captioner, which takes time for the computer to process. Real-time captioning can be used for scriptless shows, live events like congressional proceedings, newscasts, and meetings that aren't broadcast, like the national conferences of professional associations.

Although real-time captioning is accurate to within 98%, the audience will occasionally notice mistakes. The captioner might mishear a word, hear a word they are unfamiliar with, or make a lexical error.

c. The electronic newsroom's captions

Electronic newsroom captions (ENR), which are generated from a news script computer or teleprompter, are frequently used for live newscasts. This method can only be used to caption scripted content. So for spontaneous commentary, live field reports, breaking news, and sports and weather updates, real-time captioning is necessary.

d. Both edited and authentic captions

It is possible to create edited or verbatim captions. Concepts are shortened and shorter verb tenses are used in edited captions. The entire conversation is captured in verbatim captions. Although there are some situations (like for children's programming) where edited captions are preferred for ease of reading, the majority of deaf or hard-of-hearing people prefer the full access provided by verbatim texts.

e. Captioning for rear windows

This kind of captioning system is available in some movie theaters across the nation. The captions are projected onto a movable Lucite panel that is fastened to the audience member's seat from an LED panel at the theater's rear.

f. Captions for the phone

A captioned phone has a built-in screen that shows whatever the caller is saying in text form (captions). When an outgoing call is made from a captioned phone, a Captioned Telephone Service (CTS) is dialed. A person you want to speak with is picked up by a specially trained CTS operator, who then repeats what they say. The captioned phone screen automatically converts the voice of the CTS operator into text using speech recognition technology.

2.2 Technology for learners with hearing impairment

The Assistive Technology Industry Association (ATiA) defines assistive technology (AT) as any device, software, product system, or tool used to improve, maintain, or expand a person's functional capabilities. While it does not cure a student's learning disability, it does give them the opportunity to work to their fullest ability and on par with their peers who are not disabled. Due to their reduced reliance on parents and teachers, it can also help students feel more independent.

2.2.1 Access to assistive technology in the classroom for Deaf and hard-of-hearing students

Using hearing aids or cochlear implants, hard-of-hearing and Deaf students might require technological assistance (AT). Hearing that is normal for the user is not produced by cochlear implants or hearing aids. They perform best in quiet settings or when using assistive technology. "**Augmenting devices/systems**" and "**Transforming devices/systems**" are two broad categories. "should be looked into when assisting hearing-impaired and Deaf students through the use of

technology. Systems and tools for transforming convert speech into text, while systems and tools for amplification, among other things, improve the signal to noise ratio.

2.2.1.1 Devices and systems for augmentation

- a. **Personal FM systems** can transmit a teacher's voice directly to a hearing-impaired student's small receiver via FM radio waves from a wireless microphone the teacher is wearing. Both students who use hearing aids or a cochlear implant and those who do not can use personal FM systems. Individual FM systems:
 - Can be used without additional devices by using a desktop speaker, earbuds, or a headset. It can also be directly connected to a hearing aid or cochlear implant.
 - Are frequently useful for raising the signal-to-noise ratio for students who have cochlear implants. FM receivers come in a variety of varieties. You must speak with the child's audiologist, FM manufacturers, and cochlear implant center to determine which FM systems and coupling choices will function best with the child's cochlear implant processor.
 - Are transportable and typically simple to use outside of the classroom or take from one classroom to another.
- b. **Sound field systems** send the voice of the teacher through a microphone to one or more speakers mounted on a wall or placed nearby the student. This enables multiple students to use the system at once. Some systems may not be able to provide a good signal-to-noise ratio for a young child with hearing loss in noisy or echo-prone environments. Induction loop (IL) systems are another variety of sound field system. In this system, the listening space is completely encircled by a loop of wires. Cochlear implants with T coils and hearing aids both have access to the IL system signals.
- c. **Other assistive listening devices** is a system that transmits sound using infrared light waves is the infrared (IR) system. Since ambient light may interfere with the transmission, a strict line of sight is typically needed between the light emitter and the listener with the receiver. If you are unsure of which assistive listening device will be most effective, testing a variety of different systems is advised.
- d. **Audio-visual FM** for students who have hearing or oral disabilities, systems make speech reading easier. An illustration would be the Audi See, which comes with an earpiece

transmitter and a teacher-worn headset-camera. The student has a tiny monitor-receiver on their desk that allows them to see and hear the teacher's face.

- e. **Telephones with amplifiers** offer a variety of modified phones and alarm gadgets that can be useful for people who have varying degrees of hearing loss.

2.2.2.2 Modifying tools/systems

- a. A trained individual can use a keyboard to translate a speaker's words into text that is then shown on a monitor, screen, or laptop computer used by deaf or hard of hearing students.
- b. **Services for translation** can take many forms, for instance: Type in C-Print Concise programs translate spoken words into text instantly, meaning-for-meaning, while Communication Access Real-time Instant word-for-word translation of spoken words into text is offered by Translation (CART).
- c. **Accessible instructional materials (AIM)** might be taken into account because reading proficiency can be impacted by hearing loss. Some students might benefit from using text-to-speech, word prediction, or another type of assistive technology. For information on where to buy specific varieties of adaptive computer hardware and software for home use.
- d. To support equal access to content for students who are Deaf or Hard of Hearing, captioning services for video/audio productions offer captioned audio and video productions. Schools must provide captioned audio and video productions if specified on the student's Individual Education Plan. On a television or computer screen, captions show the spoken words of a conversation as printed text. The Described Caption Media program at <http://www.dcmp.org> provides access to captioned videos for schools and families of young children with hearing loss.
- e. **Direct Contact Communication** when quick, one-on-one conversations are required, systems can help. On devices with two keyboards and displays, a teacher can type messages back and forth with a student who is hard of hearing or Deaf. Devices like the Ubi-Duo and Interpretive are examples.
- f. People who are unable to use amplified phones can still access information by using **text and other adaptive telephones (TTY)**. Blackberries, Sidekicks, PDAs, and videophones are now additional options.

2.2.2 Different kinds of classroom assistive technology equipment

For students who are hard of hearing and deaf, there are numerous assistive technology tools available. While some options can be used with personal amplification systems, others can support communication and daily tasks using visual or touch technology. Using FM systems, visual aids, interpreters, and closed captioning, schools can assist deaf and hard-of-hearing students in the classroom. Deaf and hard-of-hearing students can also use their own FM systems, loop systems, streaming devices, apps, and other devices to communicate at home and in the community. Here are links on various products for each of the following five types of assistive listening devices (Jamie, B. 2021).

- a. **FM Systems:** FM systems transmit a teacher's voice wirelessly to a receiver worn by a student who is hard of hearing. It can be linked to a cochlear implant, earbuds, headset, or both. As a result, the child's hearing is improved because they can clearly hear the teacher's voice without any outside noises.
- b. **AAC (Augmentative and Alternative Communication)** systems, tools, and methods are ways of communicating that people who have difficulty speaking can use to supplement or replace verbal communication. Students can use them to create nonverbal phrases or sentences because they represent words with pictures or symbols. In order to communicate with their teachers and peers who do not understand sign language, deaf students can use this method. Although paper-based AAC is also an option, tablets and iPads are the most common AAC equipment used in classrooms.
- c. **The speech-to-text method:** Using this technology, spoken words are converted into written text. Many technology-based apps use the microphone to translate what is being said into text that appears on the screen after being understood. This can be a helpful tool in lectures so that students can focus on the teacher's words and use the transcript in place of taking down notes. Two examples of speech-to-text software that transforms spoken words into written text are Google Live Transcribe and AVA.
- d. **Systems with Audio Induction Loops:** An audio induction loop is yet another name for a loop system. A microphone is used to capture audio data, and an amplifier processes the signal before it is transmitted via the loop cable. In order to transmit a magnetic signal to the hearing aid, a wire is placed around the perimeter of a particular space, such as a church, conference room, service counter, etc. This space is known as a loop cable. The magnetic

wireless signal coming from the loop is picked up by a D/HH student using the T coil feature on their amplifier.

- e. **Streaming gadgets:** A streamer is a small gadget that is worn around the neck and has a cord. It wirelessly transmits sound to the D/HH student's amplifier from any device, including a mobile phone, laptop, TV, mp3 player, or other audio source.
- f. **Alerting Devices:** An alerting device keeps people connected and secure in commonplace circumstances. Alerting devices can send visual, vibrotactile, or auditory signals to the DHH student.
- g. **Services for the Deaf and Hard of Hearing:** These learners can access a wide range of services that support communication. A few of them are as follows:
 - Cart Services provides closed captioning on demand
 - Options for closed captioning give DHH students the opportunity to read the words of the conversation that is taking place. Real-time CC refers to participation in a conversation while typing. This is something that CC companies like CART, apps that can be downloaded to a phone or computer, pre-programmed software in programs like Zoom, Google Meets, etc. all do. Many movies and web-based resources have CC added to them so that DHH people can access CC for those specific resources. There are also more recent websites like Streamer that offer real-time credit card options. Additionally, a D/HH pupil may buy that a CC gadget
- h. Services for **ASL interpretation** offer an interpreter in a range of situations. Depending on the circumstance, the interpreter's location, and his or her availability, they may be offered virtually or in person.
- i. **Relay services** are available for free and can be used by hearing people who are contacting a D/HH person as well as DHH students. Get in touch with your state's ADA office to learn how to locate a local relay service number and to receive guidance on which kind of relay service will be most useful for the DHH person who needs the service.

2.2.3 Teaching Deaf and Hard of Hearing Children in the Classroom

People with hearing loss can benefit from cochlear implants, hearing aids, and other assistive technologies, but they cannot fully replace the fidelity and clarity of natural hearing.

However, there are a number of strategies that can enhance a student's comprehension and participation in class.

- a. Personal FM systems are a good example. With this technique, instructors can use wireless microphones during the entire lesson. Through FM radio waves, the students' assistive hearing devices directly receive an audio signal. Due to its portability, light weight, and unobtrusive design, this option enables children who are deaf or hard of hearing to participate more fully in classroom learning.
- b. **Sound field systems** are yet another well-liked strategy that can be applied in classroom settings. These speakers, which can be shared by multiple kids at once, can be wall-mounted or stand-alone. The drawback of these systems is that they are not as portable as personal FM systems.
- c. **Captioning** has a significant positive impact on lessons that incorporate audio or video (A/V). Captioned A/V content, which is similar to the "closed captioning" frequently used in television programs, must be made available in schools upon request.

A Full Range of Assistive Technology Accepted in the Classroom

The aforementioned examples only scratch the surface. Teachers can incorporate a variety of non-invasive assistive hearing technologies into their curricula today.

Other noteworthy examples include: **Communication Real-Time Translation (CART), TDD (Telephone for the Deaf), TTY (Teletypewriter), voice-to-text software, and TDD (Telephone for the Deaf).**

Although there isn't a single strategy that works best in every circumstance, educational specialists can assist schools in developing the ideal complement of assistive hearing technologies to help meet the specific needs of students with hearing impairment, faculty, and parents (Children's Choice for Hearing and Talking, 2022)

2.2.4 Technology's Contribution to Universal Design for Learning (UDL)

In the following ways, it benefits all students, not just those with disabilities:

- a. You serve a wide range of student groups who do not have disabilities when you provide technology that helps hearing-impaired or Deaf students in the classroom.
- b. Students learning in their second or third language may find it easier to understand what is being said if captions are provided. When students commute and want to review course videos but can't hear the audio out loud, captions are also helpful.
- c. Students without disabilities who have trouble taking notes or who miss class but still need access to the lecture materials can benefit from academic transcription software.

Deaf and hard-of-hearing students can benefit from technology in a number of ways. (Danielle C., 2022) campus leaders can offer personalized learning paths with technologies that help to improve all students' performance, whether or not these individuals actively seek out the university's assistance.

2.3 Visual strategies of learners with hearing impairment

Students who are Deaf or Hard of Hearing (DHH) need a variety of strategies to access the curriculum because they rely more on their eyes to access the outside world. Visual attention techniques are crucial for attracting and holding others' attention, communicating in social situations, and connecting meanings to written words.

2.3.1 Simple visual strategies

Simple visual strategies that will help or support students who are Deaf or have hearing impairments. Many of these strategies also benefit the other students in the classroom.

a. Make sure there is an open field of vision.

The teacher must address the class while facing the students. has your hair pulled back and good lighting? Normal speech should be used, with repetition and If necessary, rephrase. If there is a collective action, the participants should be arranged in a circle so that everyone can see them.

Instead of using a traditional chalkboard, PowerPoint presentations are preferred because they allow teachers to face their students at all times.

b. Provide for Process duration

A hearing person can listen and watch at the same time. Students who are hard of hearing or deaf need time to transition between the explanations and the visual material, especially those who use visual communication methods (such as speechreading or sign language). They must process information sequentially rather than simultaneously. The use of a cochlear implant necessitates processing time as well.

c. Pre-Teach Vocabulary

Students who are deaf or hard of hearing typically do not pick up words by accident; therefore, explicit instruction is necessary. Use powerful strategies like word walls, semantic maps, and word discussions. It's important to practice.

d. Print Rich Environment

Make print a significant part of daily life regardless of the communication modality being used, and emphasize the importance of reading and writing in a variety of worthwhile activities throughout the day. The classroom's items should be labeled. Use symbols in sign language in activities and visuals in the classroom, for instance.

e. Partner with Families

To ensure that vocabulary and language concepts are reflected and reinforced in as many different contexts as possible, keep the lines of communication open between the home and the classroom.

Remember that signing, like speech, is a fleeting signal. It appears for a moment before disappearing. Students who use visual aids are better able to concentrate on key details, connect disparate ideas, and combine old and new information. For kids who are deaf or hard of hearing, multisensory instruction that emphasizes visual supports will maximize learning opportunities.

2.4 Hearing-impaired students' seating in the classroom

The following are various tactics that will be used to arrange students with hearing impairment in classrooms so they can learn alongside peers who are not disabled (Ava, A. 2022).

a. Ensure comfortable lighting

Both excessively dim and excessively bright lighting, such as glaring fluorescent lighting, can strain the eyes. The best places are those with adequate natural lighting. Check to see that the person speaking doesn't have any shadows on their face or glare coming from behind them.

b. Diminish visual clamor

Deaf and hard-of-hearing students use their eyes to listen. Visual busyness (patterns, clutter, flashing or moving graphics, etc.) can make it difficult for someone to visually focus on signs, lip-reading, or facial expressions, just as background noise can make it difficult to hear what someone is saying. Keeping the classroom uncluttered and wearing shirts without patterns are helpful.

c. Arrange attendees in a semicircle so that everyone can see each other.

Considering that Deaf and hard-of-hearing students frequently listen with their eyes closed, it's crucial to arrange everyone so that they can all see each other at once. Typically, this is possible by setting up a semi-circle or circular seating arrangement.

d. Only speak to people directly when they are paying attention.

A Deaf or hard-of-hearing student might miss what is said if the conversation is coming at them from behind or to the side because they may not be able to hear well in that direction. To maximize a student's capacity to understand what you are saying, get their attention before speaking to them and make sure you are in front of them in plain view.

e. Explain ideas with the aid of visuals

Students who are Deaf or hard-of-hearing interact with the world primarily through visual means, so using visual aids like diagrams, models, pictures, and gestures can improve understanding.

f. Offer resources and notes

Students can listen to the entire lecture while taking notes by allowing silent mini-breaks during the lecture, by providing notes beforehand, and by providing a transcript afterward.

g. You should speak to the student, not the interpreter.

In educational settings, interpreters are occasionally used by students. Keep in mind that the student is speaking; the interpreter is merely providing a voice. When communicating with and addressing the student, it is respectful to look at them and speak to them directly.

h. Employ the method of communication that the student prefers.

Every student who is Deaf or hard of hearing is different. Find out from them what form of communication they prefer, then use that. You have a special opportunity to fight for your students as a teacher. You have the authority to force the school to make accommodations for their communication style if they don't already.

i. Create your class using the Universal Design for Learning principles and give students a variety of ways to represent, express, and participate.

According to the Universal Design for Learning (UDL) philosophy, everyone should be able to access education and the classroom environment. Students with disabilities, older students, introverts, extroverts, students from various linguistic and cultural backgrounds, and everyone in between.

You can design a classroom that works for everyone, including Deaf and hard-of-hearing students, by adhering to UDL principles. Giving Deaf and hard-of-hearing students options for perception as well as options for expression and communication will enable them to play to their strengths and make the most of their time in class.

j. Establish a respectful culture in the classroom

Learning is challenging if you don't feel secure. A culture of respect and value for all students, including Deaf and hard-of-hearing students, must be established in the classroom before safety can be ensured. Using Deaf etiquette and talking about accommodations in a cordial, expert, and private manner are excellent first steps.

k. Maintain open channels of communication with the student

Maintaining open lines of communication with your student will allow you both to check in on each other's progress with the strategies you are employing.

l. Make sure students are involved

A significant portion of what students learn in school occurs incidentally, or outside of formal lectures. Due to their inability to take part in the conversations that take place before and after classes, Deaf and hard-of-hearing students frequently miss out on opportunities for incidental learning.

Ensure that students are informed of significant announcements and occasions. By providing resources and tools that make it easier for peers to communicate, you can promote an inclusive culture at your school.

It's crucial that we make extra efforts to provide our Deaf and hard-of-hearing students with the same access as everyone else as we re-enter the classroom. How do you model inclusivity and accessibility for your students? Tell us in the comments section below.

2.5 Conclusion of the literature review and knowledge gaps.

Numerous nations around the world have conducted studies on the effects of instructional strategies on the academic performance of students with hearing impairment in inclusive education. For instance, (Rowland; Jelinek & Jackson, 2017) have shown that the use of captioning increases vocabulary and improves reading comprehension while giving students access to academic and cultural experiences. Any product system, piece of apparatus, piece of software, or other piece of assistive technology (AT) used to maintain, enhance, or increase the functional capabilities of people with disabilities is referred to as assistive technology (AT) (ATiA, 2020). Additionally, it has been demonstrated that classroom physical environments can affect how students act. Additionally, no research has been done on the academic performance of students in Rwanda's inclusive education system, specifically at CJSM Ngoma Inclusive School, who have hearing impairments. Due to the learners' extremely poor performance in class, this study sought to close this gap by examining the impact of instructional strategies on the academic

performance of learners with hearing impairment at CJSN Ngoma Inclusive School. This research anticipated finding out the root cause of the problem and suggesting recommendations.

Refer to the positive impact of using those strategies which are Captioning, Technology, visuals and classroom arrangement in some of the western African countries. I am really confident they will help our children with Hearing impairment in Rwanda.

CHAPTER THREE: RESEARCH METHODOLOGY AND DESIGN

3.0 Introduction

Methods that were used to accomplish the goals of the research are described in this chapter. The variables, study location, intended audience, sample size, sampling plan, piloting, data collection techniques, and analysis are all included in the research design. The research instruments, their administration, and their presentation were discussed in order to establish their validity and reliability, in addition to logistical and ethical issues.

3.1 Research approach

To learn more about how teaching methods at CJSM Ngoma's inclusive school affect the academic performance of students with hearing impairment, the study employed a descriptive survey design. In fact, a survey design like this one assisted me in gathering accurate data from the participants in their actual working environments.

3.2 Research Factors(variables)

3.2.1 Independent Factor(variable)

The independent variable was the effect of instructional methods which are utilizing captions, technology, visual aids, and seating arrangements in the classroom were independent variables.

3.2.2 Dependent Variables

Improvement in academic performance was dependent variable.

3.3 The study's setting

In the Huye district of the Southern Province of Rwanda's CJSM Ngoma Inclusive School, I carried out my research. Only two of the many schools in the Huye district (HVP Gatagara and CJSM Ngoma inclusive schools) have students who have hearing impairment. In order to practice including students with hearing impairment in the regular classes, CJSM Ngoma inclusive school was chosen.

3.4 The intended audience

All hearing-impaired students at CJSM Ngoma inclusive school in Huye district, Southern province, were the focus of this study. The head teacher, deputy head teacher, teachers, hearing impaired children, as well as hearing pupils were all part for the school's student body.

Table 1: The intended audience

Target population		
Respondent	Population	Sample
Head teacher	1	1
Deputy head teacher	1	1
Teachers	39	34
Hearing learners	301	144
Learners with hearing impairment	156	100
TOTAL	498	280

In this study, the smallest sample size required to estimate a statistic based on a reasonable margin of error was determined using Slovin's formula. Calculating Slovin's formula yields: $n=N/(1+Ne^2)$. where: n: Required sample size N: Number of people e: Tolerable error margin (Zach, 2022).

3.5 Sample size and sample method

3.5.1 Sampling approach

Since hearing-impaired students were the study's target population, this research adopted sampling techniques for them. As a researcher, to select participants for this kind of sampling who have been representative of the general population, I used my judgment. The institution picked for the study was also chosen using a purposeful sampling method. Twenty hearing learners will be chosen using a simple random sampling technique. The five teachers who will take part in my study will also be chosen using the sampling technique. Simple random sampling is a procedure for choosing individuals from a population that gives each member of the sample of a given size an equal chance of being chosen (Orodho, 2019).

3.5.2 Sample Size

The research sample size consisted of one school (CJSM Ngoma Inclusive School), one head teacher, one deputy head teacher, thirty-four teachers, one hundred hearing-impaired students, and one hundred and forty-four hearing students. There were 280 respondents in total. This figure represents equal to 56.22% of the instructors and students at the chosen CJSM Ngoma Inclusive School, it was sufficient to be a sample for this research.

3.6. Research Tools

3.6.1 Survey questions

Teachers, students with hearing impairment, and their hearing peers will all receive questionnaires. Additionally, surveys were used to gather information from teachers and students in general. They were used because they have the potential to correct a lot of information quickly (Orodho, 2019). Teachers used questionnaires to collect information from respondents, and they were not biased in any way.

3.6.2 Schedule for the Interviews

A schedule of interviews with the head teacher were used to obtain specific information. Due to the opportunity to build relationships with the respondents provided by the interview schedule being chosen and conducted in the head teacher's office, As the researcher, I gathered thorough and in-depth data from the respondents. With the help of the wide-ranging inquiries, information that questionnaires will be unable to collect will be interrogated. The information gathered through questionnaires will be supplemented by the interview.

3.6.3 Observation Plan

In my role as a researcher, I was once more use an observation schedule to gather more data on the availability of learning resources used by students with hearing impairments to improve instructional strategies and academic performance both inside and outside the classroom. Additionally, I used it to develop visual teaching techniques for deaf students. The observation schedule was preferred since it verified the accuracy of the claims made by the participants within the framework of the questionnaire and interview schedule. The information obtained using this method was justified by the data obtained from the observation schedule, which were quantitatively analyzed (Cohen, Mahion, & Marrison, 2022).

3.7 Validity

After my study is completed, its validity was determined. Unclear instructions, questions in groups, and questions with incorrect wording was opened and cross-checked. One special needs education lecturer who is knowledgeable in the field will be asked to evaluate the applicability of the instrument's content. Their suggestions will be incorporated into the interview schedules and questionnaires. According to the suggestions of the participants, any confusion will be cleared up.

3.8 Dependability (Reliability)

Test-Retest Method was used to establish reliability. This will entail giving the questionnaires to the same respondents, comparing the results, and repeating the process. Creswell (2003) asserts that the examination of evidence from the sources and the use of it to develop the justification of themes can make qualitative data valid and reliable. The Spearman Rank Order Correlation Coefficient Formula will be used to correlate the results of the two tests and assess their reliability.

Rho is calculated as:

$$\rho = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)}.$$

The letters P (Rho), d (the rank difference between two scores), and n (the number of scores in each distribution) stand for the Spearman correlation index, or Rho.

We will decide on a reliability score of 0.75. According to (Mugenda and Mugenda, 2019), an instrument's high reliability is indicated by a correlation coefficient of 0.75 or higher.

3.9 Data Gathering Techniques

I conducted interview with head teacher by face-to-face in his office as a researcher. I concentrated on in-person conversation and question him about my upcoming interviews. The questionnaire was filled out and collected in a typical classroom setting. The actual facts on the ground was discovered using an observation schedule. I gave the respondents less than 30 minutes to complete the exercise.

3.10 Analyses of Data

The descriptive survey design was used to analyze the data. In contrast to trying to explain why a phenomenon occurs, survey descriptive research places more emphasis on describing the characteristics of the phenomenon. We can better understand it by doing this, and we can create a solid basis for further research. Additionally, the descriptive survey research design employs both quantitative and qualitative research methods. It is mainly used to collect quantitative research data that is simple to statistically analyze. But it can also provide qualitative data that will help you describe and understand the subject of your research (Survey Planet, 2022).

Thematic analysis was used to analyze the qualitative responses from the interview schedule. Utilizing descriptive statistics like frequencies and percentages, the data were displayed. The analysis was informed by the survey responses. They were helpful in organizing and summarizing data to create context and spot trends as well as in explaining how variables are distributed.

3.11 Considerations for Logistical and Moral Issues

The College of Education at the University of Rwanda houses the School of Inclusive and Special Needs Education. will grant permission for the study to be carried out. Participation in this study is entirely optional. Pseudonyms will be used to identify the head teacher of that school in order to safeguard their reputation. As a researcher, I guarantee the confidentiality and anonymity of every respondent. 32 participants will be given a promise that their data and information will only be used for the study and that it will be kept private in return. (Mugenda,2022) Pose the possibility that the respondents might suffer physical or psychological harm as a result of the respondents' information not being kept confidential. I'll discuss anonymity and confidentiality before starting my study.

The confidentiality of the information provided will be guaranteed to the participants, and it will only be used for the investigation. To address the issue of anonymity, the participants will be requested not to include their names on the research instruments. Everyone who takes part will get the same treatment and information about the study's goals and how its results will help students with hearing impairments. Mugenda (2022) argues that it is profoundly unethical for researchers to conceal the true goal of the study out of concern that respondents won't agree to take part. As a researcher, I will do everything in my power to persuade the research subjects to take part in the study. This will be accomplished by building rapport with the participants through preparation for the interaction. I'll interact with the respondents in a way that makes the conversation easier.

CHAPTER FOUR: RESULTS PRESENTATION, ANALYSIS, AND DISCUSSIONS

4.0 OVERVIEW

The academic performance of students with hearing impairment at CJSM Ngoma Inclusive School in Huye District, Southern Province, Rwanda, was evaluated in this study. This chapter covers two sections which are Demographic information and Presentation, analysis, and discussion of the results. The interpretations were made from the analyzed data so that the findings of the study could come out eminently. Discussions of the findings were guided by demographic information and specific objectives that were set for the study seek to:

- i. Determine captions that enhance academic results of hearing-impaired students at CJSM Ngoma's inclusive school, Huye district.
- ii. Identify technologies that enhance hearing impaired students' academic performance at CJSM Ngoma Inclusive School, Huye district.
- iii. Assess visuals that increase academic progress of hearing-impaired students at CJSM Ngoma's inclusive school, Huye district.
- iv. Recommend classroom sitting arrangement that improve the Academic results of hearing-impaired students at CJSM Ngoma's inclusive school, Huye district.

4.1 SECTION A: Demography of teachers of learners with hearing impairment

4.1.1 Teachers' Gender of learners with hearing impairment at CJSM Ngoma Inclusive School

Refer to this study, the gender of teachers has a meaningful effect on using instructional strategies on the academic performance of learners with Hearing Impairment. Out of 34 teachers in this study, 21 (62%) were female and 13 (38%) were male.

Based on the research findings, Gender of teachers has a meaningful effect on using instructional methods on the academic performance of learners with hearing impairment. It can be inferred that there are differences in the way male and female teachers approach teaching students with hearing impairment.

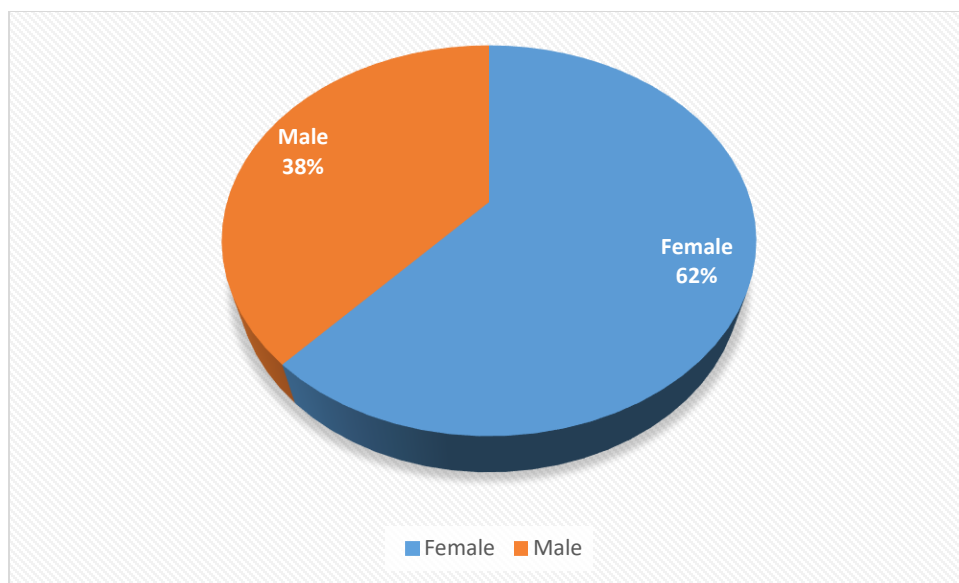


Figure 2: Teachers' Gender of learners with hearing impairment at CJSM Ngoma Inclusive School

It is importantly to note that this finding does not necessarily imply that one gender is inherently better at teaching students with hearing impairment than the other. Rather, it suggests that there may be preferences, or approaches that are influenced by gender.

Further research would be needed to explore the underlying reason for this finding and to determine how it could be used to improve the education of students with hearing impairment. For example, it may be beneficial to provide professional development opportunities that specifically

address the needs of male and female teachers work with students with hearing impairment, or to encourage a more diverse workforce in the field of inclusive education.

4.1.2 Teachers ages at CJSM Ngoma Inclusive School

This research also focused on the ages of school teachers who participated in this survey. They showed that 7(20.59%) teachers are between 25-30 ages, 8(23.53%) teachers are between 31-35ages, 9 (26.47%) teachers are between 36-40 ages and 10(29.41%) teachers are 41 and above ages.

Based on the research findings that the ages of school teachers who participated in the survey were distributed across different age groups, it can be inferred there is a diverse range of experience levels among teachers working with hearing impaired students at CJSM Ngoma inclusive School.

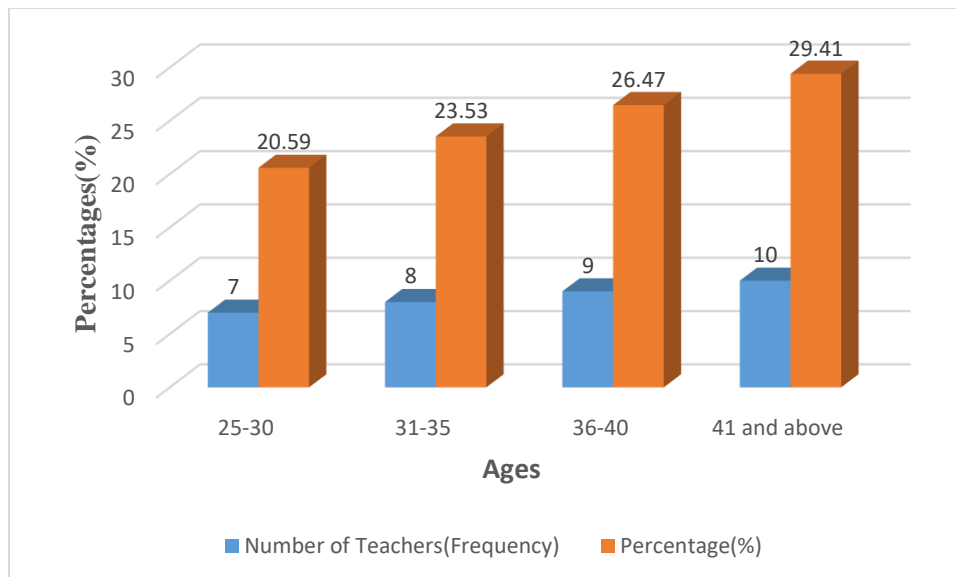


Figure 3: Teachers ages at CJSM Ngoma Inclusive School

The findings suggest that teachers of different ages may bring different perspectives, experiences, and teaching styles to their work with hearing impaired students. For example, young teachers may be more familiar with newer teaching methods, while older teachers may have more experience working with students with hearing impairment.

Understanding the age distribution of teachers can be useful for developing target professional development opportunities, mentoring programs or other forms of support to help teachers improve their teaching skills and better meet the needs of hearing-impaired students. Additionally, this information could be to ensure that the school has a balanced mix of experienced and newer teachers, which could help to provide a more well-rounded education for students with hearing impairment.

4.1.3 The highest academic degrees attained

The highest academic degrees that the teachers from CJSM Ngoma Inclusive school attained is master’s degree with 2(5.88%), university is 15(44.12%) teachers and higher education is 17(50.00%) teachers.

Based on the research findings that the highest academic degrees attained by teachers at CJSM Ngoma inclusive school were distributed across master’s degree, university and higher education it can be inferred that the teaching staff at the school are generally well educated.

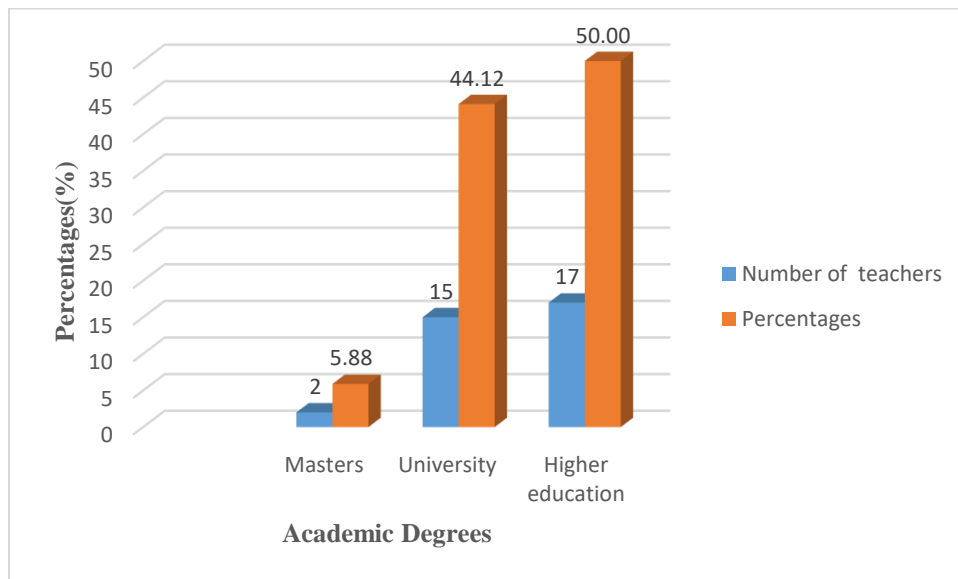


Figure 4: The highest academic degrees attained

Having teachers with higher levels of education can have a positive impact on the academic performance of students as these teachers may be better equipped to provide a high-quality

education. they may have a deeper understanding of the subject matter, be more familiar with current teaching methodologies, and be better able to adapt to the needs of individual students.

However, it is important to note that having a higher degree does not necessary guarantee effective teaching. Good teaching practices also depends on factors such as experience, training, and expertise in working with students who have special needs. Therefore, it is essential to evaluate the teaching skills and practices of individual teachers in addition to their educational qualification.

Overall, the findings that the majority of teachers at CJSN Ngoma inclusive school have attained university or higher education degrees is a positive indicator of the school's commitment to providing a higher quality education for its students.

4.1.4 The highest level of professional achievement

The highest level of professional achievement that the teachers from CJSM Ngoma Inclusive school achieved is masters' education is 2 teachers (6.9%) bachelor's degrees in education is 12 teachers (41.38%) and primary teachers' education is 15 teachers (51.72%).

Based on the research findings that the highest level of professional achievement among teachers at CJSM Ngoma inclusive school was distributed across master's education, bachelor's degree in education and primary teacher's education, it can be inferred that the teaching staff at the school have a range of qualifications and professional background.

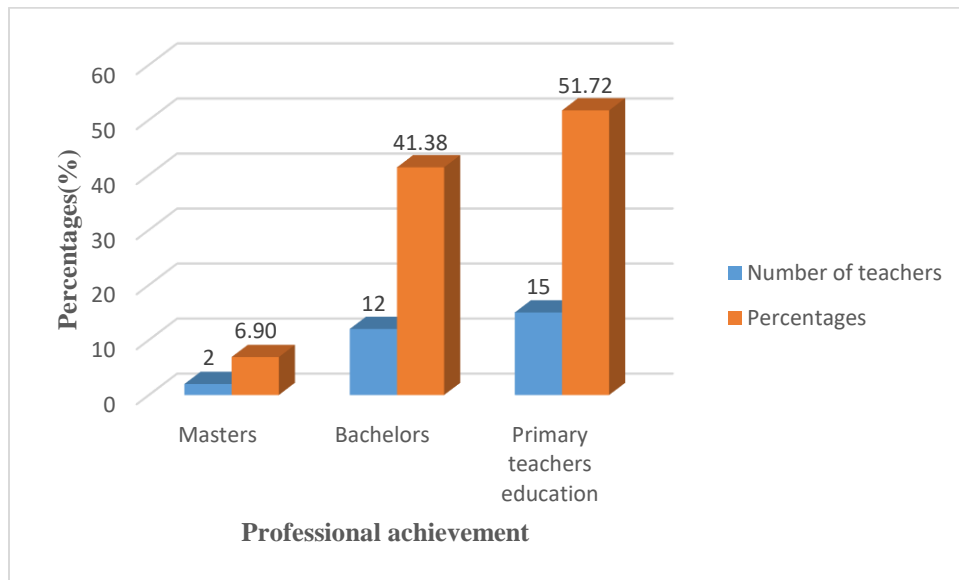


Figure 5: The highest level of professional achievement

The distribution of professional achievements among teachers could have implications for the quality of education provided to hearing impaired students at the school. For example, teachers with higher level degrees may have a greater depth of knowledge and expertise in their subject area, which could lead to more effective teaching and better outcomes for students. Additionally, teachers with specialized training in working with students with special needs may be better equipped to provide accommodations and support to hearing impaired students.

However, it is important to note that professional achievement is not the only factor that determine effective teaching practices. Teachers with primary teacher education degrees may have valuable

experience and knowledge in working with students at the primary level while teachers with bachelor's degrees in education may have a more generalist approach to teaching.

Overall, the finding that the teaching staff at CJSN Ngoma inclusive school have a range of professional achievements could have both positive and negative implications for the education of hearing impaired students. It highlights the need for a comprehensive approach to teacher training and support that takes into account the diverse skills and backgrounds of the teaching staff.

4.1.5 Teachers who have improved their professional qualification

Based on the research findings that the majority of teachers at CJSM Ngoma inclusive school have improved their professional qualifications, it can be inferred that the school places a high value on teacher training and development.

Teachers of CJSM Ngoma Inclusive school who improved their professional qualification are 25(73.53%) while 9 (26.47%) teachers have not improved their qualification

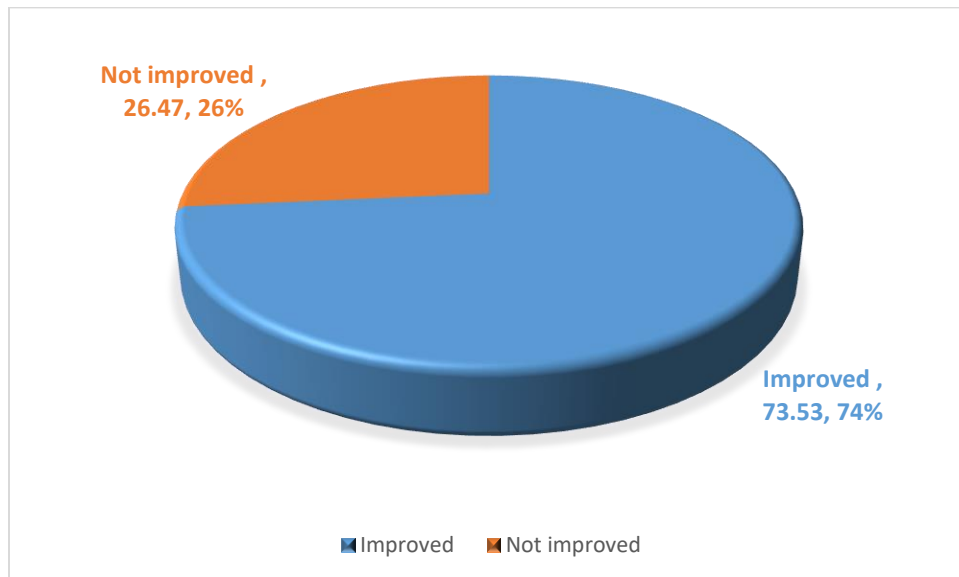


Figure 6: Teachers who have improved their professional qualification

Continuing professional development(CPD) is an essential component of effective teaching as it can help teachers to stay up to date with the latest teaching methodologies, improve their subject knowledge and develop new skills that can benefit their students.

The findings that a significant proportion of teachers at CJSM Ngoma inclusive school have not improved their professional qualifications could suggest that these teachers are not receiving sufficient support to engage in CPD activities. It could also suggest that there are barriers to accessing CPD opportunities such as lack of funding or shortage of available training programs.

Overall, the findings that the majority of teachers at CJSM Ngoma inclusive school have improved their professional qualifications is positive indicator of the schools' commitment to providing a high quality education for its students. However, it is important to address the needs of teachers' who have not had the opportunity to improve their qualification and to ensure that all teachers have access to the training and support they need to be effective in their roles. This could involve providing more targeted training programs, developing mentoring or coaching programs, or exploring other strategies to support ongoing teacher development.

4.1.6 Teachers who are trained on teaching learners with hearing impairment

Teachers of CJSM Ngoma Inclusive school who are trained in teaching learners with hearing impairment are 18(52.94%) while 16(47.06%) teachers are not trained in sample size.

Based on the research findings that just over half of the teachers at CJSM Ngoma inclusive school are trained in teaching learners with hearing impairment, it can be inferred that there may be variability in the level of expertise and knowledge among teachers in working with hearing-impaired students.

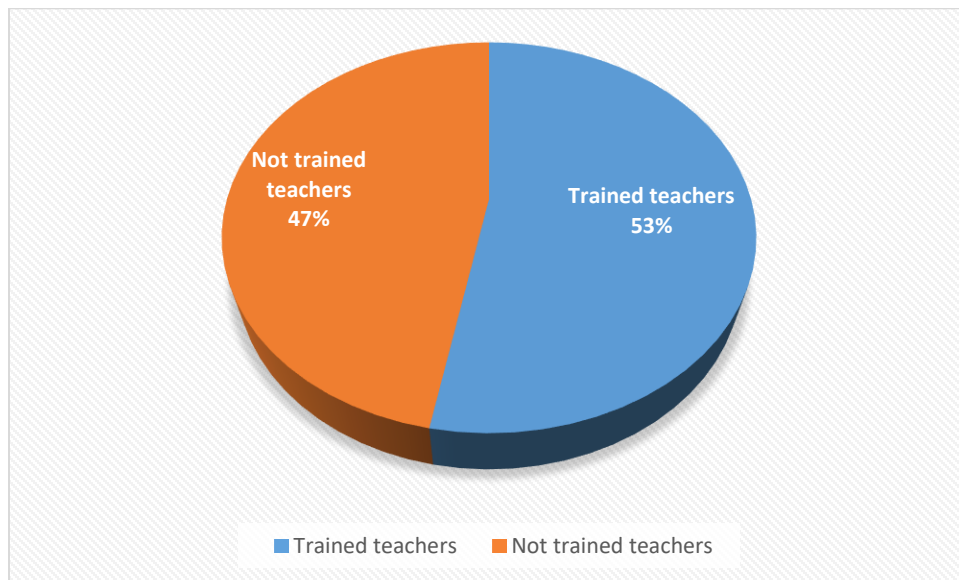


Figure 7: Teachers who are trained on teaching learners with hearing impairment

Teachers who receive specialized training in working with hearing-impaired students are likely to have a better understanding of the unique needs of these students and be better equipped to provide appropriate accommodations and support. However, it is important to note that even teachers who have not received specialized training can still be effective in working with hearing impaired students if they have the right attitude, skills and support.

The findings that almost half of the teachers at CJSM Ngoma inclusive school are not trained in teaching learners with hearing impairment suggests that there may be a need for more targeted training programs to support these teachers. Providing ongoing training and support to teachers can help to improve the quality of education provided to hearing impaired students and ensure that all students have access to the accommodations and support they need to succeed.

Overall, the findings that just over half of the teachers at CJSM Ngoma inclusive school are trained in teaching learners with hearing impairment highlights the importance of ongoing teacher training and support to ensure that all students receive high quality education.

4.1.7 Teachers with hearing difficulties

Some of the teachers of this school have hearing difficulties while others not. Teachers with hearing impairment are 2(5.88%) while 32 (94.12%) teachers are not hearing impaired

Based on the research findings that only a small proportion of teachers at CJSM Ngoma inclusive school have hearing difficulties, it can be inferred that the majority of teachers are not directly familiar with the experience of hearing impairment.

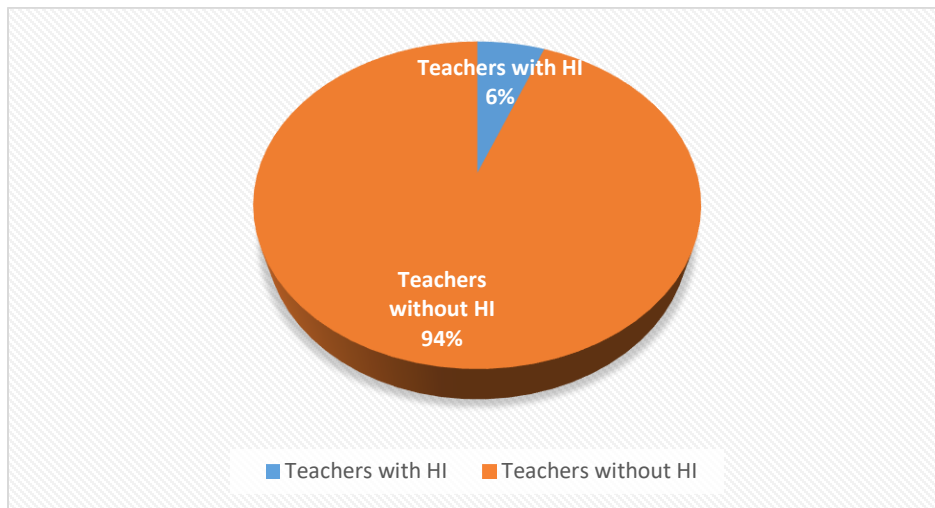


Figure 8: Teachers with hearing difficulties

While having teachers with hearing difficulties on staff can provide valuable insights and experiences that can benefit hearing-impaired students, it is not a requirement for effective teaching. Teachers who do not hearing have hearing difficulties can still be effective in working with hearing impaired students if they have the right to training, support and accommodations in place.

However, it is important to note that having teachers with hearing difficulties on staff can help to create a more inclusive environment and promote understanding end empathy among all members of the school community. Additionally, teachers with hearing difficulties may be able to provide valuable insights into the unique needs of hearing-impaired students and help to identify effective teaching strategies.

Overall, the findings that only a small proportion of teachers at CJSM Ngoma inclusive school have hearing difficulties suggests that the school may need to provide additional training and support to ensure that all teachers are equipped to work effectively with hearing-impaired students. Additionally, the school may want to consider strategies to promote a more inclusive environment and encourage understanding and empathy among all members of the school community.

4.1.8 Trained teachers in special needs education with qualification

Some of the teachers from CJSM Ngoma inclusive school are trained in Special needs education apart from hearing difficulties while others are not yet trained. The number of the teachers who are trained is 21(61.76%) while 13(38.24%) teachers are not yet trained.

Based on the research findings that just over half of the teachers at CJSM Ngoma inclusive school are trained in special needs education, it can be inferred that there may be variability in the level of expertise and knowledge among teachers in working with students with special needs.

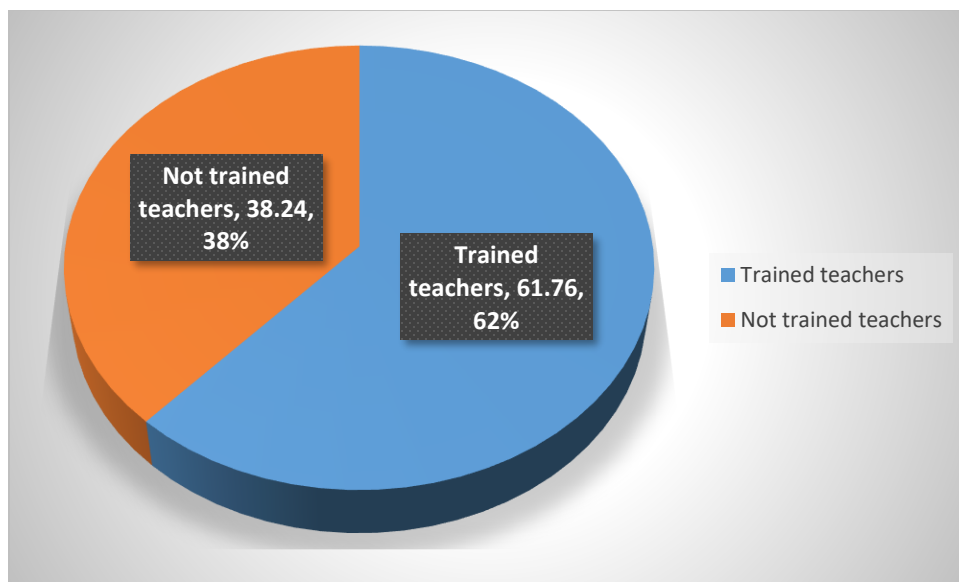


Figure 9: Trained teachers in special needs education with qualification

Teachers who receive specialized training in special needs education are likely to have a better understanding of the unique needs of these students and be better equipped to provide appropriate accommodations and support. However, it is important to note that even teachers who have not

received specialized training can still be effective in working with students with special needs if they have the right attitude, skills, and support.

The findings from CJSM Ngoma inclusive school staff are trained in special needs education suggests that there may be a need for more targeted training and support to teachers can help to improve the quality of education provided to students with special needs and ensure that all students have access to the accommodations and support they need to succeed.

Overall, the findings that just over half of the teachers at CJSM Ngoma inclusive school are trained in special needs education highlights the importance of ongoing teacher training and support to ensure that all students receive a high-quality education.

4.2 SECTION B: The effect of instructional methods on the academic performance of students with hearing impairment.

In this section, the teachers read the description of the responses then according to their views ranked accordingly. Those ranks that they provided are Strongly Agree(SA), Agree (A), Disagree(D), Strongly Disagree(SD) and Neutral(N).

4.2.1 Resources and teaching aids available to help students with hearing impairment

The school makes resources and teaching aids that help students with hearing impairment to perform better academically, teachers from CJSM Ngoma Inclusive School provided these responses where 24(70.59%) teachers are Strongly Agree, 9(26.47%) teachers are Agree while 1 (2.94%) teacher is Neutral

Based on the research findings that a large majority of teachers at CJSM Ngoma Inclusive school strongly agree that the school provides resources and teaching aids that help hearing-impaired students to perform better academically, it can be inferred that the school is committed to providing a supportive learning environment for these students.

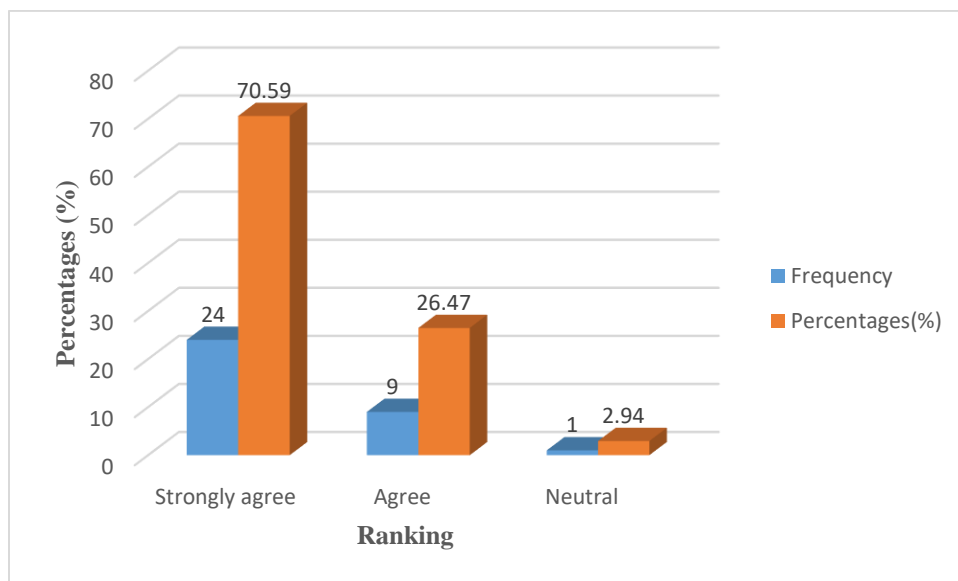


Figure 10: Resources and teaching aids available to help students with hearing impairment

Providing appropriate resources and teaching aids is essential for ensuring that hearing-impaired students have equal access to education and can participate fully in classroom activities. Teachers who have access to these resources and aids are better equipped to provide effective instruction and support to hearing-impaired students.

The findings that the majority of teachers strongly agree that the school provides resources and teaching aids that help hearing-impaired students to perform better academically is a positive indicator of the school commitment to meeting the needs of these students. It suggests that the school is aware of the unique challenges facing hearing impaired students and is taking steps to address these challenges.

Overall, the finding that a large majority of teachers at CJSM Ngoma inclusive school strongly agree that the school provides resources and teaching aids that help hearing-impaired students to perform better academically is a positive indicator of the school's commitment to providing a supportive and inclusive learning environment for all students.

4.2.2 Educational materials used to improve the academic performance for students with hearing impairment

The educational materials are used to improve the academic performance for hearing impaired students, teachers from CJSM Ngoma inclusive school provided the following responses: 19(55.88%) teachers are Strongly Agree, 13(38.24%) teachers are Agree, 1(2.94%) teacher is Disagree while 1(2.94%) teacher is Neutral

Based on the research findings that a large majority of teachers at CJSM Ngoma Inclusive school strongly or agree that educational materials are used to improve the academic performance of hearing impaired students, it can be inferred that the school is taking steps to provide appropriate resources and support to meet the unique needs of these students.

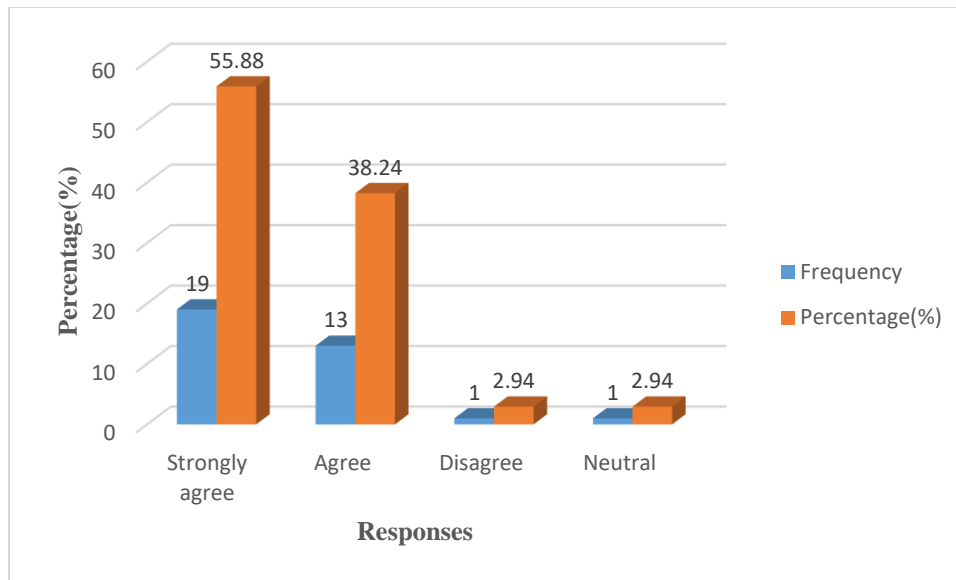


Figure 11: Educational materials used to improve the academic performance for students with hearing impairment

Effective educational materials can play an important role in improving the academic performance of hearing impaired students. The findings that the majority of teachers at CJSN Ngoma inclusive school strongly agree or agree that educational materials are used to improve the academic performance of hearing-impaired students is a positive indicator of the schools' commitment to providing a supportive and inclusive learning environment. It suggests that the school is aware of the unique challenges facing hearing-impaired students and is taking steps to address these challenges through the use of appropriate educational materials.

The fact that only one teacher disagreed with the statement suggests that the school is generally successful in providing educational materials that are effective in improving the academic performance of hearing-impaired students. However, it is important to note that the effectiveness of educational materials can depend on a variety of factors including the specific needs of individual students and the quality of instruction provided by teachers.

Overall, the findings that a large majority of teachers at CJSN Ngoma Inclusive school strongly agree or agree that educational materials are used to improve the academic performance of hearing-impaired students is a positive indicator of the schools' commitment to meeting the needs of these students and providing a high quality education for all students.

4.2.3 Technologies that aid in improving academic performance for students with hearing impairment

Technologies that aid in improving the academic performance for students with hearing impairment, CJSM Ngoma inclusive school teachers provided the following responses, 13(38.24%) teachers are Strongly Agree, 16(47.06%) teachers are Agree, 2(5.88%) teacher is Strongly Disagree, 1(2.94%) teacher is Disagree and 2(5.88%) teacher is Neutral

Based on the research findings that a majority of teachers at CJSM Ngoma Inclusive school agree or strongly agree that technologies can aid in improving the academic performance of students with hearing impairment, it can be inferred that the school recognizes the potential benefits of technology in supporting the learning needs of these students.

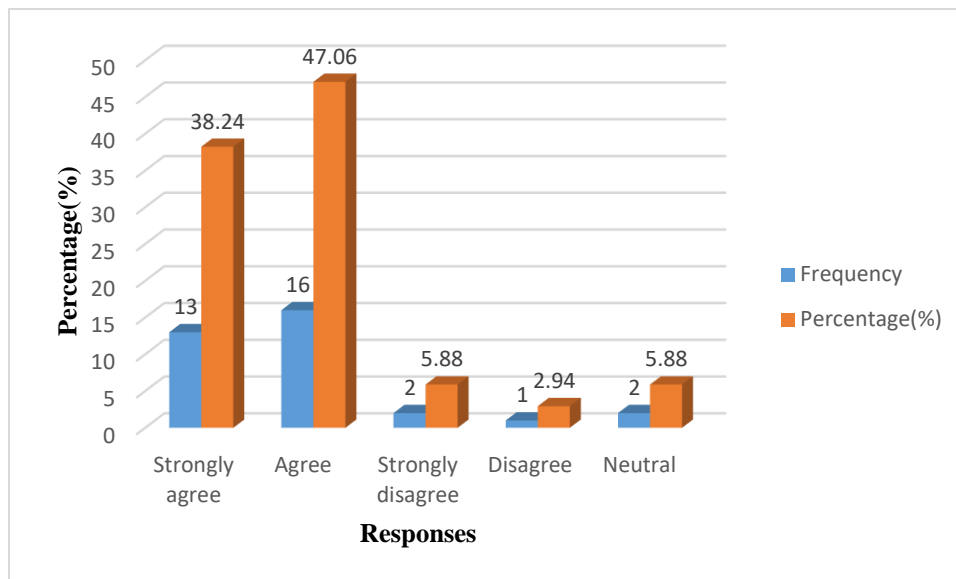


Figure 12: Technologies that aid in improving academic performance for students with hearing impairment

Technologies such as hearing aids, and assistive listening devices can play an important role in improving the academic performance and overall quality of life of hearing impaired students. These technologies can help to make classroom content more accessible and facilitate communication between students and teachers.

The fact that the majority of teachers at CJSM Ngoma inclusive school agree or strongly agree that technologies can aid in improving the academic performance of students with hearing impairment suggests that the school is aware of the potential benefits of technology in supporting the learning needs of these students and is taking steps to implement technology based solutions in the classroom.

However, it is important to note that not all teachers agreed with the statement, with some expressing neutral or negative views toward technology. This suggests that there may be varying levels of comfort or familiarity with technology among teachers which could impact the effectiveness of technology of technology-based solutions in the classroom.

Overall, the finding that a majority of teachers at CJSM Ngoma inclusive school agree or strongly agree that technology can aid in improving the academic performance of students with hearing impairment is a positive indicator of the school's commitment to providing a supportive and inclusive learning environment for all students. However, it is important to continue to assess and address any challenges that the teachers may have with the use of technology, in order to ensure that technology based solutions are effectively implemented and meet the needs of all students.

4.2.4 The use of captions to the hearing impaired students' academic performance

On captions that are used to help students with hearing impairment to perform better in classroom, teachers from CJSM Ngoma inclusive school provided the following responses; 13(38.24%) teachers are Strongly Agree, 16(47.06%) teachers are Agree, 2(5.88%) teachers are Disagree and 3(8.82%) teachers are Neutral.

Based on the research findings that a majority of teachers at CJSM Ngoma inclusive school agree or strongly agree that captions can help students with hearing impairment to perform better in the classroom, it can be inferred that the school recognizes the potential benefits of captions in supporting the learning needs of these students.

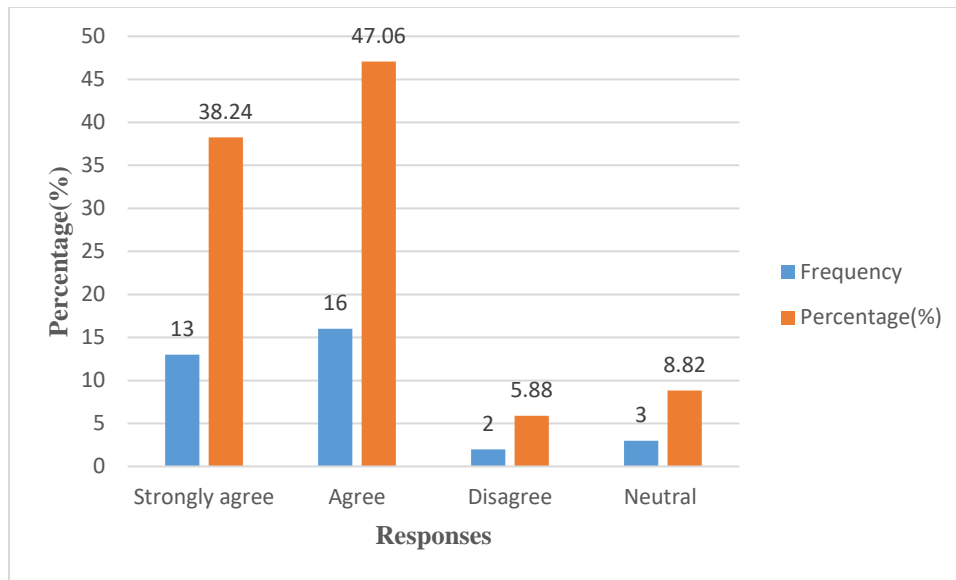


Figure 13: The use of captions to the hearing impaired students' academic performance

Captions are an important tool for improving the accessibility of classroom content or the hearing impaired students. Captions provide a visual representations of spoken language, which can help students with hearing impairment to better understand and engage with classroom content.

The fact that a majority of teachers at CJSM Ngoma inclusive school agree or strongly agree that captions can help students with hearing impairment to perform better in the classroom suggests that the school is aware of the potential benefits of captioning and is taking steps to ensure that classroom content is accessible to all students.

However, it is important to note that some teachers expressed neutral or negative views towards the use of captions. This suggest that there may be varying levels of comfort or familiarity with captioning among teachers, which could impact the effectiveness of captioning in the classroom.

Overall, the findings that a majority of teachers that a majority of teachers at CJSM Ngoma inclusive school agree or strongly agree that captions can help students with hearing impairment to perform better in classroom is a positive indicator of the school's commitment to providing a supportive and inclusive learning environment for all students. However, it is important to continue to assess and address any concerns or challenges that teachers may have with the use of captions in order to ensure that captioning is effectively implemented and meets the needs of all learners.

4.2.5 School and home settings, Students with hearing impairments engage in equal play with their hearing peers

On equal engagement in play for both students with and without hearing impairment that facilitate the performance of students with hearing impairment, teachers from CJSN Ngoma inclusive school provided the following responses; 9(26.47%) teachers are Strongly Agree, 7(20.59%) teachers are Agree, 12(35.29%) teachers are Disagree, and 6(17.65%) teachers are Strongly Disagree.

Based on the research findings that a majority of teachers at CJSN Ngoma inclusive school disagree or strongly disagree that equal engagement in play for both students with and without hearing impairment facilitates the performance of students with hearing impairment, it can be inferred that the school may need to focus more on providing opportunities for inclusive play and socialization among all students.

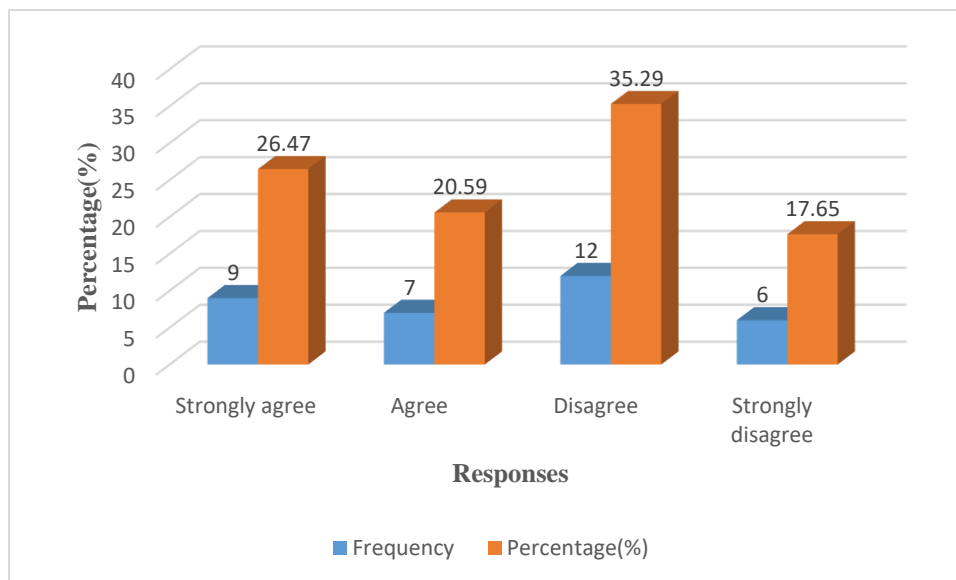


Figure 14: School and home settings, Students with hearing impairments do not engage in equal play with their hearing peers

Equal engagement in play and socialization is important for all students, regardless of hearing status. Encouraging inclusive play and socialization can help to promote understanding and empathy among all students and foster a sense of belonging and community within the school.

The fact that a majority of teachers at CJSN Ngoma inclusive school disagree or strongly disagree that equal engagement in play for both students with and without hearing impairment facilitates

the performance of students with hearing impairment suggests that there may be a need for more targeted efforts to promote inclusive play and socialization among all students.

However, it is important to note that some teachers expressed positive views towards the statement, suggesting that there may be some efforts already in place to promote inclusive play and socialization.

Overall, the finding that a majority of teachers at CJSM Ngoma inclusive school disagree or strongly disagree that equal engagement for both students with and without hearing impairment facilitates the performance of students with hearing impairment highlights the need for more targeted efforts to promote inclusive play and Socialization among all students. By providing opportunities for inclusive play and socialization, the school can create a more supportive and inclusive learning environment for all students.

4.2.6 Learning in an inclusive environment is enjoyable for students with hearing impairment

On learning in an environment which is conducive and enjoyable for learners with hearing impairment, their teachers provided the following responses; 10(29.41%) teachers are Strongly Agree, 18(52.94%) teachers are Agree, 1(2.94%) teacher is Disagree, 2(5.88%) teachers are strongly Disagree and 3(8.82%) are Neutral

The research findings indicate that the majority of teacher surveyed believe that the learning environment is conducive and enjoyable for students with hearing impairment. Specifically, 82.35% Of teachers either strongly agree, 29.42% or agree 52.94% with this statement.

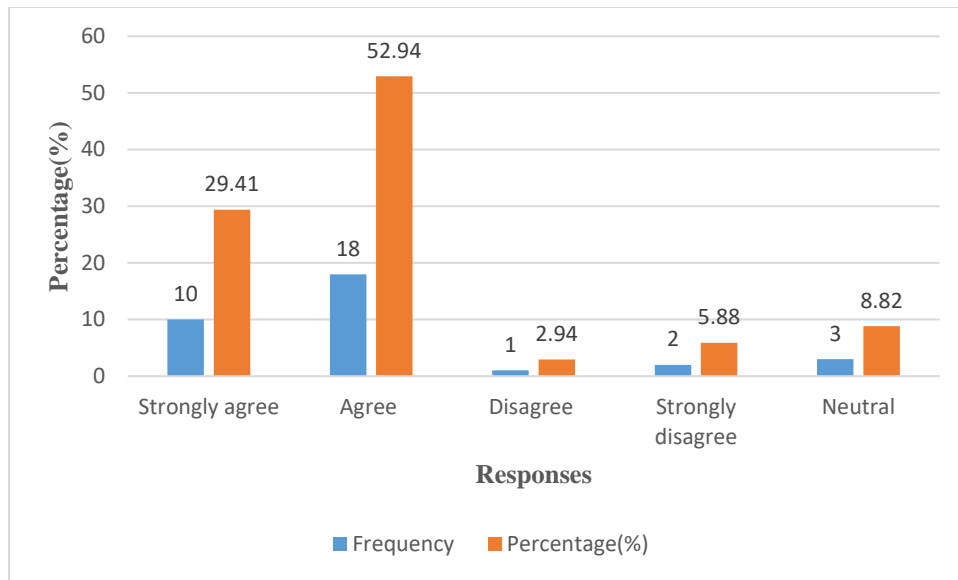


Figure 15: Learning in an inclusive environment is enjoyable for students with hearing impairment

However, a small proportion of teachers surveyed either disagree or strongly disagree that the learning environment is conducive and enjoyable for learners with hearing impairment, with 2.94% of teachers disagreeing and 5.88% strongly disagreeing. Additionally, 8.82% of teachers were neutral in their response.

Overall, these findings suggest that the majority of teachers believe that the learning environment is conducive and enjoyable for students with hearing impairment, but there is still room for improvement in ensuring that all teachers are supportive of these students and their needs. However, it is important to note that the survey only captures the perceptions of a small samples of the teachers and may not be representatives of all teacher’s perceptions. Other factors such as the type of school, the severity of student’s hearing impairment, and training and resources available to teachers may also influence the learning environment for students with hearing impairment.

4.2.7 The effect of seating arrangement on academic performance of students with hearing impairments

On sitting arrangement that affect the academic performance of students with hearing impairment, teachers of CJSM Ngoma inclusive school provided the following responses; 19(55.88%) teachers are Strongly Disagree, 9(26.47%) teachers are Agree, 1(2.94%) teacher is Disagree and 2(%) teachers are Strongly Disagree, 3(8.82%) are Neutral

Through exploring the perception of teachers at CJSM Ngoma inclusive school regarding the impact of seating arrangement on the academic performance of students with hearing impairment. Based on survey responses a majority of teachers (55.88%) strongly agreed with the statement that seating arrangement affect the academic performance of student with hearing impairment.

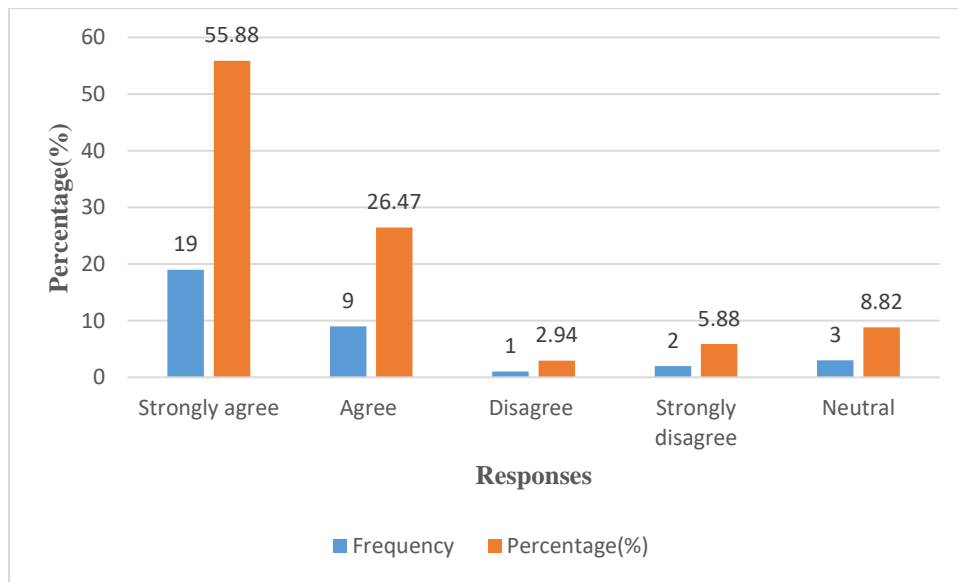


Figure 16: The effect of seating arrangement on academic performance of students with hearing impairments

However, a small proportion of teachers (26.47%) agreed with the statement indicating that they believed that the sitting arrangement could affect the academic performance of students with hearing impairment. One teacher (2.94%) disagreed with the statement and two teachers (5.88%) strongly disagreed with it. Additionally, three teachers (8.82%) were neutral in their responses, indicating that they neither agreed or disagreed with the statement.

Overall, these findings suggest that the majority of teachers at CJSM Ngoma inclusive school do not believe that sitting arrangement have an impact on the academic performance of students with hearing impairment. However, it is important to note that the study reflect the perception of a small sample of teachers at specific school and may not be generalizable to other schools or other teachers. Furthermore, other factors such as teaching techniques, classroom management and quality of instruction may also have an impact on the academic performance of students with hearing impairment.

4.2.8 The impact of visual aids on performance of Students with hearing impairment

On using visual aids that help students with hearing impairment to perform better in class, CJSM Ngoma inclusive school teachers provided the following responses; 21(61.76%) teachers are Strongly Agree, 11(32.35%) teachers are Agree and 2(5.88%) teachers are Neutral

The research suggests that the majority of teachers at CJSM Ngoma inclusive school believe that using visual aids can help students with hearing impairment perform better in class. Specifically, 61.76% of teachers strongly agreed and 32.35% of teachers agreed with this statement. Only two (5.88%) teachers were neutral in their response, indicating that they neither agreed nor disagreed with the statement.

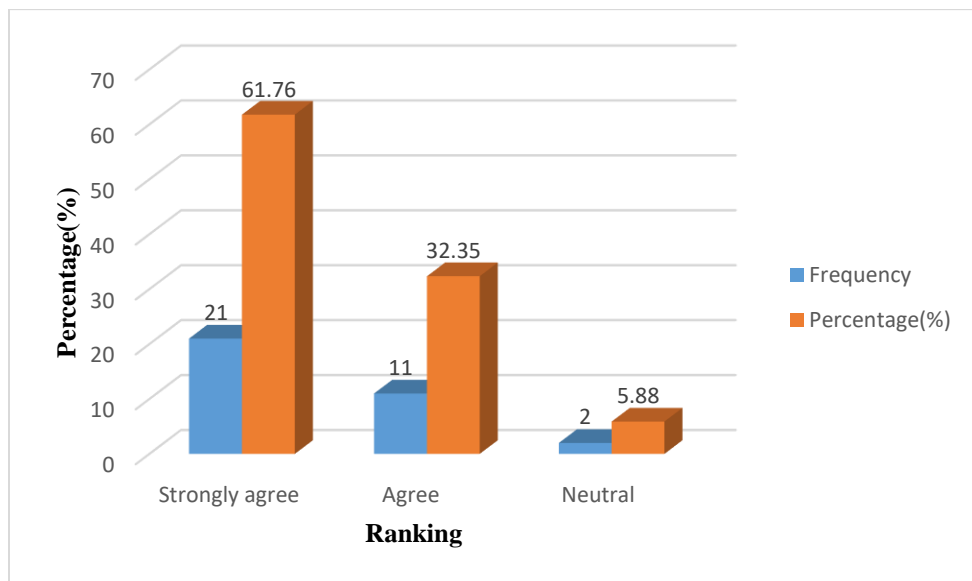


Figure 17: The impact of visual aids on performance of Students with hearing impairment

These findings suggest that the use of visual aids is seen as an effective strategy for supporting students with hearing impairment in the classroom by the majority of teachers at CJS Ngoma inclusive school. Visual aids may include things like videos, diagrams and images which can provide additional information and context to support students' learning.

It is important to note that the study only reflects the opinions of teachers at one school, and the effectiveness of visual aid may depend on various factors such as the severity of hearing impairment, type of visual aids used, and the teaching approach. Nonetheless, the findings suggest that using visual aids can be an effective strategy for supporting students with hearing impairment in the classroom and may be worthy of consideration by other schools and teachers.

4.2.9 A capable and reliable administrative system improves both the academic performance of students with hearing impairment and that of their hearing peers

On an administrative system that assists in the improvement of academic performance for both students with and without hearing impairment in class, CJS Ngoma inclusive school teachers provided the following responses; 19(55.88%) teachers strongly disagree, 13(38.24%) teachers agree, 1(2.94%) teacher disagrees and 1(2.94%) teacher is neutral.

The research findings indicate that the majority of teachers at CJS Ngoma inclusive school believe that the administrative system assists in the improvement of academic performance for both students with and without hearing impairment in class. Specifically, 55.88% of teachers strongly agreed with the statement, while only 13(38.24%) teachers agreed with it. One teacher (2.94%) disagreed with the statement, and one teacher (2.94%) was neutral in their response.

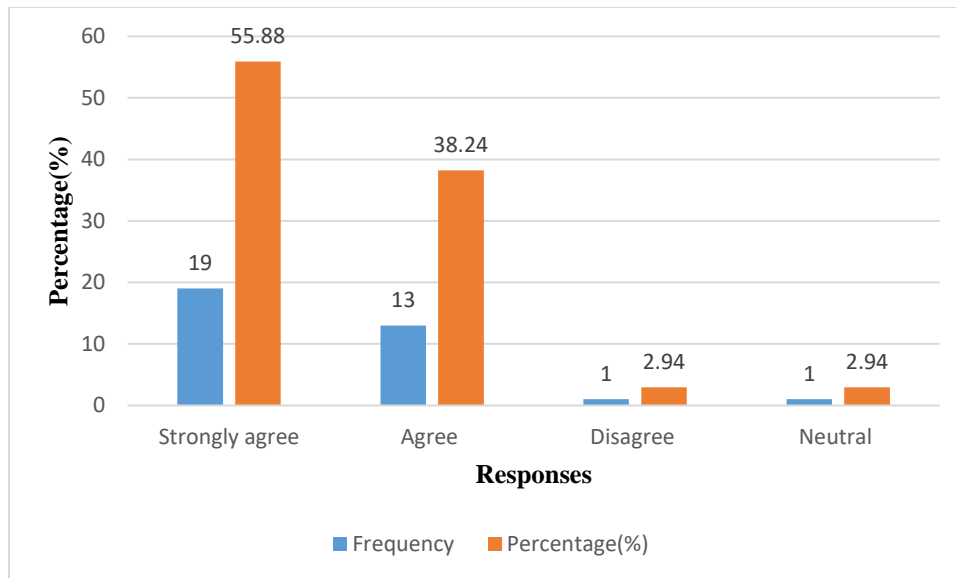


Figure 18: Administrative system improves both the academic performance of students with hearing impairment and their hearing peers

These findings suggest that the current administrative system at CJSM Ngoma inclusive school may be seen as effective in improving academic performance for both students with and without hearing impairment. It is possible that the system address the unique needs and challenges faced by students with hearing impairment, or that it may provide sufficient support and resources for all students in the classroom.

It is important to note that the study reflects the perceptions of small sample of teachers at one school and may not be generalizable to other schools or teachers. Nonetheless, the findings suggest that they may be room for improvement in the administrative system at CJSM Ngoma inclusive school to better support the academic performance of all students, including those with hearing impairment.

4.2.10 Giving students with hearing impairment access to the necessary tools and resources in the classroom boosts their academic performance.

On accessing to the necessary tools and resources in classroom and boost hearing impaired academic performance, CJSM Ngoma inclusive school teachers the following responses; 22(64.71%) teachers are Strongly Agree, 9(26.47%) teachers are Agree and 3(8.82%) teachers are Neutral.

The research findings suggest that the majority of teachers at CJSM Ngoma inclusive school believe that providing necessary tools and resources in the classroom can boost the academic performance of students with hearing impairment. Specifically, 64.71% of teachers strongly agreed with this statement. Only 3(8.82%) teachers were neutral in their response, indicating that they neither agreed nor disagreed with the statement.

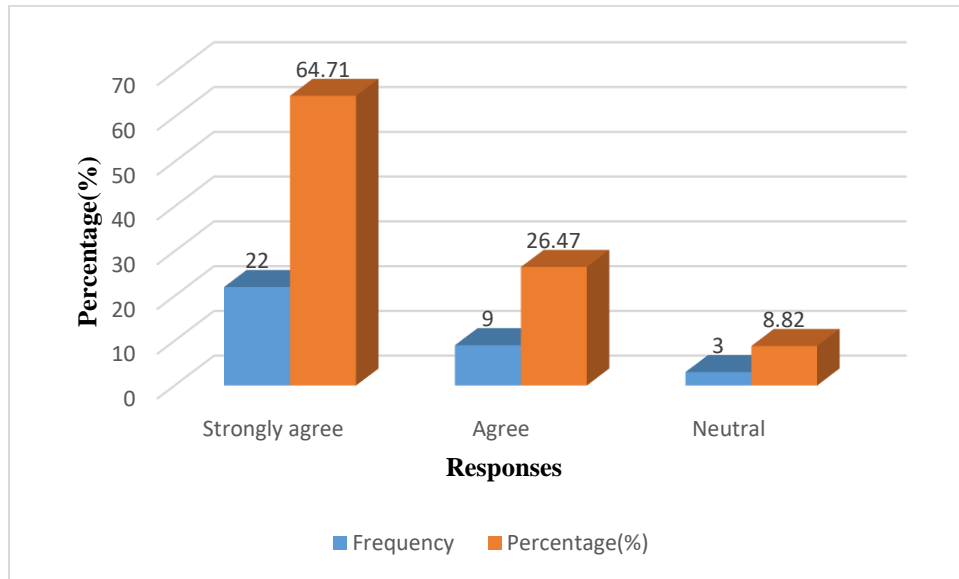


Figure 19: Giving students with hearing impairment access to the necessary tools and resources in the classroom boosts their academic performance.

These findings suggest that teachers at CJSM Ngoma inclusive school recognize the importance of providing necessary tools and resources to support the learning of students with hearing impairment. These tools and resources may include things like assistive listening devices, hearing aids, captioning and other classroom accommodations that can help students with hearing impairment access information and participate fully in classroom activities.

It is important to note that the study reflects the perceptions of a small sample of teachers at one school and may not be generalizable to other school or teachers. Moreover, providing necessary tools and resources can be an effective strategy for supporting the academic performance of students with hearing impairment in the classroom and may be worthy considering by other schools and teachers as well.

4.3 SECTION A: Demography of both learners with and without hearing impairment

4.3.1 Gender of learners with and without hearing Impairment at CJSM Ngoma Inclusive school

This study indicates that out of the total 457 students in the study, 63.89% were boys (292 students) and 36.11% were girls (165 students).

These findings suggest that there were more boys than girls in the study population. The difference between the number of boys and girls is considerable, with boys representing almost two-thirds of the total sample.

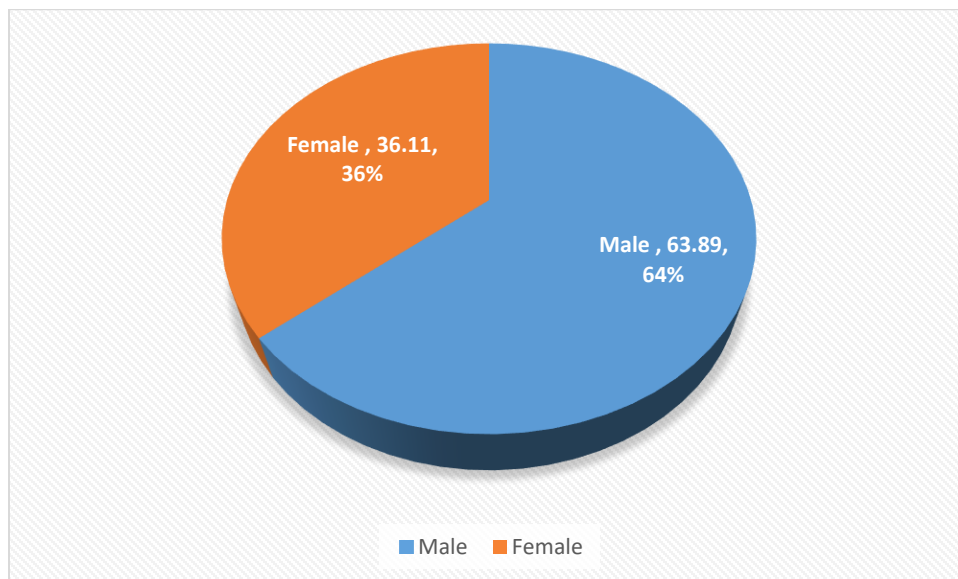


Figure 20: Gender of learners with and without hearing Impairment at CJSM Ngoma Inclusive school

It is important to note that the gender distribution in the study sample may reflect the characteristics of the population under investigation, and it may not be representative of the broader population.

4.3.2 Ages of students with and without hearing impairment at CJSM Ngoma Inclusive school

This thesis indicate that the study included a sample of school students across different age groups. Specifically, 30.33% of the learners were between age of 11-15(74 students), 59.84% were between age of 16-20(146 students), and 9.84% were 21and above (24 students).

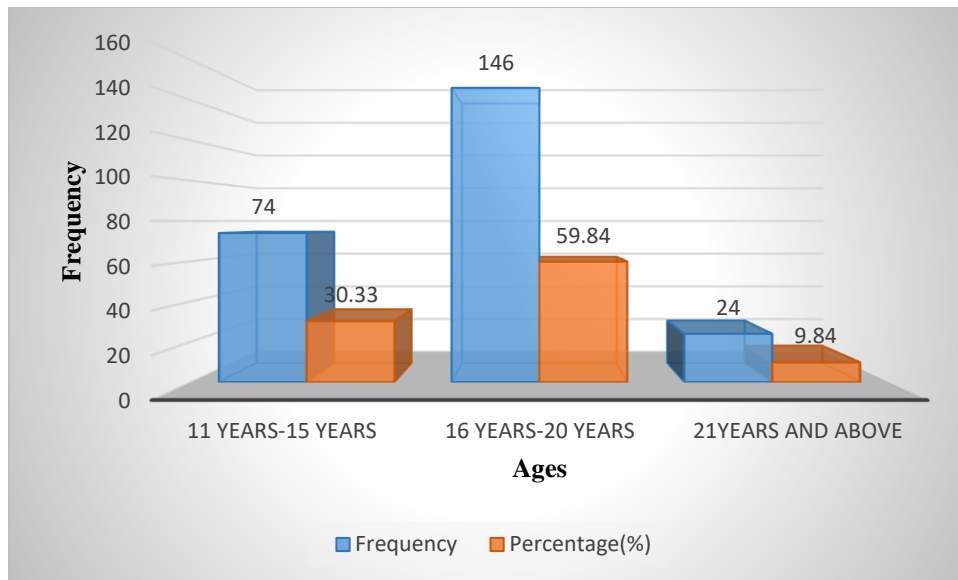


Figure 21: Ages of students with and without hearing impairment at CJSM Ngoma Inclusive school

These findings suggest that the majority of the learners in the study were in the age range of 16-20 years, with small proportion of learners in the younger ages range of 11-15 years and an even smaller proportion of learners who were 21 and above. It is important to note that the age distribution of the study sample may reflect the characteristics of the population under investigation and may not be representative of the broader population.

Moreover, the age of students may have important implications for the study's findings. For example, students in different age groups may have different learning needs, preferences, and challenges, which may influence their academic performance and experiences in the classroom.

4.3.3 Class or grade of students with and without hearing impairment at CJSM Ngoma Inclusive school

The research findings indicate the study included a sample of students from both primary and secondary levels. Where 36.89% of students (90 students) were in primary grades, while 63.11% of students (134 students) were in secondary grade.

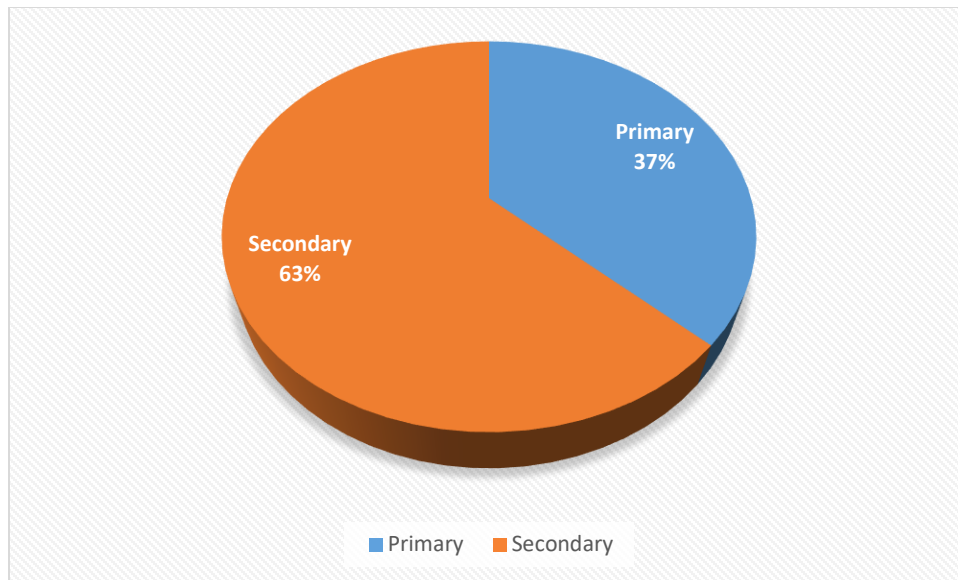


Figure 22: Grade of students with and without hearing impairment at CJSM Ngoma Inclusive school

These findings suggest that the majority of students in the study were in secondary grade with a smaller proportion of students in primary grade. The grade level of the students may have important implications for the study's findings, as students in different grades levels may have different academic abilities, experiences and needs. For example, primary school's students may be at different stage of academic development than secondary school students, and they may require different teaching and learning approaches to support their learning.

It is important to note that the grade distribution in the study sample may reflect the characteristic of the population under investigation and it may not be representative of the Broader population.

4.3.4 Hearing ability of both students with and without hearing impairment at CJSM Ngoma inclusive school

The research findings indicate that the study included a sample of students with and without hearing impairment. Specifically, 50% of students in the study (122 students) were hearing students and 50% of students (122 students) had hearing impairment.

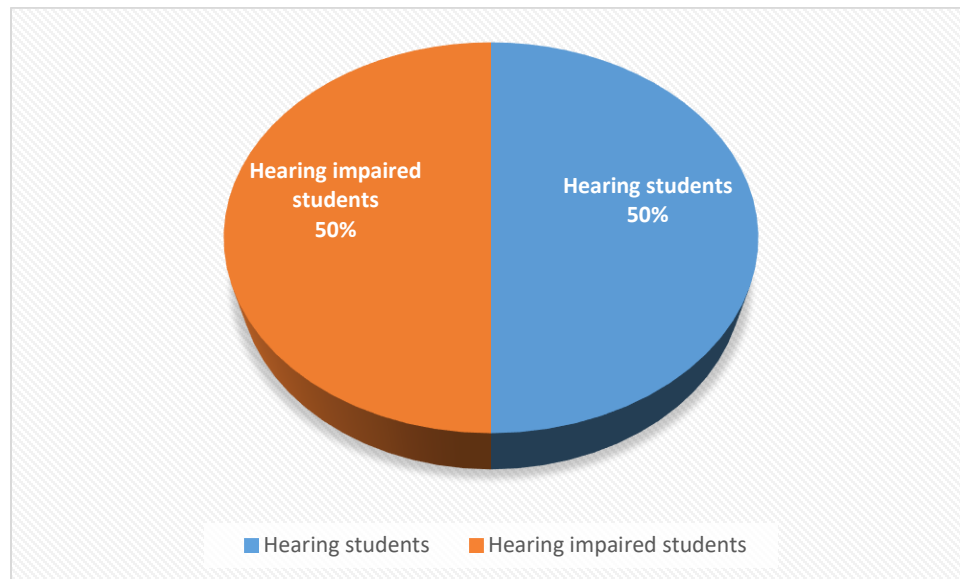


Figure 23: Hearing ability of both students with and without hearing impairment at CJSM Ngoma inclusive school

These findings suggest that the study included an equal number of students with and without hearing impairment, which may allow for comparisons between these groups in terms of academic performance, experiences, and needs. The equal distribution of students with and without hearing impairment in the sample may also suggest that the study aimed to investigate the academic experience and needs of both groups of students.

It is important to note that the distribution of hearing and hearing-impaired students in the study sample may reflect the characteristics of the population under investigation, and it may not be representative of the broader population.

4.4 SECTION B: Regarding the statements' impact on hearing impaired students' academic performance at CJSM Ngoma inclusive school

In this section, both students with and without hearing impairment read the description of the responses then according to their views ranked accordingly. Those ranks that they provided are Strongly Agree(SA), Agree (A), Disagree(D), Strongly Disagree(SD) and Neutral(N).

4.4.1 Influence of learning resources and instructional materials on the academic performance of students with hearing impairment

The School provides learning resources and instructional materials that help students with hearing impairment to perform better academically, both students with and without hearing impairment from CJSM Ngoma Inclusive school responded in the following ways; 132 (54.1%) students are Strongly Agree, 68(27.87%) students are Agree, 34(13.93%) student is Disagree, 5(2.05%) student is Strongly Disagree and 5(2.05%) student is Neutral

The research findings suggest that a majority of the students from CJSM Ngoma inclusive school believe that the provision of learning resources and the instructional materials can help students with hearing impairment perform better academically. Specifically, 53.1% of students strongly agreed and 27.87% agreed with this statement, indicating that they believe that these resources are effective in supporting the academic performance of students with hearing impairment.

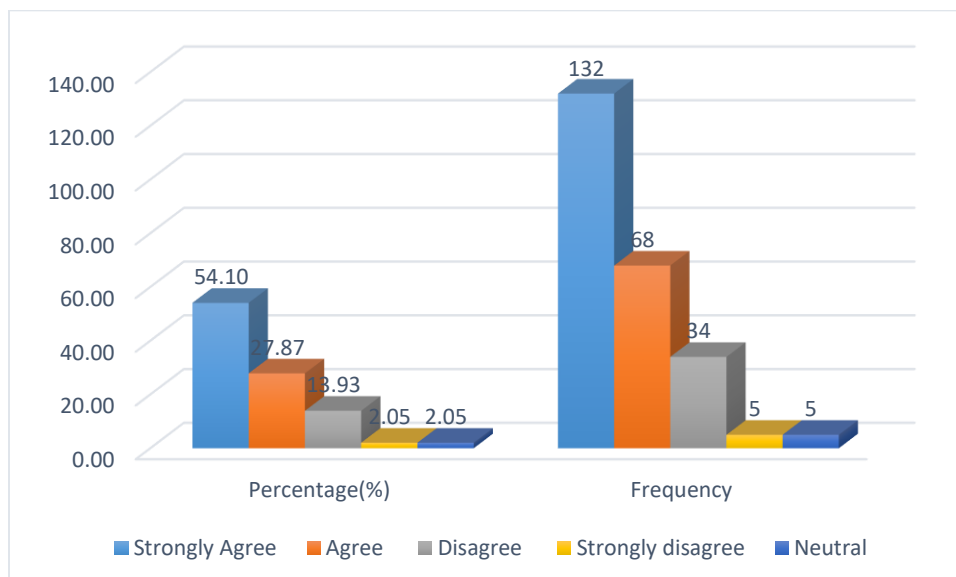


Figure 24: Influence of learning resources and instructional materials on the academic performance of students with hearing impairment

However, a significant number of students also disagreed with the statement, with 13.93% of students expressing disagreement and 2.05% of students strongly disagreeing with the statement. Additionally, 2.05% of the students were neutral in their response, indicating that they neither nor disagreed with the statement.

These findings suggest that while a majority of students believe that learning resources and instructional material are important in supporting the academic performance of students with hearing impairment, there is also a significant proportion of students who do not believe that these resources are effective. It is important to note that the reason for disagreement or neutrality among the students are unclear and may require further investigation.

Overall, the findings suggest that the provision of learning resources and instructional materials may be an important strategy for supporting the academic performance of students with hearing impairment, as perceived by a majority of students from CJSM Ngoma inclusive school. However, it is important to consider the opinions and experiences of both students with and without hearing impairment when evaluating effectiveness of these resources in promoting academic success.

4.4.2 Learning resources as a major factor in improving academic performance for students with hearing impairment

On resources that help students with hearing impairment to perform better academically, both students with and without hearing impairment from CJSM Ngoma Inclusive school responded in the following ways; 80(32.79%) Students are Strongly Agree, 140(57.38%) students are Agree while 8(3.28%) students are Disagree, 10 (4.10%) strongly Disagree and 6(2.46%) students are Neutral

This study suggests that majority of students from CJSM Ngoma inclusive school believe that resources that help students with hearing impairment can support their academic performance. Specifically, 32.79% of students strongly agreed and 57.38% agreed that such resources can help students with hearing impairment perform better academically.

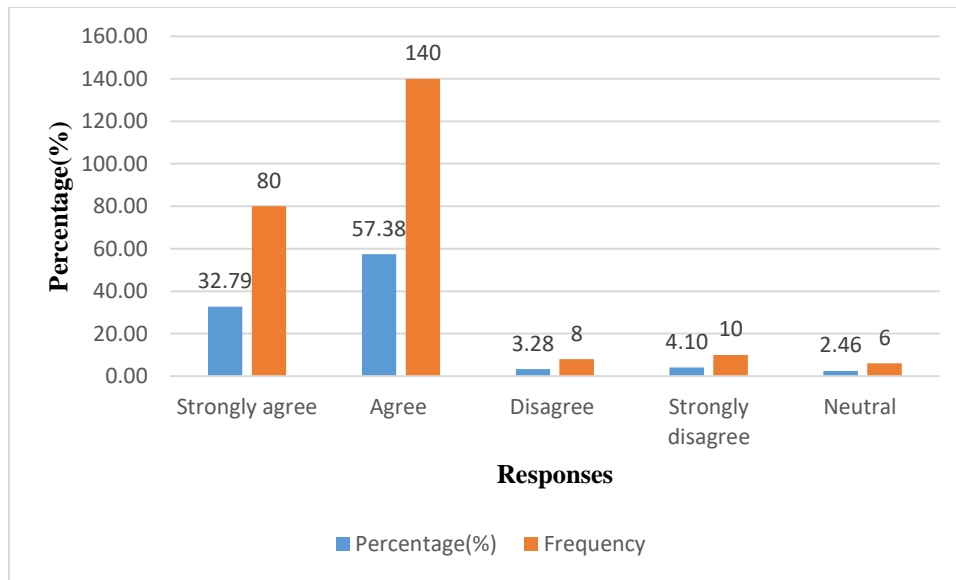


Figure 25: Learning resources as major factor in improving academic performance for students with hearing impairment

However, a significant number of students disagreed with the statement, with 3.28% expressing disagreement and 4.10% strongly disagreeing with the statement. 2.46% of students were neutral in their response, indicating that they neither agreed nor disagreed with the statement.

These findings suggest that while majority of students recognize the importance of resources in supporting the academic performance of students with hearing impairment, there is also a significant proportion of students who do not believe that these resources are effective. It is important to note that for disagreement or neutrality among students are unclear and may require further clarifications.

Overall, the findings suggest that provision of resources that support the academic performance with hearing impairment may be perceived as important by majority of the students from CJSM Ngoma inclusive school. However, it is important to consider the opinions and experiences of both students with and without hearing impairment when evaluating the effectiveness of these resources in promoting academic success.

4.4.3 Use of technology in improving academic performance for students with hearing loss.

On technologies that aid in improving the academic performance for students with hearing impairment, CJSM Ngoma inclusive school students provided the following responses;

125(51.23%) students are Strongly Agree, 93(38.11%) students are Agree, 13(5.33%) teacher is Strongly Disagree, 4(1.64%) students are Disagree and 9(3.69%) students are Neutral

The research finds suggest that the majority of students from CJSM Ngoma inclusive school believe that technologies improve the academic performance of students with hearing impairment. Specifically, 51.23% of students strongly agree and 38.11% agree that technologies can aid in improving academic performance.

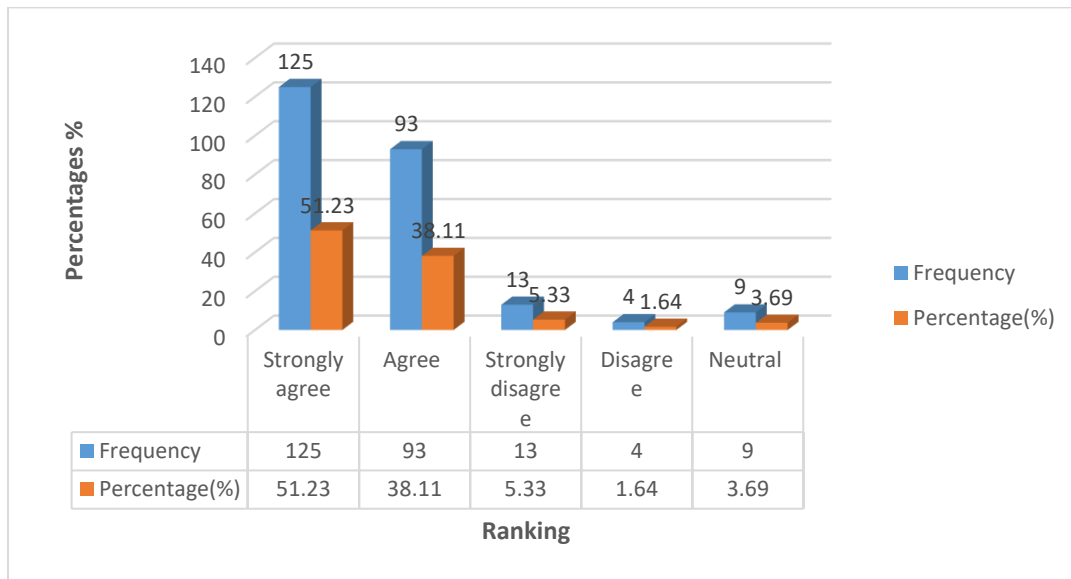


Figure 26: Use of technology in improving academic performance for students with hearing loss

A small proportion of students agreed with the statement, with 14.62% agreeing and 13.93% strongly agreeing that technologies can improve academic performance. Additionally, 3.69% of students were neutral in their response.

These findings suggest that the use of technology to support the academic performance of students with hearing impairment may not be widely accepted or perceived as effective by the students from CJSM Ngoma inclusive school. However, it is important to note that the reasons for the disagreement or neutrality among the students are unclear and may require further investigation.

Overall, the findings suggest that the use of technology to support the academic performance of students with hearing impairment may not be perceived as effective by a significant proportion of students from CJSM Ngoma inclusive school. However, it is important to consider the opinions

and experiences of both students with and without hearing impairment when evaluating the effectiveness of technology in promoting the academic success.

4.4.4 Use of captions on the performance of students with hearing impairments

The study suggests that the majority of students from CJSM Ngoma inclusive school believe that captions are effective in helping students with hearing impairment to perform better in the classroom. Specifically, 49.18% of students strongly agreed and 40.16% agreed that captions can aid in improving academic performance.

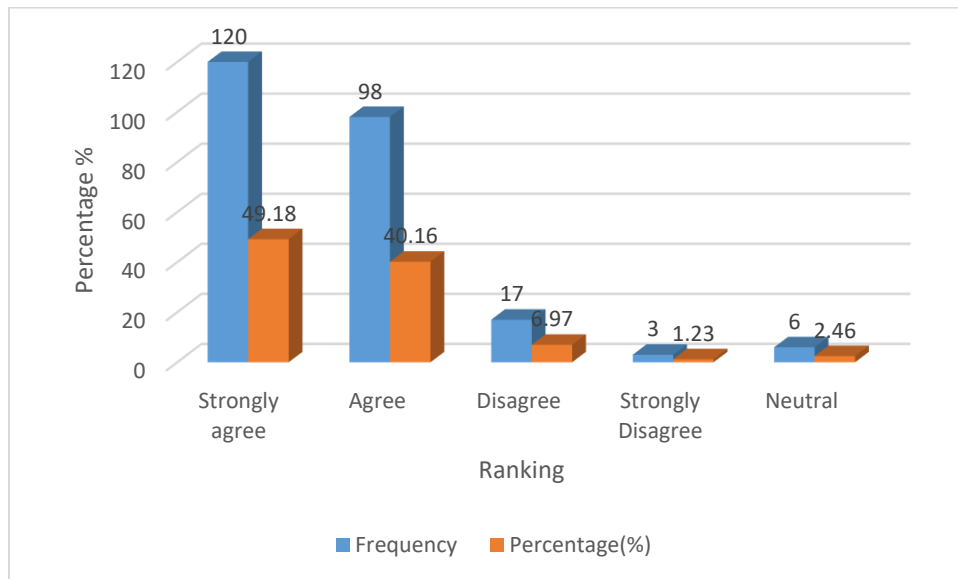


Figure 27: Use of captions on the performance of students with hearing impairments

A proportion of students strongly agreed with the statement with 49.18% and 40.16% agree that captions improve academic performance. Additionally, 2.46% of students were neutral in their response, indicating that they neither agreed nor disagreed with the statement.

These findings suggest that the use of captions to support the academic performance of students with hearing impairment may be widely accepted or perceived as effective by the students from CJM Ngoma inclusive school.

Overall, the findings suggest that the use of captions to support the academic performance of students with hearing impairment is perceived as effective by a significant proportion of the students from CJSM Ngoma inclusive school. However, it is important to consider the opinions

and experiences of both students with and without hearing impairment when evaluating the effectiveness of captions in promoting academic success.

4.4.5 At school and home, students with and without hearing impairment engage in equal play

On equal engagement in play for both students with and without hearing impairment that facilitate the performance of students with hearing impairment, both students with and without hearing impairment from CJSM Ngom inclusive school responded in the following ways; 15(6.15%) students are Strongly Agree, 21(8.61%) students are Agree, 122(50%) students are Disagree, and 78(31.97%) students are Strongly Disagree, 8(3.28%) student are Neutral

The study suggests that the majority of students from CJSM Ngoma inclusive school do not believe that equal engagement in play is effective in facilitating the academic performance of students with hearing impairment. Specifically, 31.97% of students strongly disagreed and 50% disagreed that equal engagement in play can aid in improving academic performance.

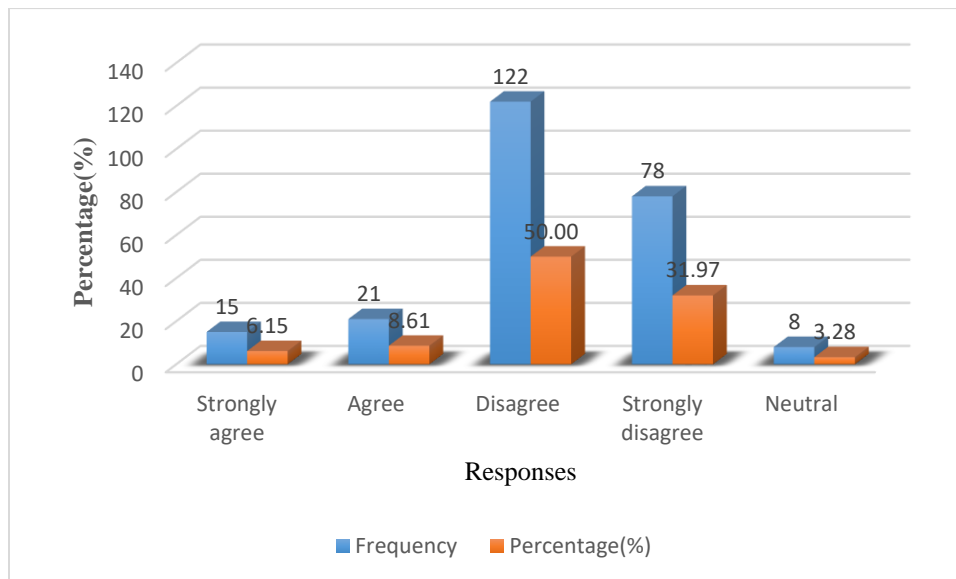


Figure 28: At school and home, students with and without hearing impairment do not engage in equal play

A small proportion of students agreed with the statement, with 8.61% agreeing and 6.15% strongly agreeing that equal engagement in play can improve academic performance. Additionally, 3.28% of students were neutral in their response, indicating that they neither agreed nor disagreed with the statement.

These findings suggest that the promotion of equal engagement in play as a strategy to support the academic performance of students with hearing impairment may not be widely accepted as effective by the students from CJSM Ngoma inclusive school. However, it is important to note that the reasons for the disagreement or neutrality among the students are unclear and may require further investigation.

Overall, the findings suggest that the promotion of equal engagement in play to support the academic performance of students with hearing impairment may not be perceived as effective by a significant proportion of the students from CJSM Ngoma inclusive school. However, it is important to consider the opinions and experiences of both students with and without hearing impairment when evaluating the effectiveness of equal engagement in play in promoting academic success.

4.4.6 Students with and without Hearing impairment benefit from learning together in an inclusive environment

Both students with and without hearing impairment benefit from learning together and facilitate their performance, both of them from CJSM Ngoma inclusive school ranked in the following ways; 106(43.44%) students are Strongly Agree, 98(40.16%) students are Agree, 19(7.79%) students are Disagree, and 15(6.15%) students are Strongly Disagree, 6(2.46%) student is Neutral

This study suggests that both students with and without hearing impairment from CJSM Ngoma inclusive school believe that learning together can benefit their academic performance. Specifically, 43.44% of students strongly agreed and 40.16% agreed that learning together can facilitate their performance.

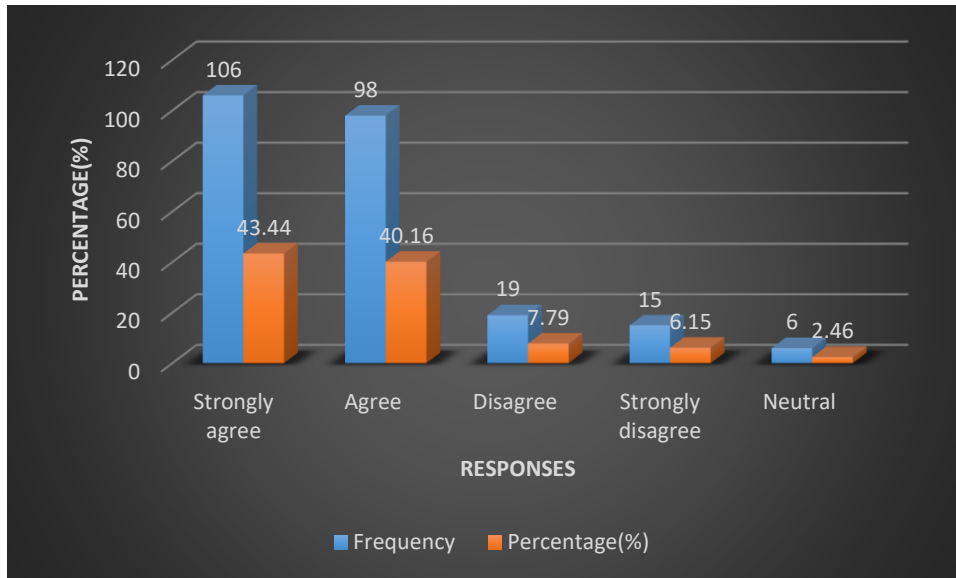


Figure 29: Students with and without Hearing impairment benefit from learning together in an inclusive environment

A small proportion of students disagreed with the statement, with 7.79% expressing disagreement and 6.15% strongly disagreeing with the statement. Additionally, 2.46% of students were neutral in their response, indicating that they neither agreed nor disagreed with the statement.

These findings suggest that the majority of students from CJSM Ngoma inclusive school recognize the benefits of learning together for both students with and without hearing impairment. This is an important finding, as it highlights the importance of inclusive education and the benefits of inclusive learning environment for all students.

Overall, the findings suggest that the promotion of inclusive learning environments to support the academic performance of students with hearing impairment may be effective and well perceived by the students from CJSM Ngoma inclusive school. However, it is important to consider the opinions and experiences of both students with and without hearing impairment when evaluating the effectiveness of inclusive learning environments in promoting academic success.

4.4.7 The academic performance of learners with hearing impairment is improved by seating arrangement

On sitting arrangement that affect the academic performance of students with hearing impairment, both students with and without hearing impairment at CJSM Ngoma inclusive school provided the following responses; 88(36.07%) students are Strongly Agree, 123(50.41%) students are Agree, 12(4.92%) students are Disagree, and 15(6.15%) students are Strongly Disagree, 6(2.46%) student is Neutral

The research findings suggest that both students with and without hearing impairment from CJSM Ngoma inclusive school believe that sitting arrangement can affect the academic performance of students with hearing impairment. specifically, 36.07% of students strongly agreed and 50.41% agreed that sitting arrangement can affect academic performance.

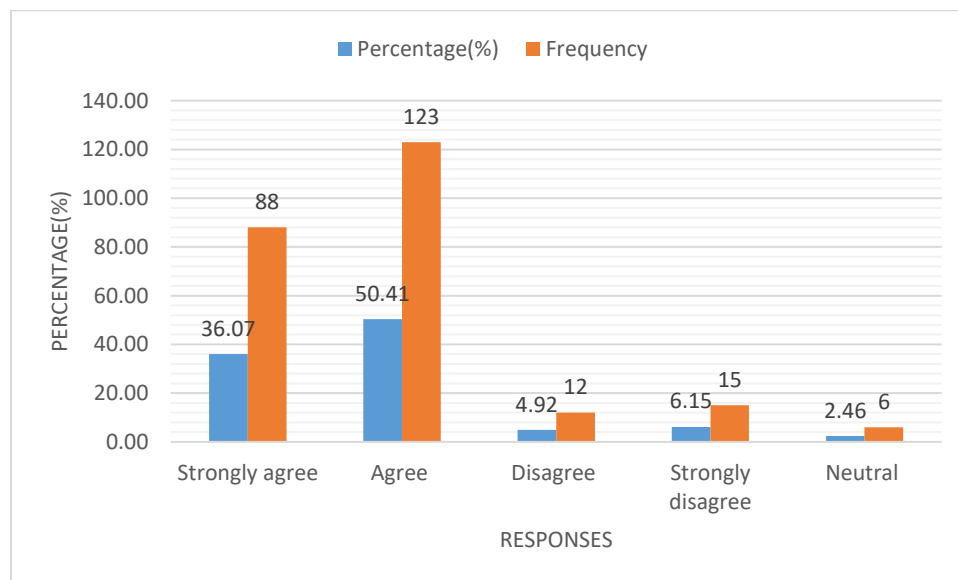


Figure 30: The academic performance of learners with hearing impairment is improved by seating arrangement

A small proportion of students disagreed with the statement, with 4.92% expressing disagreement and 6.15% strongly disagreeing with the statement. Additionally, 2.46% of students were neutral in their response, indicating that they neither agreed nor disagreed with the statement.

These findings suggest that the majority of students from CJSM Ngoma inclusive school recognize the importance of sitting arrangement in supporting the academic performance of students with

hearing impairment. This is an important finding, as it highlights the role that environmental factors can play in facilitating or hindering the academic performance of students with hearing impairment.

Overall, the findings suggest that the promotion of appropriate sitting arrangements to support the academic performance of students with hearing impairment may be effective and well-perceived by students from CJSM Ngoma inclusive school. However, it is important to consider the opinions and experiences of both students with and without hearing impairment when evaluating the effectiveness of sitting arrangements in promoting academic success.

4.4.8 Students with hearing impairment perform better academically when visual aids are available in classroom

On visual aids that are available in classroom and affect the academic performance of students with hearing impairment, both students with and without hearing impairment at CJSM Ngoma inclusive school ranked in the following ways; 120(49.18%) students are Strongly Agree, 91(37.30%) students are Agree, 9(3.69%) students are Disagree, and 17(6.97%) students are Strongly Disagree, 7(2.87%) student is Neutral

This study suggests that both students with and without hearing impairment from CJSM Ngoma inclusive school believe that the availability of visual aids in the classroom can positively impact the academic performance of students with hearing impairment. Specifically, 49.18% of students strongly agreed and 37.30% agreed that visual aids can affect academic performance.

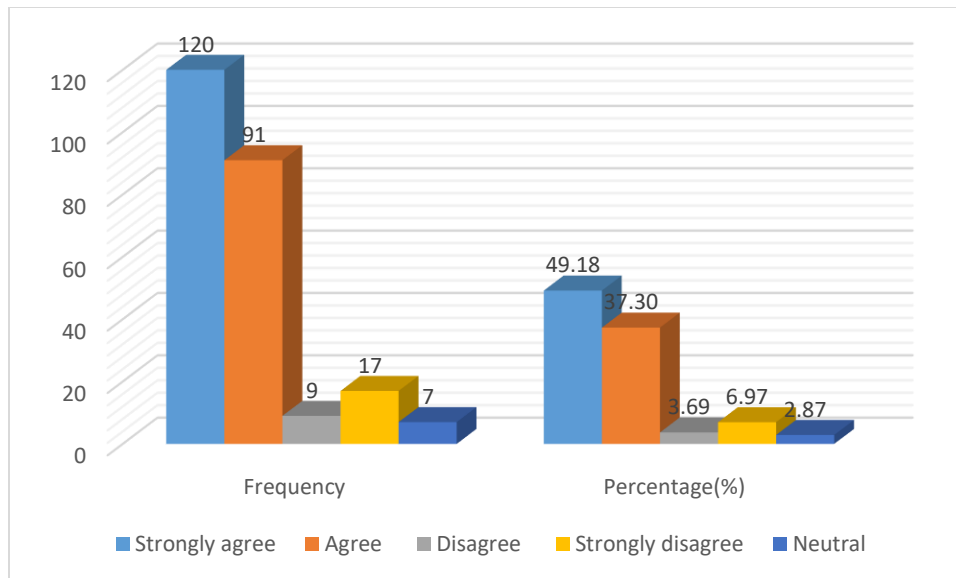


Figure 31: Students with hearing impairment perform better academically when visual aids are available in classroom

A smaller proportion of students disagreed with the statement, with 3.69% expressing disagreement and 6.97% strongly disagreeing with the statement. Additionally, 2.87% of students were neutral in their response, indicating that they neither agreed nor disagreed with the statement.

These findings suggest that the majority of students from CJSM Ngoma inclusive school recognize the importance of visual aids in supporting the academic performance of students with hearing impairment. This is an important finding, as it highlights the role that visual aids can play in facilitating the academic success of students with hearing impairment.

Overall, the findings suggest that the provision of appropriate visual aids to support the academic performance of a students with hearing impairment may be effective and perceived by the students from CJSM Ngoma inclusive school. However, it important to consider the opinions and experiences of both students with and without hearing impairment when evaluating the effectiveness of visual aids in promoting academic success.

4.4.9 Effective administration system lead to the performance of Students with hearing impairment

On effective and consistent administration system that affect the academic performance of students with hearing impairment, both students with and without hearing impairment at CJSM Ngoma

inclusive school ranked in the following ways; 86(35.25%) students are Strongly Agree, 133(54.51%) students are Agree, 13(5.33%) students are Disagree, and 7(2.87%) students are Strongly Disagree, 5(2.05%) student is Neutral

The research findings suggest that both students with and without hearing impairment from CSJM Ngoma inclusive school believe that an effective and consistent administration system can positively impact the academic performance of students with hearing impairment. Specifically, 35.25% of students strongly agreed and 54.51% agreed that an effective and consistent administration system can affect academic performance.

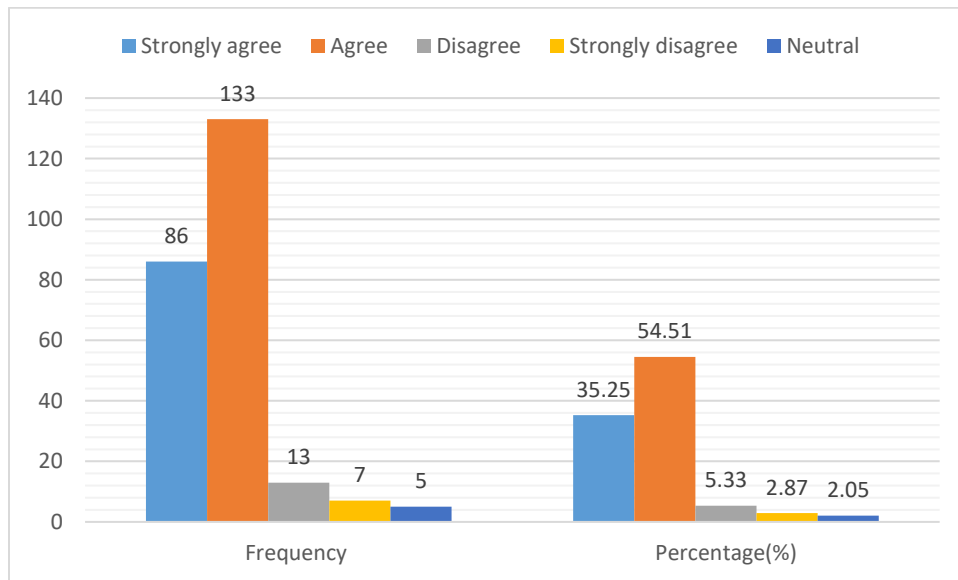


Figure 32: Effective administration system lead to the performance of Students with hearing impairment

These findings suggest that the majority of students from CJSM Ngoma inclusive school recognize the importance of an effective and consistent administration system in supporting the academic performance of students with hearing impairment. This is an important finding, as it highlights the role that administrative factors can play in facilitating the academic success of students with hearing impairment.

Overall, the findings suggest that the promotion of effective and consistent administrative systems to support the academic performance of students with hearing impairment may be effective and well perceived by the students from CJSM Ngoma inclusive school. However, it is important to

consider the opinions and experiences of both students with and without hearing impairment when evaluating the effectiveness of administrative systems in promoting academic success.

4.4.10 Tools and resources boost academic performance of learners with Hearing impairment

On the tools and resources that boost the academic performance of students with hearing impairment, both students with and without hearing impairment at CJSM Ngoma inclusive school ranked in the following ways; 133(54.51%) students are Strongly Agree, 75(30.74%) students are Agree, 13(5.33%) students are Disagree, and 18(7.38%) students are Strongly Disagree, 5(2.05%) student is Neutral.

The research findings suggest that both students with and without hearing impairment from CJSM Ngoma inclusive school believe that tools and resources can positively impact the academic performance of students with hearing impairment. Specifically, 54.51% of students strongly agreed and 30.74% agreed that tools and resources can affect academic performance.

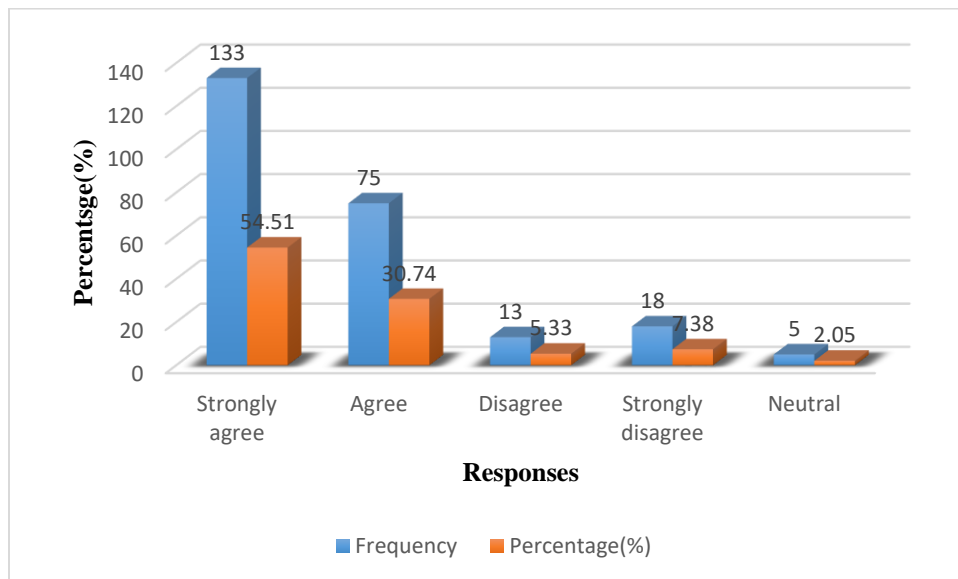


Figure 33: Tools and resources boost academic performance of learners with Hearing impairment

A smaller proportion of students disagreed with the statement, with 5.33% expressing disagreement and 7.38% strongly disagreeing with the statement. Additionally, 2.05% of students were neutral in their response, indicating that they neither agreed nor disagreed with the statement.

These findings suggest that the majority of students from CJSM Ngoma inclusive school recognize the importance of providing appropriate tools and resources to support the academic performance of students with hearing impairment. This is an important finding, as it highlights the role that instructional materials and resources can play in facilitating the academic success of students with hearing impairment.

Overall, the findings suggest that the provision of appropriate tools and resources to support the academic performance of students with hearing impairment may be effective and well-perceived by the students from CJSM Ngoma inclusive school. However, it is important to consider the opinions and experiences of both students with and without hearing impairment when evaluating the effectiveness of instructional materials and resources in promoting academic success.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 Introduction

The purpose of this final chapter was to present a brief and summary of the findings based on the presentations and establish conclusions as well as recommendations focused on the findings from chapter four.

5.1 Summary

My argument Finding out how different teaching strategies affected the academic achievement of students with hearing impairments at CJSM Ngoma Inclusive school in Huye District, Southern Province, Rwanda, was the main objective. All hearing-impaired students were the focus of this study. The research sample size consisted with 280 respondents in total. Teachers, students with hearing impairment, and their hearing peers were given questionnaires to complete. A schedule of interviews with the head teacher were used to obtain specific information in the office. Pseudonyms were used to identify the head teacher of that school in order to safeguard their reputation. Thematic analysis was used to analyze the qualitative responses from the interview schedule. Utilizing descriptive statistics like frequencies and percentages, the data were displayed.

5.2 Conclusion

Overall, it is important to note that the study only reflects the opinions of teachers at one school, and the effectiveness of visual aid may depend on various factors such as the severity of hearing impairment, type of visual aids used, and the teaching approach. Nonetheless, the findings suggest that using visual aids can be an effective strategy for supporting students with hearing impairment in the classroom and may be worthy considering by other schools and teachers. The finding that a majority of teachers at CJSM Ngoma inclusive school agree or strongly agree that technology can aid in improving the academic performance of students with hearing impairment is a positive indicator of the school's commitment to providing a supportive and inclusive learning environment for all students. However, it is important to continue to assess and address any challenges that the teachers may have with the use of technology, in order to ensure that technology based solutions are effectively implemented and meet the needs of all students. The findings suggest that the use of captions to support the academic performance of students with hearing impairment may not be perceived as effective by a significant proportion of the students from CJSM Ngoma inclusive school. However, it is important to consider the opinions and experiences of both students with and without hearing impairment when evaluating the effectiveness of captions in promoting

academic success. These findings also suggest that the majority of students from CJSM Ngoma inclusive school recognize the importance of sitting arrangement in supporting the academic performance of students with hearing impairment. This is an important finding, as it highlights the role that environmental factors can play in facilitating or hindering the academic performance of students with hearing impairment.

5.3 Recommendations

1. In service teachers should improve their professional qualification about instructional strategies used to help students with hearing impairment to perform academically.
2. School administration (Head teachers, Deputy head teachers in charge of studies) should organize the time for continuous professional development about instructional strategies for learners with Hearing impairment in schools.
3. Sector education officers should organize training on instructional strategies for students with hearing impairment at sector level. This will help the teachers to share different information about children with hearing impairment in their different schools
4. Rwanda Basic Education Board (REB) should be aware and train all teachers on those different instructional methods used to help learners with hearing impairment in all different schools of our country.
5. Ministry of Education should be aware of different strategies used to assist hearing-impaired students. In the planning it is a mandatory to make budget on technologies, captions and visual aids, this will help to raise the quality education for these students.

5.3 Recommendations for additional study

- a. More research is needed to determine how instructional materials and learning resources affect hearing-impaired students' academic performance in rural inclusive schools.
- b. Researches on the academic performance needed specifically on the impact of technologies as it is still a scarcity in education of students with hearing impairment in Rwandan inclusive schools.
- c. Research about captions on the academic performance of students with hearing impairment in Rwandan inclusive schools is needed

- d. Research is needed about the influence of school administration on the academic performance of students of students with hearing impairment in Rwanda. Case of rural schools

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THE APPENDICES

THE APPENDIX

AN OUTRAISING LETTER

I'm a master's student at the University of Rwanda College of Education in the School of Inclusive and Special Needs Education. At CJSM Ngoma Inclusive School in the Huye District, this questionnaire is intended to collect data on instructional methods' effects on hearing-impaired students' academic performance. The information you provide on this survey will be kept private and used only for this research project. Your sincere assistance in making that possible will be greatly valued. I want to say thank you.

The appendix

ASK THE HEAD TEACHER

1. What is your name, please?
2. What age range fall you into?
3. What is your highest educational level?
4. How long have you held the position of head teacher?
5. How long have you attended this institution?
6. What instructional techniques do you believe can be used to assess how well hearing-impaired students are understanding in an inclusive environment?
7. What is the best instructional approach that teachers should employ in order to improve the performance of students who have hearing impairments?
8. The way in which the instructional strategies are applied completely determines the learning process. Speculate on that.
9. The teachers' instructional strategy has a significant impact on how well hearing learners perform.
10. In order to help students perform better in school, the teachers have received adequate training in instructional strategies for students with hearing impairment. What do you make of that?
11. Specifically in CJSM Ngoma Inclusive School, what difficulties do teachers encounter when implementing instructional strategies for students with hearing impairment?

APPENDIX

ASK THE TEACHER'S QUESTIONS

1. Man's gender Female
 Ages: 25 to 30 31 to 35 36 to 40 41 to 45 46 and above
2. The highest academic degree attained
 Primary Higher Education University
3. The highest level of professional achievement
 Primary teacher certificate Education-related bachelor's degree Education master's degree
4. Have you improved upon your current level of professional training? Yes No
5. Describe your professional background at the entry level before advancing.
 a certificate of graduation degree in education
6. Have you ever trained on how to teach learners with Hearing Impairment? Yes No
7. Do you possess a teaching certification for special needs students? Yes No
- If not, describe the area in which you have expertise.....
- (Years) of Teaching Experience.....

Chapter B

8. Select the statement that best represents your opinion by checking the box next to it. Regarding how instructional methods affect hearing-impaired students' academic performance at CJSJ Ngoma, there are five possible answers to the statements. Each statement should only be chosen ONCE.

5 Definitely Agree 4 Agree 3 Disagreement, 2 Strongly disagree, and 1 are neutral.

letters	Descriptions of the responses	Ranking				
		DA	A	D	SD	N

a.	The school makes resources and teaching aids available to help students with hearing impairments perform better academically.					
b.	The instructional materials used greatly enhance the academic performance of hearing-impaired students.					
c.	Students with hearing impairments can benefit from technologies that help them perform better academically.					
d.	Hearing-impaired students perform better when captions are used.					
e.	In both school and home settings, students with hearing impairments engage in equal play with their hearing peers.					
f.	Learning in an inclusive environment is enjoyable for students with hearing impairment.					
g.	The way students with hearing impairments sit in class has an impact on their academic performance.					
h.	Students with hearing impairment perform better in class when using visual aids.					
i.	A capable and reliable administrative system improves both the academic performance of students with HI and that of their hearing peers.					
j.	Giving students with HI access to the necessary tools and resources in the classroom boosts their academic performance.					

In Appendix IV

QUESTIONNAIRES FOR LEARNERS WITH AND WITHOUT HI

1. Gender: Male Female
2. Ages: 5 -10 11 – 15 16 and up
3. Your level: Primary Secondary
4. Do you have hearing difficulties? Yes No
- a. If Yes, are you Deaf Hard of Hearing

4. Please check the box next to the statement that best expresses your response to the ones listed below. Regarding the statements' impact on hearing-impaired students' academic performance, there are five possible answers. Each statement should only be chosen ONCE.

5 Definitely Agree 4 Agree 3 strongly disagree 2 strongly disagree 1 Neutral

Letters	Descriptions of the responses	Ranking				
		SA	A	D	SD	N
a.	The school provides learning resources and instructional materials so that students with hearing impairments can improve their academic performance.					
b.	Learning resources are a major factor in improving academic performance for students with hearing impairment.					
c.	Both you and students who have hearing loss use technology to improve their academic performance.					
d.	Students with hearing impairments perform better when captions are used.					
e.	In both school and home settings, students with hearing impairments engage in equal play with their hearing peers.					
f.	You both benefit from learning together in an inclusive environment as learners with and without hearing impairment.					
g.	Your academic performance is improved by the way that your class is seated.					
h.	Students with hearing impairments perform better academically when visual aids are available and used in class.					

i.	Students with hearing impairment perform better academically when there is an effective and consistent administration system in place.					
j.	You are given the tools and resources you need to boost your academic performance.					

V. APPENDIX

AGENDA FOR LEARNERS' OBSERVATIONS

Instruction

It ought to happen outside of classrooms, in the middle of a lesson, when the students are getting instructions, or when they are apart from the teacher.

1. The conduct of hearing-impaired and hearing-healthy students inside and outside of the classroom.
2. Instructional techniques that are applied in and outside of the classroom.
3. Teachers implement instructional strategies to improve hearing-impaired students' performance in an inclusive classroom.
4. The attitude of teachers toward including students with hearing impairment
5. How students behave toward one another.
6. Facilities/equipment/materials:
7. Learner-centered or teacher-centered approaches to teaching and learning

APPENDIX VI

PERMISSION TO COLLECT THE DATA



COLLEGE OF EDUCATION

TO WHOM IT MAY CONCERN

Student Name: *NYORUMURI Jean Samwani*
Registration number: *221028326*

The School of Inclusive and Special Needs Education offers a master's degree in special Needs Education. As part of the academic requirements students must write their dissertation on a topic of their choice after conducting a research study.

We seek your cooperation in facilitating the student to conduct research on the topic:
The Impact of Instructional Strategies on the Academic Performance of students with Hearing Impairment at C.J.S.M. Kigoma Inclusive school, Kuye district, Southern province, Rwanda.

For further information please contact the Postgraduate Coordinator
Dr Gonzague Habinshuti; Phone: 0788809234; Email: habinshutihgo@gmail.com

Thank you for your cooperation.



Ass.Prof. Evariste Karangwa
Dean, School of Inclusive and Special Needs Education
Email: karangwa28@vmail.com
Phone: 0785489767

EMAIL: principal.ce@ur.ac.rw
www.ur.ac.rw

P.O. Box:55 Rwamagana, Rwanda WEBSITE:

APPENDIX VII

APPROVAL TO COLLECT THE DATA BY HEAD TEACHER OF CJSM NGOMA INCLUSIVE SCHOOL



COLLEGE OF EDUCATION

TO WHOM IT MAY CONCERN

Student Name: *NYIRUMUKI Jean Saverus*
Registration number: *221028316*

The School of Inclusive and Special Needs Education offers a master's degree in special Needs Education. As part of the academic requirements students must write their dissertation on a topic of their choice after conducting a research study.

We seek your cooperation in facilitating the student to conduct research on the topic:
The Impact of Instructional Strategies on the Academic Performance of Students with Hearing Impairment at CJSM Ngoma
by collecting data in your Institution/ Organization. *Inclusive school, Huye district, Southern province, Rwanda.*

For further information please contact the Postgraduate Coordinator
Dr Gonzague Habinshuti; Phone: 0788809234; Email: habinshutihgo@gmail.com

Thank you for your cooperation.

Ass.Prof. Evariste Karangwa
Dean, School of Inclusive and Special Needs Education
Email: karangwa28@vmail.com
Phone: 0785489767

Bro. Jean Claude MUKYANEZA
CJSM Director



EMAIL: principal.ce@ur.ac.rw
www.ur.ac.rw

P.O. Box:55 Rwamagana, Rwanda WEBSITE: