

**Assessing the Impact of COVID-19 on the Management of Students with Hearing
Impairment: A Case of Selected Secondary Schools in the Northern Education
Division**

By

EMMANUEL KABUYE

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DECLARATION

I, **Emmanuel Kabuye**, solemnly declare that, to the best of my knowledge and belief, this thesis entitled ‘**Assessing the Impact of COVID-19 on the school support for Students with Hearing Impairment.**’ (A Case of Selected Secondary School Managers in the Northern Education Division) is entirely my own and has been carried out at Mzuzu University under the supervision of Associate Professor S.M. Gwayi.

It has not been nor is it being concurrently submitted for any other institution of higher learning for the award of any degree or qualification, other than the degree of Master of Education (Educational Leadership and Management) of Mzuzu University. All reference materials contained in here have been duly acknowledged.

Signed

(Student)

Date.....

Signed

Supervisor

Date.....

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I owe my gratitude to the Ministry of Education for allowing me to upgrade to Masters level. I also appreciate their love and care on my education and my relatives for their support and care for my education. God bless you.

DEDICATION

To:

Mr and Mrs Kabuye (My Parents), all my relations and Ministry of Education.

ABSTRACT

COVID-19 pandemic had negatively affected the education system in many countries and it was worse to students with disabilities which includes those students with hearing impairment. The purpose of this study was to assess the impact of COVID-19 on the school support for students with hearing impairment (A case of selected secondary schools in the Northern Education Division). The study was guided by the following specific objectives: (i) explored the impact of COVID-19 on the management of students with hearing impairment; (ii) examined how school managements are implementing inclusive education with emphasis on students with hearing impairments in the COVID-19 situation; (iii) explored interventions that could be made to better support implementation of inclusive education during Pandemics especially for students with hearing impairment. The study was informed by the interpretivist paradigm as it posits that social reality is subjective and it advocates for multiple reality and viewpoints from the lived experiences of participants. The study was conducted in Mzimba District in the Northern Education Division (NED). Data was collected from three secondary schools on the basis that they all practice inclusive education. Twenty-six participants were purposively selected and they included the NED Education Division Managers, School Managers, Teachers, Parents and Students. These participants were selected on the basis that they know how students including those with hearing impairment were impacted by COVID-19.

. Data was analysed thematically, and findings revealed that management of students with hearing impairment was negatively affected by COVID-19 due to several factors such as an abrupt holiday that came into play, the introduction of online lessons left students with hearing impairment behind, and measures that were developed to reduce the spread of the disease also negatively affected the

schooling of these students. The study recommends that the curriculum be reviewed to make it robust enough to always remain truly inclusive and withstand pandemics such as COVID-19. Proper policies have to be put in place for the education system to better respond to pandemics and ensure continuity of education provision including developing teaching and learning resources that support inclusive education. Lastly, teachers have to be oriented on how best to ensure continuity of inclusive education even during pandemics.

GLOSSARY OF ACRONYMS/ABBREVIATIONS

ABC	:	African Bible College
COVID-19	:	Corona -Virus Disease 2019
CRPD	:	Convention on the Rights of Persons with Disabilities
EDM	:	Education Division Manager
HI	:	Hearing Impairment
ILO	:	International Labour Organization
ISCED	:	International Standard Classification of Education
MZUNIREC	:	Mzuzu University Research and Ethics Committee
NED	:	Northern Education Division
PTA	:	Parent Teacher Association
PPEs	:	Personal Protective Equipment
SOS	:	Societas Socialis (Socially Responsible Society)
UN	:	United Nations
UNESCO	:	United Nations Educational, Scientific and Cultural Organisation
UNCEDAW	:	United Nations Convention on the Elimination of all Forms of Discrimination against Women
UNCRC	:	United Nations Convention on the Right of the Child
UNICEF	:	United Nations Children’s Fund
WHO	:	World Health Organization
ZPD	:	Zone of Proximal Development

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CHAPTER 1: INTRODUCTION

1.0 Introduction

1.1 Background Information

The World Health Organization (WHO) declared the Corona Virus (COVID-19) outbreak a Public Health Emergency of International Concern on 30th January 2020 (WHO, 2020). In addition, on 11th March 2020, the WHO upgraded the COVID-19 outbreak to a global pandemic. School closures were still affecting approximately 139,000,000 learners enrolled in pre-primary, primary, lower-secondary and upper-secondary levels of education (International Standard Classification of Education (ISCED) levels 0 to 3), as well as at tertiary education levels (ISCED levels 5 to 8) at the end of 2020 (UNESCO, 2020).

The COVID-19 crisis highlights a pre-existing crisis in education. It has made inequalities even more visible (UNESCO, 2021), and it has become a reason for systemic change in education worldwide (Ainscow, 2020; Ainscow & Haile Giorgis, 2020). Prior to the COVID-19 crisis, Ainscow and Haile-Giorgis explained the meaning and importance of systemic change in education to promote more inclusive approaches in times of crisis like COVID-19. WHO and UNESCO among others, emphasized the need for a deliberate change in the way education is managed during such times because students are mostly affected whenever pandemics strike. Various forms of interventions have always been put in place in order to ascertain that learning does not get significantly disrupted. These interventions are methodological, managerial and organizational in nature and are instituted in order to remove potential barriers to learning for all children, thus linking together the pursuit of access and equity. Change involves a continuous

process of school improvement aimed at using available resources, particularly human resources such as management of inclusive education in order to support the participation and learning of all students within a local community. In this way, special needs come to be regarded as the stimulus that can spur developments towards a much richer overall educational environment.

To achieve educational change, ‘a debate on purpose and outcomes involving all stakeholders, including students and families’, is also required (European Agency, 2013). During the COVID19 pandemic, educational change focused on emergency responses to the crisis, through various modes of emergency remote schooling (Vuorikari, et al., 2020) or other preparedness measures inspired by the field of Education in Emergencies (INEE, 2020). Then, calls were made for more permanent action, involving the development of prevention-based policy approaches. It is important to ensure that all learners, with or without disabilities, are included in mainstream education in line with Article 24 and General Comment No4 of the UN Convention on the Rights of Persons with Disabilities (INEE, 2020).

Globally, education has been particularly hit hard by the COVID-19 pandemic with 1.53 billion learners out of school and 184 country-wide school closures, impacting 87.6% of the world’s total enrolled learners. Drop-out rates across the globe are rising, as a result of this massive disruption to education access (Pokhrel & Chhetri, 2021), and this has caused so many problems in the management of inclusive education, especially students with hearing impairment as many of them have no access to gadgets that they can use to continue learning during COVID-19 era. While other critical needs such as health, water and sanitation are being responded to, educational needs ought not to be forgotten and these have an equally detrimental impact if left unaddressed. The

‘pile-on effect’ of the virus is that during the global COVID-19 pandemic, interruptions to education have had long term implications — especially for the most vulnerable groups like students with hearing impairment. There is a real risk of regression for children whose basic foundational learning namely; reading, mathematics and languages was not strong (WHO, 2020). In addition, during COVID-19 millions of children who had already been deprived of their right to education, particularly girls, were potentially exposed to health and well-being risks. Again, some of the school going children that had been affected heavily due to COVID-19 include girls, refugees and students with hearing impairment. However, there is need to explore ways to ensure continuity of education provisions for all, including students with special needs.

Malawi wasted a lot of time without providing access to education during the initial stages of COVID-19 pandemic. Even though the Ministry of Education managed to put in place online learning as one of the interventions, not all student had access to these lessons since COVID-19 shocks were still being experienced, including loss of life and livelihoods – and school going children were more vulnerable and unprotected (Chiwaula, et al 2021). As household finances were being strained and needs increased, out-of-school children were more likely to be exposed to risks like family violence, child labour, forced marriage, trafficking and exploitation and these are what International Labour Organisation has been always fighting against (ILO, 2018). However, for the most vulnerable children, education is lifesaving. Not only does it provide safety and protection, but more importantly, it also instills hope for a brighter future like to children with hearing impairment.

So continuing education through alternative learning pathways, as soon as possible, must also be a top priority even right now, to ensure the interruption to education is as minimal as possible to students with hearing impairment. There was urgent need to support school managers, teachers, parents, caregivers, innovators, communication experts and all the stakeholders to provide education, through such media as radio programmes, online learning and other innovative approaches. In the short term, school managers were supposed to make sure that access to learning and students retaining knowledge and skills through temporary remote, alternative or distance learning programmes was done (Parker, et al 2022). In the medium term, this means catching up and transitioning students who have fallen behind or had a break in their education to re-join their level of schooling and competency, that is, automatic promotion with a mandatory catch-up or remedial period at the beginning. In the longer term, this means there is a need for education systems to be set up with contingency capacities to mitigate and manage similar risks in the future (UNESCO, 2020).

Since 2nd April 2020 when the first cases were confirmed in Malawi, eighteen cases of COVID19 and two deaths were registered as of 21st April 2020, (MoEST, 2020). Lilongwe in the Central Region had registered the highest number (22 cases and two deaths) followed by Blantyre (8 cases and one death) while Nkhotakota, Chikwawa and Zomba had registered one case each. Malawi was declared a State of Disaster on 14 April 2020 and the government subsequently declared a 21day lockdown period effective 18th April 2020 in a drive to control the spread of COVID-19 in the country. The Government of Malawi declared COVID-19 a national disaster and a state of health emergency on 20th March 2020 and ordered an immediate and indefinite closure of all schools and educational institutions in the country three days later. This has had an immediate impact on

learners with the loss of learning as schools closed two weeks earlier than it was scheduled for 3rd April. This had immediate implications particularly for rural public schools, including schools in refugee camps. The closure had greater impact on marginalized children including those with disabilities, struggling learners, especially girls from hard-to-reach and poorest communities, refugees, asylum seekers and their host communities who already face challenges in accessing learning opportunities. COVID-19 has negatively affected the implementation of Inclusive Education policy in Malawi as it has rendered the management of its implementation to be a daunting task, mainly to students with hearing impairment. The Malawi Government, through the Ministry of Education tried to source funds from various organizations to help fight the pandemic through proposal writing as referred to Table 1. However, this was on general education, not specifically for the support of students with hearing impairments.

Table 1: COVID - 19 Accelerated Funding Request Form

Country:	Malawi
Grant agent(s):	UNICEF
Coordinating agency(ies):	UNICEF
Programme name:	Malawi Covid-19 Education Sector Response
COVID-19 Accelerated Funding amount requested:	USD 10,000,000
Agency fees amount (additional to COVID-19 Accelerated Funding amount requested):1	700,000
Agency fees as % of total COVID-19 Accelerated Funding requested:	7%
COVID-19 Accelerated Funding application date:	4/30/2020
Estimated COVID-19 Accelerated Funding programme start date:	6/1/2020
Estimated COVID-19 Accelerated Funding programme closing date (must be last day of the month, e.g. June 30, 2021):	11/30/2021
Expected submission date of completion report (At the latest 6 months after programme closing date):	6/1/2022

The table is a request Form of Funds by Malawi government from Global Partnership for Education (Accelerated Funding for Malawi, 2020).

Inclusive education, as originally defined by the Salamanca Statement (UNESCO, 1994), refers to education in which all children, including children with severe disabilities, have access to regular classrooms with adequate support. Inclusive education is seen as a multidimensional concept encompassing the celebration and appreciation of differences and diversity, taking into account human rights, issues of social justice, and a social model of disability and a socio-political education model (Hornby, 2014). Inclusive education is an approach and not a programme, but a dynamic process that supports and welcomes diversity amongst all learners. It is a concept of effective schools where every child has a place to study, and teachers become facilitators of learning rather than providers of information. Inclusion should be the broad goal worldwide and the ways to work towards achieving inclusion are many. For those countries that have ratified the Convention on the Rights of Persons with Disabilities, compliance with Article 24 on education is mandatory so that inclusive education is ensured.

Inclusive education means teaching within the ordinary educational system, all children, young people and adults with special educational needs (Inclusive Education Implementation Library, 2012; Imaniah & Fitria, 2018). When the right to education is being discussed, reference is made to the right to the best education according to Salamanca Statement (UNESCO 1994). Inclusive education therefore means best education provided to all students including those with disabilities such as students with hearing impairment in light of the COVID-19 pandemic. The school is the first experience of social living for a person outside the family circle and for this reason, it is of the utmost importance that all students with disabilities are integrated in the same places with all other members of the human family, who share space and experiences. Inclusive education means stepping from the medical model to the social model so that every student is accommodated in

their nearest school due to managers making sure schools have a conducive environment for everyone.

In the medical model, the problem lies in the child who has to cure himself or herself and adapt himself or herself to be able to go to an ordinary school, and this requires numerous specialists and special centers. In the social model, the problem lies in the environment and community services have to cater for all people, including people with disabilities (People with Disability Australia, 2023). The starting point is that all people are different, although some differences are more obvious than others. In the field of education, this concept implies that ordinary teachers and ordinary schools must be ready to offer training opportunities to heterogeneous people, including learner with disabilities. Therefore, inclusive education does not refer to the way to educate students with disabilities, but rather the way to educate everyone and all school managers should embrace the concept of inclusivity. This implies that classroom teachers should be equipped with the necessary skills and knowledge to enable them offer the right support to learners with disabilities. This calls for strengthening the pre-service general teacher preparation programme by including adequate component of disability awareness in the general curriculum. On their part school managers put in place deliberate efforts to promote Continuous Professional Development (CPD) trainings on how to manage and offer support to students with hearing impairment.

The concept of effective schools will flourish only when the general educators understand the individual learning requirements of students with disabilities. There are three major principles of inclusive education. Firstly, concept of inclusive education recognizes the fact that every child in the class is special in a certain way or another. The children are not categorized on the basis of

achievement or cognitive abilities or even sensory defects. On the contrary, they are treated as individual children having specific strengths and limitations. This approach makes the teacher to see the child as an individual, which is very vital for the overall development of the child. The second principle of inclusive education is that true learning happens in a non-threatening environment. This approach focuses on using all flexible methods of teaching in the classroom. Lastly, IE believes that, teachers play the role of facilitator of information rather than provider of knowledge. These fundamental principles provide strength to the concept of inclusive education. (Guidance Note on Education Systems' Response to COVID-19, 2020). The speed of the spread of the epidemic, the closure of school institutions and the transition to online teaching were so swift that it hardly accorded ample time to plan and to reflect on the potential risks or opportunities that such sudden changes could bring, consequently leaving the school managers in an awkward situation.

Hearing impairment is associated with the following definitions: deafness, hard of hearing, conductive and mixed hearing loss. Deafness is a severe hearing impairment and a person faces challenges to process linguistic information, while hard of hearing is an auditory impairment and an individual can get some conversations, but might miss some components of the conversation, (Kaplan, 1996). Students with hearing impairment are placed in a number of categories related to the site affected (Meyen and Bui 2007). Conductive hearing loss occurs when the sound is not transmitted efficiently in the outer and middle ear, while the sensorineural hearing loss occurs when the sound is not transmitted efficiently in the outer and middle ear. Some students have what is referred to as 'mixed hearing loss', a combination of conductive and sensorineural hearing

impairment. Likewise, central hearing loss occurs when the auditory centres in the brain become dysfunctional.

In terms of onset of these impairments, congenital impairment manifests itself before birth due to abnormal foetal development, pre-lingual hearing impairment occurs before the age of three, a period before language and speech is developed fully (Meyen & Bui, 2007). Similarly, post-lingual hearing impairment occurs after the development of speech and language. Both pre-lingual and post lingual conditions are caused by environmental factors like diseases, accidents and noise. Ways of communication to learner with HI, include the following; lip- reading where someone simply observes the movements of the lips to get the meaning of what is being spoken. Cued speech is another form of communication whereby hand shapes are used to represent specific sounds during speaking. Speech reading is the use of visual interpretation of spoken communication like body movements and gestures. Finger spelling is when fingers are used to spell out each letter of the word. Sign language is translating each spoken word into a sign. Total communication is a combination of oral and sign language.

Given such a situation, it is important to look at the impact on school managers and reflect on what has transpired and what is likely to happen as we move forward in the field of global education. Many things have changed in education in both a positive and a negative way due to COVID 19, however, the negatives outweigh the positives, especially to students with hearing impairment. Unforeseeable situations such as abrupt closure of schools, shortage of teaching and learning resources due to resorting to double shifts, not giving enough time for students with disabilities to carry out school activities , sudden shift to online learning without any planning as our curriculum

is not currently designed to respond to online system, unpreparedness by teachers to use online learning system since many are not oriented to using it even school managers were not oriented on how to use it, (Kamlesh, 2020). Due to these problems brought by COVID-19, school managers are facing serious challenges to ensure that students with hearing impairment continue to learn in the normal school environment.

The importance of school managers in determining the success of inclusive education ought not to be overemphasized since they are the implementers of policies that are initiated by the Ministry of Education. Becoming a more inclusive school often requires significant shifts in school values, culture, practices, and organizational systems; thus, school management is critical to ensuring sustainable inclusive change in schools whenever necessary like the time of COVID-19 (Ainscow et al, 2010). School managers are highly influential figures whose values, beliefs, and actions directly affect the culture of the school, expectations of staff, and school operations (Wong et al, 2009). It is incumbent that school managers are committed to ensuring that inclusive principles that promote the development of an inclusive school culture are adhered to within the school community. In this regard, school managers should ensure that every learner inclusively participates in the learning process while adhering to the measures put in place to reduce the spread of COVID-19 Pandemic.

1.2 Statement of the Problem

The coming of COVID-19 has affected the education system worldwide so badly that we have experienced school closures and other changes in the education system to ensure continuity exists in the provision of education services. Changes such as introduction of distance and online learning

and use of PPEs like non-recommended face masks that cover the whole face of the person, including teachers. Regardless of the efforts being made to ensure continuous access to education, students especially those with disabilities, have been significantly affected as the situation is no longer the way it used to be in schools. Students with disabilities have been seriously affected as often times inclusion is no longer adhered to due to changes adopted, and at best, the practice of inclusion has retrogressed to integration even beyond integration. In fact, physical and learning stopped due to lockdowns and instead distance and online learning were introduced as alternative modes of learning. While studies have been done on the impact of COVID-19 on education worldwide (MoEST, 2020), there is a paucity of empirical information specifically on assessing the impact of COVID-19 on the management of students with hearing impairment in schools in Malawi, including their ability to access education using distance and online learning. In Malawi, online learning, for instance, made use of videos without captions as well as and radio programmes.

There was also reduction of learning time for a class period to accommodate double shift. Lack of adequate teaching and learning resources, including teachers due to the implementation of double shift schooling has increased the demand for teachers (Singal, et al 2021 & Giovanelli, et al 2021). In addition, use of appropriate methods or best practices in teaching and supporting students with hearing impairment have been affected to the extent that some teachers are not using these practices due to time limitation. School management introduced distance and online learning in which students with hearing impairment did not benefit at all as their learning largely depends on face-to-face interaction with the teacher and fellow students. Regrettably, online environment did not accommodate sign language services. As a result of using distance and online learning, lack of recommended assistive devices, reduced learning time, and fear of spreading and contracting the

corona virus, methods that emphasized individual help and contact with students with hearing impairment are not being utilized to the maximum extent possible in many schools today, including those in the Northern Education Division (personal communication with the NED Special Needs Desk Officer,). Hence, the need to assess how school management were impacted by COVID-19 in offering teaching and learning as they were the ones managing schools and responsible to implement the measures that were introduced in order to reduce the spread of COVID-19 in an inclusive school setup, especially to students with hearing impairment in selected schools in the Northern Education Division.

1.3 Aims of the Study

The aim of this study was to assess the impact of COVID-19 on the school support for students with hearing impairment in selected schools in Northern Education Division.

1.3.1 Objectives of the Study

The study was guided by the following specific objectives:

- i. Explored the impact of COVID-19 on the school support for students with hearing impairment.
- ii. Examined how school management teams are implementing inclusive education with emphasis on students with hearing impairments in the COVID-19 situation.
- iii. Explored interventions that could be made to better support implementation of inclusive education during the pandemics.

1.4 Significance of the Study

The study will help education stakeholders of Ministry of Education which includes school managers and Division Managers to have alternative ways of making sure that learning in schools does not get interrupted during outbreaks of pandemics like COVID-19. This is the case because ‘schooling does not wait even though there is a pandemic, and since all students have the right to education regardless of any situation’ (Salamanca 1994). It will also help policy developers to put in place clear policies that ensure that learning does not come to a halt during the pandemics, unlike during the COVID-19 outbreak when there was no clear policy on how education can go on, mainly concerning continued implementation of inclusive education, which was heavily hit by the COVID-19 pandemic. The research will increase the body of knowledge of the researcher, and it will also provide the suggested solutions to challenges faced by managers during COVID-19 in the implementation of inclusive education, especially to students with hearing impairment.

1.5 Limitations

The study was limited by a number of factors such as:

Few studies on the area in Malawi on the impact of COVID-19 on the implementation of inclusive education specifically on students with hearing impairment.

Respondents were not usually available and the researcher had to visit the study sites several times to meet the respondents.

Some respondents were busy with their daily work schedules since the study was done towards the end of term examinations.

Meeting some respondents like parents was not easy in a boarding school. Some parents had to travel long distances, for instance, from Nkhatabay to Mzuzu.

1.6 Delimitations

The boundaries of this study were as follows:

- The study focused on the impact of COVID-19 on the management of students with hearing impairment who were in schools for the past two years, and during this study they were in Form 3 and 4 only. Other types of disabilities were not the focus of this study apart from those with HI.
- In terms of participants, teachers that were teaching students with hearing impairments in the classes two years ago and who were teaching Form 3 and 4 were targeted for data collection. These were deemed to have adequate experience with the pandemic and to know what it meant to support learners with HI. The study also targeted parents of children with hearing impairment who learned at the selected schools in Form 3 and 4. Further, students without hearing impairment but who were in these schools for the past two years, since COVID-19 started and were in Form 3 and 4 were targeted for data collection. In addition, it was deemed desirable to engage school managers to understand strategies that they used to manage inclusive education during the pandemic and adaptations that were made or could be made to better support learners with HI especially during pandemic like COVID-19.

1.7 Brief of Theoretical Framework Informing the Study

1.7.1 Introduction

This section focuses on the concept of inclusive education, some international protocols and local policies that promote inclusive education. It further looks at the importance of good school management in relation to the teaching and learning of students with hearing impairment during the COVID-19 pandemic so that the implementation of inclusive education is successful. It reviews different literature written about and studies that have been carried out on successful school management in teaching students with hearing impairment during the COVID-19 pandemic.

This chapter will start by defining school management in relation to the successful implementation of inclusive education concerning students with hearing impairment, which is also called learning management. Learning management also refers to efforts to control learning activities based on the concepts and principles of assessment to achieve school goals that have been arranged more effectively, efficiently, and productively (Amtu, 2013). It has several components or processes consisting of planning, organizing, implementing, as well as controlling, and evaluating actions that are carried out to determine and achieve predetermined goals through the use of available human resources (Terry, 2005). School management has to make sure teaching and learning is possible to every student regardless of the student's disability. It will also focus on hearing impairment and the term inclusive education and its meaning in this study, hearing impairment has several ranges but the most affected group is that with severe hearing impairment that needs sign language for their learning to take place. Most importantly, the study will discuss the impact of the COVID-19 pandemic on the management of students with hearing impairment

in an inclusive setting. Lastly, this chapter will look at the teaching and learning of students with hearing impairment based on the social cultural perspective.

Teaching and learning of children with hearing impairment from a social cultural perspective, the socio-cultural perspective is a theory which has gained more attention within the field of inclusive education. The theory advocates that students learn from each other in class, that is, learning in the community, the socio-cultural perspective focuses its attention from individual learning to learning in a community. Lev Vygotsky (1998) is the main inspiration source within the sociocultural direction.

The socio-cultural theory is influenced by Vygotskian psychology and also by Bakhtinian notions of dialogism, known as the socio-cultural theory. Vygotsky's socio-cultural theory of human learning describes learning as a social process and the origination of human intelligence in society or culture. The major theme of Vygotsky's theoretical framework is that social interaction plays a fundamental role in the development of cognition. Vygotsky believed that everything is learned on two levels; that is, through interaction with others and then integrated into the individual's mental structure.

Learning is seen as participation in social practices. The school is looked as one of the places of learning and learning here takes place through pupils' participation and interaction with other pupils and teachers (Dysthe, 2001). Language and communication are important tools in this process. The social-cultural theory has got a number of vital components which are discussed in the following paragraphs.

1.7.2 Zone of Proximal Development (ZPD)

The Zone of Proximal Development (ZPD) is an important concept in the social-cultural theory. Vygotsky (1978) describes the zone of proximal development as the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or collaboration with more capable peers. According to Bråten (2009), this "zone" is the distance between what a person manages on their own and without the help of others and what the person can manage with assistance from others who have more expertise in the area (Bråten, 2009). This zone is thus the area of exploration for which the student is cognitively prepared, but requires help and social interaction to fully develop (Briner, 1999). ZPD is where learning and instructions take place. Here a teacher or more experienced peer is able to provide the learner with "scaffolding" to support the student's evolving understanding of knowledge domains or development of complex skills. Scaffolding involves providing a pupil with help in a task, but gradually withdrawing the help in order to allow the child to gain mastery over the learning process. Collaborative learning, discourse, modelling, and scaffolding are strategies for supporting the intellectual knowledge and skills of learners and facilitating intentional learning.

The implications of Vygotsky theory to learners with hearing impairment is that such learners should be provided with socially rich environments in which they will explore knowledge domains with their fellow students, teachers and outside experts. Collaborated learning should also be encouraged among pupils and also the teachers should give extra help to pupils who struggle with their learning to help scaffold pupils' evolving understanding and cognitive growth. Thus, given the help and collaborated activities, those with hearing impairment finally learn and internalize the

strategies and language used by others in tackling the tasks, and finally manages to do the tasks without the help of others. In so doing, they reach their zone of actual development. However, with lockdowns and changes in the education system due to the coming of COVID-19, application of Lev Vygotsky's understanding is not possible as students with hearing impairment need face to face with their teachers so that teaching and learning takes place since they learn through lip reading, sign language and even body language. All these were no longer happening as learning was online and had excluded students. The only exception is when proper arrangement has been done by school management so that students with hearing impairment too benefit through online learning.

1.7.3 Learning from concrete to abstract

Another important component in Vygotsky's theory is that children should learn from simple to complex material. Thus, the teacher first works with pupils within their actual development zone, and then moves the child forward by working within the zone of proximal development. Pupils are supposed to develop mastery in the area of concern before they are introduced to the next level of complexity. That is in order to help the pupils to develop new skills and the teacher does not just give children difficult tasks that they can solve by themselves, but those tasks that they can solve with some assistance. In this way, instruction stimulates capacities that are still in an embryonic state and it pushes development forward (Crain, 1992). Class work usually has to start from concrete to abstract so that students can connect ideas and even start solving class problems on their own. This becomes easy and fast to someone who hears properly and not to students with hearing impairment.

In relation to Vygotsky's way of thinking, children must therefore learn abstract concepts and theories before they are able to think in abstract. The teacher has thus to give as much support as possible as needed by the pupils before they manage on their own (Rasmussen, 1997). However, with COVID-19 as schools experienced lockdown, face to face teaching and learning was disrupted. Online mode of learning affected the ability of students with hearing impairment to thoroughly grasp ideas learning from concrete to abstract which works better with face to face learning.

1.7.4 Guided participation

Guided participation is the second important component found in Vygotsky's social-cultural theory. Under the concept of guided participation, guidance and participation culturally values activities thought important to children's apprenticeship in thinking. Guided participation involves children and their caregivers and companions in the collaborative processes of, among others, building bridges from children's present understanding and skills to reach new understanding and skills and arranging and structuring children's participation in activities, with dynamic shifts over development in children's responsibilities. Children use social resources for guidance, both support and challenge, in assuming increasingly skilled roles in the activities of their community (Rogoff, 1990). The notion of guided participation is, according to Rogoff (1990), intended at stressing shared activity with communication that includes words as well as actions, and to encompass the routine, tactic activities and arrangements of children and their companions. Guided participation also involves adults or children challenging, constraining, and supporting children in the process of posing and solving problems through material arrangements of children's activities and

responsibilities as well as through interpersonal communication, with children observing and participating at a comfortable but slightly challenging level. The process of communication and shared participation in activities engages children in their understanding, and develops skills for new problems (Rogoff, 1990). In the context of communication, caregivers and children make connections between what the children already know and what they must learn to handle a new situation. Adults help children making connections, for example, by specifying how the new situation resembles the old.

According to Vygotsky (1978), the most important learning in people's lives happens in collaboration with the important others. Thus, in the socially assisted learning where the important others who are already competent participants in the adult cultural community guide and support children's development within the same community. Rogoff (1990) and Lave and Wenger (1991) say that it is through guided interaction that development happens. This does not mean that children's initiative is less important, but that without support from a sensitive caregiver, the child's development has a limit as to where it can go (Hundeide, 2003). A Teacher will lend various levels of assistance over various interactions of task completion depending on various factors. These include adapting the support based on the pupil's competence level, reducing the assistance as the child's skill level increases, regulating the assistance in relation to the task's difficulty and appropriating the procedures so that they are later on applied by the pupils on their own. This just shows the need for face-to-face communication between a teacher and a student, however, students with hearing impairment will not benefit from this as teaching and learning is now online. Exclusion therefore takes place due to the adopted online mode of teaching and learning.

1.7.5 Socialization through Verbal Instructions or Dialogue

Johnsen (2001) defines the term *socialization* as a mutual understanding of two or more persons towards each other to share and interchange interests; feelings, opinions, or information by using different systems of communication. Socialization in the classroom between the teacher and learners is another important component in Vygotskian theory. This socialization happens only where there is communication, either in the verbal or non-verbal exchanges of daily life and it has an implication when it comes to students' involvement in classroom activities and relationships. According to Vygotsky, language is thus a very important tool of thought and higher cognitive functions (Rogoff, 1990). Dialogue is thus very crucial in the learning of the subject area. It is almost impossible to discuss the content and methods of learning between teachers and learner without dialogue. Thus, they need to dialogue which is interactive in nature and also conversations that are instructional in the learning process. Thus, since some students with hearing impairment difficulties have problems with written language, they need more descriptive instructions or dialogue in order to capture as much information as possible in the learning process. Dialogue is also important to such students in group discussions or when they are getting help from their peers. Language that provides humans with a powerful tool for thinking and communicating, as already seen above, includes non-verbal which includes sign language and verbal dialogue. However, meaningful dialogue has to be regulated, the regulative dialogue is concerned with helping and supporting (scaffolding) the student's efforts to master himself or herself and also what is going on in the world. The teacher has the responsibility of guiding or supervising the students with subject area difficulties in the planning stage and makes them realize the consequences of their actions. Again, the teacher has the role of advising such students actions which are not acceptable (Hundeide, 2003).

1.8 Operational Definitions of Terms

School management is a process of planning, organizing, directing and controlling the activities of an institution utilizing human and material resources so as to effectively and efficiently accomplish the function of teaching extension work and research for the purpose of achieving the aims and goals of the goals, (Akpan, 2016).

Education Division Manager is a person responsible for making sure education is being implemented through organizing educational strategies and managing learning resources in an education division, following the standard curriculum and guideline, (Akpan, 2016). However, different countries have different duties of Education Division Managers.

CHAPTER 2: LITERATURE REVIEW

The chapter presents previous studies conducted in line with the topic of education in relation to COVID-19 in different countries, including Malawi. Literature review helps to gain familiarity with the current information on the chosen topic of the study as well as knowing limitations and boundaries of the topic (Creswell, J.W. (2014).

2.0 Global Reflection of COVID-19 Worldwide: Effects and Adaptations

Inclusive education is enshrined in the UN Convention on the Elimination of all Forms of Discrimination Against Women (UNCEDAW), the UN Convention on the Rights of the Child (UNCRC), the UN Convention on the Rights of Persons with Disabilities (UNCRPD) and targeted by Sustainable Development Goal (SDG) 4 of the agenda 2030 for Sustainable Development, UNESCO, (2020). Yet, worldwide, education systems are still failing to accommodate children with disabilities during the pandemic and managers struggle much to make sure these students are included in education during the pandemic.

COVID-19 had increased setbacks in the achievement of implementing inclusive education, as there were more challenges that needed urgent attention from stakeholders to bring their commitments and political will towards inclusive education in these difficult times. School managers were struggling to provide more funds, resources and coming up with new strategies which target inclusive education leading to quality education. Even though COVID-19 had negative effects, it had helped to expose weaknesses in the implementation of inclusive education which can now be given attention to deal with them. The weaknesses include increased exclusion,

marginalization, poverty and vulnerability to unfair education and social conditions. This is the time to rethink on how best inclusive education can be implemented for the better by focusing on strengthening education frameworks and capabilities by using multi-sectoral strategies, (International Disability and Development Consortium. 2020). Some girls with hearing impairment from poor families were married off by their parents during lockdown, this happened as parents saw it a burden to keep children with hearing impairment. In the same vein, it was estimated that almost a quarter of a billion children worldwide were out of school due to COVID19 lockdown and this situation made the work of School managers to be difficult to support such students while home when their parents are the ones forcing them to get married, (UNESCO's Global Education Monitoring Report. 2020). All these challenges are happening to girls marrying off early, even many countries are signatories of **1979** – UN Convention on the Elimination of all Forms of Discrimination Against Women, Article 10 of the UN Convention on the Elimination of all Forms of Discrimination Against Women affirms that ‘States Parties shall take all appropriate measures to eliminate discrimination against women in order to ensure equal rights in the field’. The COVID-19 pandemic had interrupted the education of millions of students across the world. The purpose of the study was to investigate the perceptions regarding the technological instruction and accommodations provided to deaf students in online distance learning during the COVID-19 pandemic (Alshawabkeh et al, 2021).

The study interviewed students who described their experience of using online technology in both negative and positive terms. Online distance learning was described as a difficult and challenging experience that lacked efficient communication channels and failed to address the needs of the students with deafness with respect to the communication medium. The course delivery methods

were described as challenging, and they lacked social interaction. At the same time, participants acknowledged some ancillary benefits of online distance learning especially that it enhanced their technology skills and their competences in adapting to a new environment. This was an advantage of using online learning and as such it has to be embraced as technology is advancing every day.

The study in Italy by Inguscio et al (2022), which was on investigating the psychological characteristics of online learning on Italian students with and without hearing loss and on their parents who were forced into isolation during the COVID-19 pandemic, showed that, in both the student and parent groups, no significant effect of hearing loss on school wellbeing and anxiety was found. Additionally, in parents, state anxiety was significantly higher than trait anxiety, suggesting one possible impact of lockdown on psychological wellbeing. However, the study revealed that COVID-19 had a negative impact on students with hearing impairment, teachers and parents and this affected them psychologically.

These are disadvantages of online learning which were severe to students with hearing impairment during COVID-19 as revealed by studies above. Students with hearing impairment needed to access the gadgets for online learning and needed to have technical know-how. Due to COVID19, distance education has been emphasized in Italy which is causing so much challenges to students with hearing impairment. Digitalization is promoted due to COVID-19 lockdowns, that is, students learning at home using computer gadgets. Malaysia has imposed strict measures to contain COVID-19 outbreak and the group that has been affected so much are students with disabilities, in fact lockdowns are considered as means of excluding them from their school society leading to sense of isolation. School managers had to make sure students with hearing impairment continue learning at home as school does not stop regardless of any condition, they had to source for gadgets

to be used by students at home which fits their level of hearing impairment (Chung, Subramaniam & Christ, 2020).

Another area that the school managers had to face is lack of knowledge by parents and community members of categories of hearing impairment, and this lack of understanding of hearing loss is further compounded by the tendency to classify the ability to hear into two categories: hearing and deaf. There is a diversity of definitions of hearing impairment. Thus, comparison among studies is difficult. We use WHO classification that classifies hearing impairment according to the pure tone average in the better hearing ear. Categories of hearing impairment range from “no impairment” to “profound impairment” according to the threshold level (Mathers, 2003). Based on the findings of (Mohd, Sharani, & Ahmad 2004), a total of 24 of 141 students in four schools in the Klang Valley, Selangor was now wearing hearing aids.

The examination results also found that 38.5% of hearing aid batteries are weak and produce a sound that is not clear and 35.9% of the students found mould in their ear hearing aids. Furthermore, hearing aids were found to be dirty and clogged. Students with very severe hearing loss, can hardly detect the sounds of the spoken speech but with the help of hearing aids they can. Attention and teaching methods on children's hearing is different from students with special needs and the others due to the difference in their problems and needs. Only 39 hearing aids were used by the 24 students who participated in this study. Hearing aids do not work well when there are some problems and sounds produced are not clear; the battery is low, dirty and clogged ear mould and so on. Another challenge is lack of knowledge by teachers and parents about hearing aids because they cannot repair the device in the event of damage. Additionally, not all types of damage

to hearing aids can be sent to a specialist (Mohd et al., 2004). Students with disabilities struggle to receive the most basic education and this is the duty of school managers to ensure such struggles are reduced. These struggles caused more levels of inequality and discrimination on students with disabilities. The exclusion of students with hearing impairment from education is worse during this COVID-19 time, like inaccessible school facilities, lack of assistive devices, poor health, discrimination and stigma.

2.1 COVID-19 in the Southern Africa (Regional).

South Africa reports on how COVID-19 has affected education, *“Governments and civil society concerted efforts that mobilize resources, and expertise to address the impact of COVID-19 on education is urgently required. This process should include developing long term strategies to address the needs of education in emergencies”* by Kasowanjete in the (Global Campaign for Education 2020p1).

COVID-19 hit hard the education sector in South Africa and left students not being attended to as they were on lockdown at home, and this was a huge source of worry to school managers on how to bring a better solution to the challenge. COVID-19 had also resulted in death of teachers and parents too, leaving children with hearing impairment vulnerable to lacking support from their parents and teachers. School managers are struggling to find bursaries to support orphaned children and again to find specialized teachers to teach such children since specialized teachers are not enough. The challenge is that the time lockdown was announced, there was no proper contingency plan for education to continue thereby putting school managers in an awkward situation. Another

challenge in South Africa that school managers had encountered was that those specialized teachers with underlying COVID-19 health issues effects were advised to be working from home, resulting in significant reduction in the workforce. Even though the teachers with underling effects are teaching remotely from home, its effectiveness is questionable due to network issue, availability of up to date and friendly gadgets (WHO. 2020).

COVID-19 also affected the amount of education funding that Countries in Sub-Saharan Africa receives from developed countries. Developed countries such as United States of America, China and Germany among others usually support education sector in developing countries in Sub-Saharan Africa including Malawi. Their support to education sector reduced drastically as their countries were not spared to shocks of COVID-19 economically as their factories reduced their production due to lock downs in order to reduce the spread of COVID-19, (Datzberger. 2021). The reduced education funding from developed countries also negatively affected the implementation of inclusive education during COVID-19.

Malawi's education system had had its own share of COVID-19 lockdown for six months. After the lockdown was lifted, schools struggle to cope with the situation as government decreed that schooling had to continue but without proper preparation on how this learning would be possible. The study was done at the large scale covering all categories of disability on how they were affected as highlighted in the subsequent sections. COVID-19 did not spare any country in Africa but its impact differed from one country to another depending on how countries individually responded in their quest to control its spread. Studies showed that many countries introduced online learning to continue learning, however, the method had a negative impact on students with

hearing impairments as they could not lip-read someone when he is putting on non-transparent face masks (Aljedaani, et al 2022).

The study by Hammer et al (2023), showed detrimental effect of COVID-19 measures on the communicative accessibility of individuals with hearing loss. The measures were really supposed to come in to reduce the spread of the disease and they were supposed to be inclusive even to students with hearing impairments.

Literature locally (Malawi)

Some studies were done in Malawi on how COVID-19 affected implementation of inclusive education. Studies showed that students with hearing impairment suffered so much mainly due to measures that were developed to reduce the spread of the disease (Singal, et al 2021 & Giovanelli, et al 2021). The studies also agrees that students with hearing impairment faced much problems in their education and school managements found it difficult to make sure students with hearing impairments had equal access to education. However, the situation did not deter school managers from providing assistance to students with hearing impairment. On the contrary, they did all they could in seeking for support to procure appropriate PPEs for use and train teachers, among others. All this was done in a bid to ensure that no one was left behind, including students with hearing impairment.

Reaching students with disabilities either using such means as phoning or physically meeting them to support their remote learning was not successful. Many parents did not have phone gadgets due to poverty in the country, as a result contacting these students by their teachers resulted in students

not benefiting from improperly arranged remote learning (Inclusive Education Initiative, 2021). The report revealed that during lockdowns, a lot of students experienced lack of essential therapies, safety and emotional wellbeing. Students also faced challenges like lack of access to materials such as television sets, radio, phones or computers since learning was remotely done through these gadgets, students also lacked parental support in their schooling at home since many parents in Malawi are illiterate and do not possess the skills that are used to students with disabilities such as braille and sign language.

The study by Munthali A.C (2021), found out that income levels of parents who are also responsible for the welfare of their children's school needs declined during the COVID-19 pandemic because employment opportunities and businesses dwindled. This was another challenge faced in implementing inclusive education during COVID-19 pandemic. The study by Inclusive Education Initiative (2021), further highlighted the challenges people experienced in accessing health services, food and nutrition, education and COVID-19 information and adapting COVID-19 preventive measures.

Below are comments from some parents who were interviewed during this study and their voices summarized: The parent fears for the protection of her child due to her condition as some might rape her leading to being impregnated or catching sexually transmitted diseases. While another parent of the boy child feared of her child being discriminated due to his condition or even being a barrier to her own child's education due to failing to send him to school where braille transcription is available.

The comments from parents really show that students with disability have been not fully helped to continue learning during lockdown. Despite that Malawi is a signatory to different international protocols and conventions that promote inclusive education such as Dakar Education for All Framework for Action, (UNESCO, 2000) and its Constitution in Chapter IV Section 20 (The Constitution of Malawi, 1995), gives equal rights to education to everyone, its education system has been severely affected by the COVID-19 pandemic. This study was done on how the whole inclusive education was affected by COVID-19 while my study is concerned with a specific area of hearing impairment.

Current Related Studies

A study by Bachik et al (2022) on the impacts of online learning during COVID-19 to HI students. Students were required to switch to online learning in the two years period of this pandemic and in so doing increasing the loads of emotional burden on their education especially to the students with special needs. One such caliber of students were those with hearing impairment, who were already facing significant amounts of difficulties in adapting to the new style of learning. The differences in approaches taken and ability to adapt to online learning needed to be taken into consideration to evaluate the effects of online learning to comprehension skill. The results reveal that there were approaches taken by the teachers to teach and enhance hearing impaired students' comprehension skill which include sign language and making videos for online learning. It was also found that online learning during COVID-19 negatively affected students with hearing impairment. The negative effects included the significant drop in students' reading task performance, deterioration of prior knowledge usage and the decline in average achievement level in completing reading comprehension tasks.

Another study is by Kotwal et al (2022), on the challenges and opportunities in online learning amid COVID-19. According to the study, online classes became necessary overnight, but the transition was not smooth and productive. Moreover, educating students with speech and hearing disabilities online is not similar to those who can hear and speak. The study explored challenges of online classes, the struggles of the student–teacher community, and the limitations of technology to make virtual education possible for the hearing–speech impaired students in Jammu and Kashmir. The study also captured some of the possibilities of effective deliverance. Finally, it suggested imperative changes to make online learning accessible, inclusive and meaningful for the hearing–speech impaired community that depends on facial expressions, lip-sync and sign language to learn and communicate.

A study done in Malawi by Singal et al (2021) on the impact of COVID-19 on the education of children with disabilities in Malawi. The study found out that COVID-19 had led to unprecedented school closures and brought about extraordinary and unique challenges to ensuring continuity of learning for children across countries. According to the study, parents reported of being overwhelmingly dissatisfied with the educational experiences of their children with disabilities, with a significant number reporting that they had no contact with the school or the teachers during closures. This means that there was no coordination between parents and teachers, teachers and students and among students themselves which promotes interaction and is a vital component in teaching and learning. Children with disabilities were reported to be spending very little time on formal learning at school once these re-opened, as parents noted the loss of structure for their children’s day and increased loneliness arising from lack of contact with their peers. As schools

reopened, the mental health of children with disabilities, alongside their learning, needed to be a priority.

Another study done in Malawi by (Munthali, 2021). The study found out that income levels of parents who are also responsible for the welfare of their children's school needs declined during the COVID-19 pandemic because employment opportunities and businesses significantly dwindled. The study further highlighted the challenges people experienced in accessing health services, food and nutrition, education and COVID-19 information and adapting COVID-19 preventive measures. Lastly, the Government of Malawi developed the National COVID-19 Response Plan that acknowledged that persons with disabilities were vulnerable to COVID-19. However, according to the study, there was no specific interventions that targeted persons with specific types of disabilities like those with hearing impairment.

Mitigation against COVID-19

While it was important to ensure that life had to be protected at all times during pandemics such as COVID-19, education was supposed not to be interrupted, but rather, proper measures were innovatively created to suit the situation. Education systems were already failing our children even before the pandemic. COVID-19 had exacerbated this learning crisis and children in almost every country had fallen behind in their learning.

School closures have clear negative impacts on child health, education and development, family income and the overall economy, Saka T.W (2021). In this sense, the pandemic is also a call to renew the commitment to the Sustainable Development Goals that could bring a positive change

in the education sector if they will be looked upon, Schleicher A. (2020). Contingency plans were placed in many countries to make sure education continues during COVID-19. No matter where they live and circumstances, children have a right to education at all times (GCE Global Coordinator 2020).

Governments and Civil Society Organizations concerted their efforts and mobilized resources and expertise to address the impact of COVID-19 on education. Government and foreign organizations had put together resources to help in making sure education continued. This process involved both long and short terms strategies, hence, coming up with mitigation measures.

Countries had to prioritize education in the first phase of all emergency responses with immediate effect, and to include education in their COVID-19 response policies.

- Countries had to dedicate appropriate resources, financial and technical, to ensure the right to free, quality public education for all was maintained during the COVID-19 crisis.
- Countries had to increase funding and support to education in crises as emergency assistance in line with its needs.
- Countries had to minimize the pressure on teachers, schools and school systems that remained open or volunteer to offer extra support.
- Radio and TV are also very powerful tools and they were utilized. The advantage we have today is that through social networks, WhatsApp or SMS, ministries of education can communicate effectively with parents and teachers and provide guidelines, instructions and structure to the learning process, using content delivered by radio or TV. Remote learning

is not only about online learning, but about mixed media learning, with the objective of reaching as many students as possible.

- Some countries had to increase their teachers' digital skills. Radio and TV stations will recognize their key role in supporting national education goals and improve the quality of their programming and understanding their immense social responsibility.
- Parents will be more involved in their children's education process, and ministries of education will have a much clearer understanding of the gaps and challenges (in connectivity, hardware, integration of digital tools in the curriculum, teacher's readiness) that exist in using technology effectively and act upon that. All of this can strengthen the future education system in a country (Saavedra J. 2020).

The literature shows that COVID-19 had a huge impact on implementation of inclusive education, however, school management in addition of using measures developed by Ministry of Education to continue learning during COVID-19 era, could modify them by making such measures to be even friendly to students with hearing impairment, for instance, they encouraged use of transparent face masks for easy lip-reading. The literature also shows interventions that could be implemented so that countries should be in readiness to continue learning during emergencies like COVID-19. This includes coming up with policies that can be used during emergencies and aligning our curriculum to respond to emerging issues.

The mission of all education systems is the same; to overcome the learning crisis we were already living in and respond to the COVID-19 that was at hand. The challenge today is how to reduce as much as possible the negative impact the pandemic will continue to have on learning and schooling

and build on this experience to swiftly get back on track. As education systems cope with this crisis, they must also be thinking of how they can recover stronger, with a renewed sense of responsibility of all actors and with a better understanding and sense of urgency of the need to close the gaps and assuring that all children have the same opportunities for a quality education.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter explains how the research was designed and structured for the purpose of obtaining data pertinent to the research questions. The design of the research includes: how data was collected and analysed, the sample size that was chosen and the technique used when obtaining data. The chapter also involves study sites and the instruments that were used to collect data. Lastly, the chapter gives ethical considerations for taking care in the research and the offices permission and managing participants.

3.1 Research Paradigm, Approach and Design

The study was informed by the interpretivist paradigm which posits that social reality is subjective and assumes multiple realities in understanding human views, interests and experiences (Creswell, et al., 2011). The research paradigm encourages use of multiple methods to better understand and represent participant meaning of an issue under investigation in order to achieve trustworthiness of the research. It emphasizes collecting data in participants' natural habitats. As such, it is anticipated that participants will have subjective meanings about the impact of the COVID-19 pandemic negotiated through their personal and social-political environments. As such interviewing teachers and students in their schools, promote interactions among participants and doing in-depth study of something.

3.2 Research Approach and Design

In order to achieve the general objective of the study, a qualitative approach was employed. It is worth noting that qualitative research provides room for analyzing the ways in which individuals interpret their social world through talk and interaction (Creswell et al., 2011). This study involved interaction with participants to better understand their views on how COVID-19 affected schooling, hence, the choice of the approach. It entailed conducting an in-depth study on the impact of COVID-19 on management of students with hearing impairment. Research design is the overall strategy that is used in carrying out research, including how data is collected and the tools that are used, how data is interpreted, and analyzed. A case study design was used in this study to inform collection of in-depth data from participants. Open-ended questions were used in order to probe more details (Creswell, et al, 2011). Further efforts were made to collect rich data so that with the use of this research design, neutrality and trustworthiness could be attained.

3.3 Site of the Study

Site of the study is the area where data collection process takes place (Thomas, 2005). The research was conducted in Mzuzu City which is in Mzimba District in the NED. Three public secondary schools were selected to participate in the study because they all practised inclusive learning and they are indicated as School A, B and C in the study. School A is a boarding school while B and C are day secondary schools.

3.4 Population and Sample

3.4.1 Population

According to Saunders, Lewis, and Thorn Hill (1997), a target population is a set of cases whereby a sample is taken for analysis. The population in research involves people, animals or objects of common characteristics. The characteristics include gender, sex and education backgrounds (Ary, et al., 2006). The research involved participants from the education sector who were Division officials (EDM and Desk Officer for Special Needs), school managers, specialist teachers, students and parents.

3.4.2 Sample

Sampling refers to the process of selecting the cases to be included in the study to represent the target population (Saunders, et al., 1997). A sample is said to be representative of the sampled units have similar or almost the same characteristics as those of the whole population (UNESCO, 2017). The study involved the EDM, school managers, teachers, parents and students since they are the ones who know how they were impacted by the coming of COVID-19 relating to students with hearing impairment. The parents of children with hearing impairment were involved because they are the ones looking after students with disabilities at home and they are aware of the schooling conditions as well as the COVID-19 pandemic. The number of participants from whom data was collected is twenty-six, which includes three school managers, two Division officials, twelve students, three teachers and six parents. There were three male and three female respondents for the questionnaires on students and parents' side for purposes of gender representation. However, the key informants of the study were the EDM, school managers, teachers and students as the EDM

was the one to make sure all measures COVID-19 from the Ministry of Education were being implemented in the schools. The school managers and teachers were the ones implementing the measures in their schools in coordination with their teachers and students. They are the ones who had first-hand information on challenges faced by students with hearing impairments in their schools. The students with hearing impairments are the ones also taking part in implementing the measures and are the ones whose education was negatively affected. Key informants according to Needs Assessment Task Force (2011), are people with needed knowledge about certain aspects of the community, the site visited, the population, or the emergency either because of their professional background, leadership responsibilities, or particular personal experience. The Division officials, school managers, teachers and students with hearing impairment are the key informants as they were the ones involved in making sure that measures were implemented and students are the ones being the victims due to the measures implemented as such measures were not friendly to them.

3.5 Sampling Technique or Procedure

Sampling technique refers to the way in which a sample is selected from the whole or the target population (Thomas, 2005). In this study, purposive sampling was used to select participants. Purposive or purposeful sampling refers to selecting participants who will mostly benefit the study, and it involves inviting participants who can give rich information on the phenomenon being studied (Patton, 2002). Purposive sampling, also known as judgmental, selective, or subjective sampling, is a form of nonprobability sampling in which researchers rely on their own judgment when choosing members of the population to participate in the study, because they meet a predetermined criterion. Participants involved met the following criteria:

- a) Holding a managerial position at school as head at the school or EDM in the Division and must have served in that position for at least 2 years and Special Needs Desk Officer must have served for 2 years too; Three school administrators were selected for interviews and it was one per school.
- b) Teachers who were supporting students with hearing impairment during the COVID-19 pandemic in forms three and four.
- c) Continuing students in form 3 and form 4 who have been there since the onset of COVID-19.
- d) Parents who had children with hearing impairments in the selected schools, those students in form 3 and form 4.
- e) Students with hearing impairments in form 3 and form 4 as these were assumed to have richer experience of COVID-19 during the past 2 years.
- f) Students without hearing impairment that were used in focus group discussions. These were included as they interacted and collaborated with peers with HI regularly and could understand how COVID-19 affected these students with HI.

According to Creswell et al (2011), if an individual does not meet the criteria, he or she should not be selected; hence, only participants who met the above criteria were engaged. Purposive sampling is an on-probability sampling method and it is used when “elements selected for the sample are chosen by the judgment of the researcher. Researchers often believe that they can obtain a representative sample by using a sound judgment, which will result in obtaining rich data. However, researchers can use various techniques during purposive sampling, depending on the number of participants who have similar characteristics according to the criteria. Likewise, in this

study, students and teachers who would be involved in focus group discussions and interviews were selected using cluster random sampling where students were clustered by gender and form. The participants were believed to have homogenous characteristics.

3.6 Data Collection Methods and Tools

The data collection methods and tools are ways used to collect data from the field and the instruments which were respectively used. Some of the data collection methods include questionnaires, interviews, focus group discussions and classroom observation. The study used questionnaires, interview guide, focus discussion questions or guides as tools for data collection. The subsequent sections explain methods and associated tools for data collection that were used in this study.

3.6.1 Interviews

Face to face interviews were conducted with the Division manager to probe more and triangulate the information drawn from the Division's inclusive education Desk Officer and information from three school managers and students. The Education Division Manager, being the overall person overseeing education in the whole Northern Division was believed to have much information on how COVID-19 had affected the implementation of inclusive education in the Division. These participants were selected using purposive sampling as detailed in section 3.5. Face to face interaction with some participants was one way employed to improve the quality of data collected as the engagement provides opportunities to collect and interpret facial expressions and other

nonverbal communication during the process of interviewing (Canagarajah, 2004). Refer to interview guide questionnaire for the Division Manager attached as appendix 6.

3.6.1.1 Focused Group Discussion

The students were put into three groups of 4 members and they were led into discussions of about 20 minutes. The group was chosen using purposive sampling. These discussions were conducted when it was not time for classes. The focused groups were conducted after getting consent from the school administration and participation was on voluntary basis for both students with disabilities and those without disabilities. The groups were presented with questionnaires on how school management helped to make sure teaching and learning continued during COVID-19 time and in general, how inclusive education was being implemented in this COVID-19 period. The collection of data using Focused Group Discussion was helpful as it gave real experience of students during the COVID-19 situation where students interact (Henry, 2013). Refer to the focused group discussion guideline as appendix 3.

3.6.1.2 Questionnaire

A questionnaire is a data collection tool that comprises questions that are filled by the participants during the process of collecting data (Govinder, 2009). A questionnaire in this case comprised questions that reflected all the four objectives. The first section of the questionnaire sought data related to the first objective, which was about the impact of COVID-19 on the management of students with hearing impairment. Secondly, the questionnaire gathered data on how school managers are implementing inclusive education concerning students with hearing impairment during the COVID-19 situation. Thirdly, information was sought regarding suggested

interventions that could be made to ensure continuity of learning and helping in the implementation of inclusive education during COVID-19 to support students with hearing impairment. For this research question teachers, students, school managers and Division officials were interviewed. The questionnaires were left to participants to fill in themselves at their own free time. Mainly, the questionnaire was used by school managers and teachers as they are quite busy people and it was a challenge to conduct interviews with them. Therefore, two questionnaires were used to collect data from school managers and teachers. Refer to the attached questionnaires as appendices 1, 2, 4 and 5.

3.7 Data Analysis

Qualitative analysis of data in this research was done using thematic analysis since it was not much interested in numbers but in analyzing texts for meaning. Texts are rich data sources with the potential to tell us more information about something (Hsieh, 2005). Both participants and context were considered in data analysis in order to identify common patterns in data. The purpose of this study involved assessing views and behaviours of participants including aspects that shape their understanding; hence, the use of qualitative method of data analysis. Thematic analysis was employed and it was informed by the Braun and Clarke (2006) six step-process that includes, familiarizing with your data, generating codes for common patterns in data, identifying themes, reviewing themes, defining and naming themes, and finally producing the research report. The importance of qualitative data collection and analysis is that it allows an in-depth study of a phenomenon in its natural setting, and it gives more clarification of the results of the phenomenon being studied (Crotty, 1998).

3.8 Trustworthiness

To ensure trustworthiness of findings, first and foremost, the study involved participants that were credible and were key informants, such as school managers, Division officials, parents, students and teachers themselves, they all gave their responses during interviews. Triangulation (use of multiple methods of data collection) was also used for participants such as teachers who provided data through a questionnaire in addition to being observed in the classroom. For students, apart from focus group discussions, they were observed in the classroom. The data collection tools are all attached as appendices 1-6. Triangulation is one way of ensuring credibility of findings as it helps to pilot the methods and instruments in order to collect information that was used to improve the tools before actual by use the target participants. (Creswell et al, 2011). Member checks (sending transcripts back to participants to check the content whether or not it accurately reflects the interviews) were used. Methods and tools for data collection were also reviewed by the supervisor before use.

3.9 Ethical Considerations

Prior to data collection, a letter of permission and introduction was obtained from the supervisor. The letter was presented to informants who was interviewed so that they should affirm that the information collected was for academic purposes only. Presenting permission is an important aspect before venturing into a study since it encourages respondent's willingness to participate and be confident in giving information (Crotty, 1998). Emphasis was on the target of questions to be asked to the interviewees who were told prior to the start of the interview. The researcher also assured the interviewees that their information would be kept with strictest confidentiality by not

mentioning names during the compilation of data and that after the study, data would be kept with confidentiality. During interview of students, permission was taken from their teachers. The interviewees were told the amount of time which they had to spend for the interview.

The study was cleared by the MZUNIREC which approves its trustworthiness and letter from MZUNIREC is attached as appendix 7. Permission letter from Mzuzu University was used to add its trustworthiness. Permission was sought from EDM and then schools' head teachers to conduct research in their schools and letter for Introduction for collecting data is attached as appendix 8. Actual names of schools and actual participants were not used in the report. Participants were informed that their participation was voluntary and that they could opt out of the study any time should they felt so. There were no financial benefits associated with participation because the study was for purposes of academics only.

Plagiarism

This study has tried to cite/acknowledge the work of others through citation both in-text and inclusion of a list of sources in the bibliography or reference section.

3.10 Summary

This chapter has explained the research paradigm, design, methods and instruments that were used, population and sampling technique, site of the study, and efforts to attain trustworthiness of the study.

CHAPTER 4: FINDINGS AND DISCUSSION

4.0 Introduction

This chapter presents the findings of the research inquiry that aimed at assessing the impact of COVID-19 on the management of students with hearing impairments. Firstly, are the findings in relation to the first objective which deals with the impact of COVID-19 on the management of students with hearing impairments, are presented. Secondly, findings on school management teams' implementation of inclusive education in the COVID-19 situation with emphasis on students with hearing impairment is looked into. Lastly, it will present findings related to interventions that could be put in place in order to mitigate the impact of COVID-19 on the management of students with hearing impairment.

4.1 The Impact of COVID-19 on the Management of Students with Hearing Impairment

Under this objective, three key themes on the impact of COVID-19 on the management of students with hearing impairment (HI) were developed. These are barriers to learning, limited learning spaces to accommodate split classes and communication challenges. It was evidently clear that all these themes were interconnected and that the aspect of barriers impacted on all areas of teaching and learning.

4.1.1 Barriers to Learning

The study findings revealed the unexpected closures of schools as one of the negative impacts of the COVID-19 pandemic. The Education Division under which the study was conducted was heavily affected by this sudden school closure. This was the case since there was no adequate

preparation on how schooling would be conducted during the indefinite closure of schools as narrated by one Education Division official:

“As a Division, we have been affected so much since holiday came abruptly affecting the school calendar and exam classes negatively. Whenever we have holiday’s we encourage schools to be helping exam classes in areas they are behind, but with this holiday no such arrangement was made in most schools”

The Division official vehemently lamented the manner in which the abrupt closure of schools came about and the expectation for schools to be helping students during holidays, especially for examination classes like form 2 and form 4. In addition, the directive by the Government of Malawi to stop public gatherings like meetings as one of measures to reduce the spread of the COVID-19 meant that even classes could not be convened.

Another Division official explained how the absence of physical contact with students affected face to face teacher support to students and that the option to learn online was not feasible for many students:

“COVID-19 also reduced physical contact of people as it was one means of reducing the spread of the disease and this means individual support to students was reduced too and the only way to continue learning was through online learning but many students did not have access to gadgets that can be used for online learning”

The Division official highlighted the absence of physical meetings between teachers and students which for teachers was the conventional way to offer individual support to students all students including those with hearing impairment. Teaching and learning is a hands-on activity and for most teachers, this required physical interaction and support in order for students to demonstrate

understanding of what has been learnt. This is particularly true because best practices require learning from concrete to abstract to promote meaningful understanding, apart from this, efforts by the schools in the Division to reduce class sizes in order to contain the spread of COVID19 was met with a number of challenges especially in the rainy season as one of the school managers narrated:

“Our school does not have enough classes and the coming of COVID-19 has worsened the situation due to the splitting of classes as some lessons were conducted in the open ground under trees and when lessons were cancelled”.

Managing students with hearing impairment during the rainy season was a huge challenge. The school managers found it extremely difficult to make sure that learning continued uninterrupted during the rainy season.

The study found out that even though the schools introduced online learning, they lacked the necessary gadgets for facilitating the process. However, it was not only the absence of such gadgets that was a challenge, but it was also revealed teachers were not trained on how to use such new technologies in classes especially to students with hearing impairments. Related to this, one teacher narrated:

“Our students were affected so much, especially those with hearing impairment, even if well-wishers could have donated these gadgets. Students would need to be oriented on how to use them and it’s not easy to orient students with hearing impairment depending on the severity of the problem. Being an exam class, students kept learning using online classes and students whose parents/guardians had gadgets to be used like smart phones could access these online classes. However not all students could access them since their parents did not have smart phones for their children”.

Teachers, being the implementers of the directives from the Ministry, were concerned that the situation disturbed their planned work to be finished within the prescribed term. Communication was a problem due to the use of gadgets for online learning as many students did not have the gadgets as well as airtime to access lessons online. Teachers too were not oriented on teaching online and this resulted in difficulties in using the system.

Many students could not access the needed gadgets for online lessons as their parents could not afford to buy the gadgets for them. The development caused students fail to attend online lessons despite that those in form two and form four were due to sit for national examinations. This was also common to students with HI since many of them had no access to the gadgets on account of acute poverty, as one concerned student's narrated:

“We felt abandoned by our school due to forcing us to go on holiday without letting us know in advance so that we prepare mentally and physically. This was even worse to students with hearing impairments as some have mental problems and needed to prepare them in advance when something was about to be done as sometimes their disability also affects their mental ability to process things Abrupt closure of the school made some to be switched off from academics and their performance got reduced”.

This was the situation that was experienced by students in all the schools under study and the manner in which their performance was negatively affected. Students complained of their inability to have access to online lessons due to the challenge of gadgets. Students also complained about the way the indefinite closure of schools came about since they were not mentally prepared to go for such a long break. The abrupt school closure made some students lose interest in school and their performance drastically dropped.

The study also found that even parents of students with hearing impairments were also highly affected by the abrupt school closures caused by the COVID-19 pandemic as observed by one of the parents:

“We were also just wondering seeing children told to go home and we needed to send transport for them to come home. We were not ready that schools would be closed the way it was done. Does it mean in all pandemics to come schools will be closed like this? In fact, as parents some of us are not educated and we did not offer any support to our children when they were home because it is the job of teachers”.

Parents with children in boarding schools were also taken by surprise when they were told about the abrupt closure of schools. They had no choice but to look for money to transport their wards back home. Another issue was that these children were coming from school where COVID-19 cases were already confirmed, thereby exposing parents to the high risk of contracting the disease. The whole situation made parents to be caught unawares and failed to cope with the challenges associated with the closure of schools. This was regrettably the case because as stakeholders in the education system, parents were supposed to be consulted by the Ministry of Education before the unprecedented closure of schools was infected.

Discussion on the thematic area on barriers to Learning

The theme of barriers to learning was about challenges the management of the selected schools faced and the barriers that were created in the process of dealing with COVID-19 pandemic while at the same time facilitating students' learning, especially for students with hearing impairments. “Inclusive education represents the way forward to achieving high quality education systems, which are fair and equitable” (Arnaiz, 2019, p18). This means that the implementation of inclusive education should strive to remove all barriers to teaching and learning regardless of the disability

of a student. However, management of students with hearing impairment during COVID-19 was a challenge in many ways. The respondents narrated how COVID-19 posed a barrier to learning in many ways. COVID-19 added to the already existing challenging situation in schools where resources to be used by students were not enough or in other cases, unavailable. COVID-19 made management of students with hearing impairment to be difficult in schools. School managements tried their best to make sure that all students had equal access to education. However, some measures that were instituted to reduce the spread of the pandemic were not inclusive in nature like purchase and distribution of non- recommended face masks, one-meter social distancing between students and online learning among others, left students with hearing impairment not to be effectively and efficiently included in the teaching and learning process.

Measures that were brought in to reduce the spread of COVID-19 were not fully thought of on how they would negatively affect learning for students with hearing impairments. In addition, lack of policy direction to guide continuous provision of education during serious pandemics like COVID-19 made the situation more complex. For example, there was no clear direction on how to prepare all stakeholders to fully participate in ensuring quality teaching and learning for all learners. COVID-19 made it very difficult to manage the education of students with hearing impairment as they needed special attention like one-to-one teaching and learning which contravened measures of stopping the spread of COVID-19 like social distancing. Apart from that, teachers and students who had tested positive to the virus would be being sent into isolation. There were issues of social distancing issues of social distance, lack of recommended assistive devices, lack of classes to accommodate split classes, reduced teaching periods for a subject, too much

workloads on teachers, introduction of online lessons caused students with hearing impairment fail to fully benefit from the lessons.

The above situation shows that there was no consideration during the development of COVID-19 measures on how the measure would support the provision of inclusive education. As earlier alluded to, Malawi is a signatory to different protocols on the promotion of inclusive education like Salamanca Statement (UNESCO, 1994), Dakar Education for all Framework for Action, (UNESCO, 2000) and even the Republican Constitution (1995). All these protocols promote access to quality education for all children regardless of exceptionalities and yet these Articles did not adequately provide measures to deal with COVID-19 in the education sector. COVID-19 affected so many countries world-wide and it brought similar barriers to teaching and learning, (Schleicher, 2020). However, the response to eliminate barriers to teaching and learning differed from country to country. For instance, the Ministry of Education in the Dominican Republic made sure accessibility to learning materials was increased by all means and in different modes so that even students with HI could access them, like friendly online lessons that could be accessed by anyone (UNICEF, 2022). China had to eliminate barriers to learning during COVID-19 by stopping face to face classes, but allowing learning to continue by relying on well-developed online learning (Zhu et al., 2022). Even though most African countries, including Malawi, are signatories to many international agreements on inclusive education, our technological infrastructure is not adequately developed to support online learning for every student regardless of their condition. Much investment in technology is needed so that online learning can be used by every student regardless of their disability and economic status.

4.1.2 Limited Learning Space due to Splitting of Classes

Another thematic area that emerged from data is limited learning spaces as schools strived to deal with the COVID-19 Pandemic by splitting classes to ease student congestion. The study found that the prevalence of COVID-19 pandemic had brought many challenges in the Northern Education Division as far as education at large is concerned, particularly in the implementation of inclusive education which has been already suffering due to several other factors.

Related to this, the Education Division official said:

“Most of our schools in the Division do not have enough classes and in fact some students learn outside in many schools, including schools under your study”.

For example, at School A some lessons were conducted in the open space due to the splitting of classes as the school did not have adequate classrooms. Even though government and nongovernmental organizations are trying their best to build new classrooms these are not enough to solve the problem. The Division official also reported that the situations were the same at the three schools under study. The splitting of classes proved to be a challenge in the schools under study due to the following reasons. Firstly, the schools already have three streams for each form. As a result, some classes were practically never split at all, and thus defeating the whole essence of preventing the spread of COVID-19 through over-crowding. Related to this was the need for more Deputy Head teachers and in so doing increasing the number of managers in general from one to three Deputies for each school. Splitting of classes brought the challenge of increased workload on the part of teachers and it negatively affected teachers as the schools under study were already grappling with the problem of understaffing. One concerned teacher had this to say:

“The school has three streams already and the splitting has resulted in having six classes in Form Three only, and for other classes, the same situation obtains and so cannot be conducive”.

Teachers were therefore prone to fatigue and their delivery mode was unquestionably highly compromised. Coupled with the newly split classes at the above school, form one alone had six classes and this made students receive half-baked lessons at the end of the day. The study also found out that the splitting of classes not only affected teachers, but also students since they lost interest in their studies as narrated below:

“Desks are no longer enough due to the need for space between each other; desks that require two students to sit on is only one student who sits on it and this means some classes have no desks. Our teachers are always tired when coming to our class to teach because by the time they come to us, they have already taught four classes on the same topic and students are losers in this situation,”.

The need for a good environment for students cannot be over-emphasized as it is a very important component for quality education. Desks help students to be clean, write well in their books and they help girls to sit properly in class.

The study also found that apart from negative consequences academically, the splitting of classes was not favoured by parents. They complained that their children came home from school dirty. Parents also reported that their children’s academic performance was highly affected as they began to show poor school results.

One parent whose child was at one of the schools said:

“The idea of splitting classes is good to prevent the spread of COVID-19 but it cannot work at our school as classes are not enough to allow that idea, let the idea be implemented by schools with enough classrooms and not us”.

The concerns from parents proved to be genuine as they were better placed to know the capacity of their schools whether they are able to manage the change or not whenever occasions arise. As one of the key stakeholders, parents would know that the capacity of their school was not adequate enough to successfully embrace the notion of split classes.

Discussion on thematic area on Limited Learning Space due to Splitting of Classes

The directives that came in order to reduce the spread of COVID-19 included measures such as de-congesting classes to create enough space of one metre from one student to another. The directive exposed the lack of resources in schools like classes to accommodate split classes and the associated material resources for teaching and learning. This was also experienced in other countries due to COVID-19 restrictions and students with disabilities were severely disadvantaged. A case in point was rural Ghana where the quality of education to students with disabilities, including those with HI, reduced significantly (Tsiboe, 2020). According to Kamga (2020), the same situation happened in South Africa where research findings revealed that there was need to re-thinking the education system in that country in order to make emergency education be inclusive. All these countries suffered from lack of resources to accommodate students with disabilities, including those with HI. In Malawi too, directives were introduced and hurriedly implemented to arrest the COVID-19 spread as it was a pre-requisite for schools to re-open. These directives were implemented when schools were opening with strict COVID-19 measures so that there should be control of the spread of the pandemic. This resulted in splitting the classes to the recommended size by the COVID-19 Committee, resulting in inadequate classes to accommodate split classes.

Even though the idea of splitting classes was a good strategy, it was not fully thought of on the impact it would have on education provision, mainly for students with HI. The education authorities knew too well that the classroom situation on the ground was a challenge, but given the magnitude of the resource constraints in schools, they failed to suggest better alternative strategies to the COVID-19 Committee. By implementing the measures like splitting of classes, it meant that some students would have lessons outside the classrooms. The worse situation was that COVID-19 covered the whole rainy season, making split classes fail to conduct lessons outside the classroom, thereby resulting in serious disruption of lessons. According to Babalola (2006), educational management involves the process of forecasting, planning, decision-making and formulating educational policies with the aim of attaining set educational goals. It involves the application of the process of planning, organizing, coordinating, controlling, supervising and evaluating human and material resources with the explicit purpose of achieving educational goals and objectives. Hence management in this sense proved quite challenging to school managers during the pandemic to implement the directives from the Ministry of Health in collaboration with the Ministry of Education.

The people on the ground to implement the directives were not adequately consulted during the development of the directives and these stake holders included teachers and students (Ministry of Health, 2020). Therefore, school managers were supposed to implement the directives regardless of the fact that the created excess classes needed additional teachers, and schools in our country all along did not have enough teachers for the classes before the pandemic. According to MoEST (2020), the normal teacher student ratio is 1:60, but if the class has students with disabilities like hearing impairment, the students should be less than 60 in a class since students with disabilities

need much more time because their learning pace is slow. They need more attention and individual help in order to be moving together with their friends. It was not an easy directive to be implemented by the school managers in schools that already lacked classrooms as narrated by one of the school managers. At School A which had one top school manager plus two deputies, one manager echoed the sentiments of the Division official on the challenges of classroom blocks. The school managers at the other two schools experienced the same situation and they both needed more classroom blocks so that they accommodated split classes.

School A manager complained that the situation had put their work in an awkward situation. The splitting of classes, regardless of being a directive and a way to reduce the spread of the disease, was not applicable and easy to implement in the Malawian educational situation since most schools do not have classes that can accommodate more splitting of classes in time of emergencies or pandemics. COVID-19 has given us a wakeup call that as a country, we need to do more in constructing enough classrooms in our schools country-wide. The splitting of classes was a challenge both in urban and rural schools. However, the situation was dire in urban schools since they have more students compared to schools in the rural areas. The issue brought a serious problem to students with hearing impairments who usually do not have enough recommended resources and assistive devices to use when needed (Kasowanjete.. 2020).

Another burden on the lack of classrooms was shifted to teachers who could also not question the decisions by the school managers. Teachers were just implementing the directives from their authorities. But with the serious problem of shortage of teachers in schools, they continue to suffer in silence because they do not have the platform or opportunity where they can question some of the unpopular directives promulgated by their authorities.

The findings prove that most schools had very high teacher pupil ration coupled with the challenge of adequate classroom infrastructure. Teaching and learning resources in most schools posed an enormous challenge in the quest to implement inclusive education. Due to high enrolment, schools under study had more streams in order to accommodate as many students as possible. COVID-19 pandemic and its preventive measures really came at a time when schools were already grappling with myriad challenges. It is an open secret that students' morale was negatively affected, since classroom environment can affect student's motivation and students put more effort into learning activities (Ambrose, 2010).

The issue of shortage of desks was also brought to the fore during COVID-19 period. Even though there was the splitting of classes, the general picture was that there was acute shortage of desks in most schools for students to use. The availability of adequate desks could have at least helped students whose lessons were conducted in the open space to make them feel comfortable instead of sitting on the dirty and dusty ground. All this was happening even though we had been singing the song of promoting quality education. It would seem that quality education remained an uphill task to be accomplished, particularly for students with hearing impairment. Management of students had not been easy during critical COVID-19 period as school managers had to struggle to provide all the necessities so that education continued, especially to students with hearing impairments.

It is the wish of every normal parent to ensure that their children learn without facing serious obstacles. However, parents got disappointed so much with the coming of COVID-19 as it

paralysed the education system. The PTA committee meetings were not held to strategies on how the schools could manage COVID-19 situation. It simple shows that both parents and school managers were not consulted on the way forward when the authorities were formulating COVID19 guidelines to be implemented in schools. Specifically, parents were not given the chance to give their input on the salient issue of split classes whose consequences were dire on the learners.

Lack of meetings between parents and teachers, teachers and students and students among themselves is against the idea of scaffolding as a means of learning and the whole idea of social cultural theory (Vygotsky, 1987).

Parents lodged a complaint which implies that they were not in agreement with the splitting of classes according to their school situation. Any project or idea coming at a school has to win a sense of ownership by the community, and this splitting of classes was not successful as there was no engagement of the parents to own it for easy implementation. School managers work hand in hand with parents through the PTA and anything that does not go through PTA is usually not successful at school. Schools are owned by the community and they take part in the developments at the school and this idea could have been left to individual schools to see how they would manage it for them to take part in its implementation (MoEST, 2017-2021). Communities could have found a better way of implementing it like by requesting for other structures in the community like churches and warehouses to be used as classrooms within the week so that learning continued.

4.1.3 Communication Challenges

The study revealed that students with hearing impairment face a lot of communication challenges that may limit their participation and engagement in teaching and learning experiences. The Education Division Manager highlighted the challenges as follows:

“Students with hearing impairment usually depend on total communication, that’s using all means of communication including body language, facial communication, lip-reading and the coming of COVID-19 has made it impossible for total communication to be there as now there is emphasis on spacing between students to be almost one meter apart, making a student to be very far from the teacher. Using face masks by both teachers and students, plus COVID-19 holiday itself, has made communication not to work at all”,

The Division, being responsible for education affairs in the entire northern part of Malawi, is in the fore-front promoting the implementation of inclusive education. They are also concerned with the situation students with hearing impairment are going through. The use of social distancing between students developed negative situations to students with HI as they depend on total communication, but the space developed created a barrier to the communication process. The study also found that school managers experienced similar views to what was expressed by the Division official as they narrated the following;

“The coming of putting on masks is disturbing total communication such as body language, facial communication and lip-reading, which are very important in the communication process between teachers and students with hearing impairment”,

Communication was also disturbed by the use of non-recommended masks that hinder communication. Teaching and learning became difficult due to challenges with communication between teachers and students and the situation was worse to students with HI.

The study findings revealed that all teachers from the three schools under study had a negative perception on issues of putting face masks and its impact of communication with students with hearing impairments. Students were also found to face the same problem of communication among themselves like in group discussions, class presentations and chatting.

One student from one of the schools said:

“Group discussions are now being reduced in frequency and understanding each other is now a problem as we are putting on face masks which hinder voice and facial communication”.

The study found out that in these three mainstream schools, those who suffered the most under this practice of covering the whole mouth with a mask were students with hearing impairment as they usually rely much on total communication which includes facial communication. Parents complained that their children’s performance had declined as many of them cited non-verbal communication as a challenge when both teachers and students put on face masks.

Discussion on the thematic area on Communication Challenges

Teaching and learning depend on communication between the teacher and the student and among students themselves. This communication can be both visual and non-visual. The learner must be attentive to the teacher during the teaching and learning process. Loss (2000) intimated that skill acquisition involves listening and speaking as well as reading and writing from both the teacher and the student. There is no learning when there is communication breakdown. COVID-19 brought many challenges on communication between the teacher and the student. It had broken down the face-to-face communication which is highly used by students with HI resulting in their learning to be very difficult. This was a result of abrupt school closures and social distance issues leading to

a halt of physical meetings between teachers and learners. The challenge was worse to students with hearing impairments as they already have reduced or sometimes completely no hearing range. This situation on communication challenges was acknowledged by the Division officials that it was being experienced in their schools due to the coming in of COVID-19 and the measures developed to help reduce the spread of the disease.

Due to abrupt closure of the school, splitting of classes to allow one meter distance between students, use of non-recommended masks, unavailability of assistive devices that already exist and voluntary isolation of COVID-19 cases seriously affected communication between a teacher and a student. Compulsory wearing of face masks, splitting of classes and social distancing were some of the measures stipulated in the Guidelines on the Re-opening of Schools by following COVID19 measures, (Government of Malawi, 2020). School managers found it very difficult to put things in order due to chaos brought by COVID-19, mainly due to policies decisions made from above. COVID-19 also affected organizations that were supporting schools with financial and material assistance. Such organizations included Starkey Foundation, SOS, Plan Malawi, Save the Children, and St Johns of God Hospitaller. However, as a Division, they were doing their best to keep on supporting such schools from their limited budgets and the support from their partners in order to provide needed materials in schools. The Division also trained regular teachers in the area of inclusive education so that they increased the number of teachers that could effectively manage inclusive classrooms.

The school managers continued to receive complaints from all sides, parents, students and the community at large on the low performance of students due to COVID-19 disruptions. The school

managers were doing everything possible to salvage the situation. However, things were not adding up as the impact of COVID-19 was overwhelming. School managers narration of the situation was concurred by what the Division official had to say as they were all in management position, working hard to find the needed resources in schools, especially for children with hearing impairment as their resources are scarce, expensive and need technical know-how to use them.

Teaching and learning is a communication between a teacher and a student, and communication itself is a two-way process. Learning can be considered as change that is permanent in nature because change is brought into students by a teacher through techniques like developing specific skills, changing some attitudes, or understanding specific scientific law operating behind a learning environment (Sequeira, 2012). However, COVID-19 has distorted this process of communication between the teacher and the student, especially to students with hearing impairment who usually rely on physical meeting with the teachers. The coming in of measures to reduce the spread of COVID-19 has affected schooling so much that it has distorted the communication process. Measures like abrupt closure of schools, use of face masks that are not transparent, social distancing of one meter apart and lack of assistive devices and isolation when one is infected, disturbed the communication process between the teacher and the students.

The use of non-recommended masks makes total communication difficult, especially to students with hearing impairment. Communication is getting information through all means of communication including facial, lip-reading and body language (Hasanat, 2020). In fact, all students faced communication challenges during COVID-19, but it was worse to students with hearing impairment. Even if scaffolding as posited by Vygotsky (1987) could be done by some

teachers, use of non-recommended masks hindered communication as students with hearing impairment also rely much on lip-reading and facial communication. School managers tried to manage the situation, but it was not easy as the impact of COVID-19 on communication between teachers and students was huge. However, they tried to find means and ways of managing it by buying transparent masks so that a teacher and a student could lip-read each other and also sourcing assistive devices like hearing aids to be given to those who needed them in order to improve hearing range.

The students themselves were the victims of the challenges of communication that had arisen due to COVID-19. Students with hearing impairments could fail to lip-read teachers and fellow students who were putting on non-recommended face masks that covered the whole face. They were the ones that were subjected to one metre social distancing in classes that affected group work and pair work. Some of the measures set by government were good in reducing the spread of COVID-19, but it was not envisaged that such means would have a huge negative impact on students with hearing impairments. If they had engaged schools when formulating such measures, its implementation could have effectively assisted learners with hearing impairment.

Readiness of teachers and students to use the virtual classroom for teaching and learning was another challenge experienced globally (Chua, et al. 2022). In many countries, the education sector is not fully developed technologically to the point that teaching and learning can successfully take place in virtual classrooms. Malaysia education sector experienced the same challenge of not having an education sector not developed to successfully implement virtual classrooms. Not only did teachers and students lacked the technical know-how on the use of these technologies, but also

lacked access to the needed gadgets due to poverty. The situation made students with hearing impairment to be left out even more.

Students failed to participate in group discussions or pair work and putting on non-recommended masks affected the communication process. This communication challenge due to COVID-19 measures is detrimental to the education of students as it contradicts the social cultural theory which emphasizes learning from within the society through interactions with others (Briner, 1999). Learning is done through interaction in the society, but COVID-19 has removed this interaction aspect, leading to communication challenges resulting in low performance of students especially those with hearing impairment.

4.2 How School Management Implemented Inclusive Education with Emphasis on Students with Hearing Impairment

Under this objective, three key themes emerged and these were use of PPEs, screening issues encouraged and use of assistive devices. It was clear that all these themes were interconnected and that the aspect of barriers impacted all areas of teaching and teaching. The section will also look at how school management teams were implementing inclusive education during the COVID-19 with emphasis on students with HI as their adaptive measures.

4.2.1 Use of Personal Protective Equipment in Schools

PPEs include transparent face masks, hand washing facilities and sanitizers.

Basing on the testimony from the Division official, the study found that schools were very strict in the use of PPEs as adaptive measures to the COVID-19. He narrated:

“We have encouraged schools to be using transparent face masks so that both teachers and students can be seeing each other’s faces for easy lip-reading as those face masks that are not transparent prohibit lip-reading which enhances communication. The school managers have been reminded to enforce the use of transparent face masks for easy communication.”

The Division playing its overall responsibility of managing education system, encouraged all schools to implement adaptive measures that could help to reduce the spread of the disease. It facilitated trainings on how to implement such adaptive measures and helped in sourcing funds to buy materials to be used when implementing adaptive measures. The School managers had also put in place measures to make sure the right PPEs were used in schools and one of them at School C said that;

“My school has bought enough PPEs, including transparent face masks to be used by both, teachers and students, using COVID-19 funding we got from government and some well-wishers. Now teachers can communicate easily with every student even those with hearing impairment as they are using transparent masks that allow lip-reading easily”.

Despite that schools registered high enrolments compounded by the ever-rising cost of PPEs, school managers tried to provide PPEs like transparent face masks to students, teachers and support staff. They also made sure sensitization campaigns were done so that students understood the need to use the right PPEs all the time. One manager observed that teachers were happy as they could

communicate with all students, including learners with hearing impairments as they could lip-read each other.

“We were so much concerned when we were using PPEs that were not friendly to everyone, like masks covering the face. But now with transparent masks, we are easily communicating with all students”.

There are different types of PPEs like face masks some of which are recommended for use in inclusive classroom environment. The recommended ones are those that are approved by health personnel, including those that are transparent to allow facial communication like lip-reading to students with HI. Schools used COVID-19 funds provided by the Government and its co-operating partners to procure face masks. Students from all schools were very happy to use transparent masks, especially those with hearing impairment as they could easily lip-read their teachers and vice-versa. A student with hearing impairment at School B who usually uses facial communication because of their ability for partial hearing said that,

“I can now communicate with my teacher and friends as we have the needed PPEs like transparent face masks, I see their facial movements when communicating both in class and outside, I thank the school for giving me transparent face masks”.

Partial hearing impairment is when the student can hear some loud sounds but cannot hear soft sounds and oftentimes, they are either aided by lip-reading or sign language. The use of transparent face masks helped both the student with HI and those communicating with him or her as communication is a two-way traffic. Transparent face masks were used to prevent the spread of COVID-19 and to allow for facial communication like lip-reading. Parents too in all three schools were happy that now students could easily communicate with their parents as both used transparent face masks:

“We are happy our children can learn now as they have been provided with transparent face masks, in fact some of us we could not afford to buy these expensive masks for our children. Our children are now catching up with their studies, praise God”.

From the extract above, parents were happy that their children with HI could easily learn as they were able to communicate with each other and with their teachers. One parent at School C whose child has hearing impairment narrated that:

“Teaching and learning is done through communication as it is a means of sharing information.”

Discussion on the thematic area on Use of Personal Protective Equipment in Schools

Personal Protective Equipment are used in order to minimize the risk of contraction of diseases. The PPEs for COVID-19 includes surgical masks, particulate filter respirators (such as P2 or N95), gloves, goggles, glasses, face shields, gowns and aprons. The PPEs protect the wearer from infection. Proper use helps keep health workers safe and stops the spread of COVID-19 (Department of Health and Aged Care, 2022). The PPEs mainly needed at school include transparent face masks, hand washing facilities, and sanitizers. The Ministry of Education, through the Division encouraged schools to make available recommended PPEs to both teachers and students so that the spread of COVID-19 could be reduced. Some schools were making their face masks by sewing pieces of cloth. The government through the Division and the COVID-19 Response Committee, made available funds to buy PPEs in all public schools, even though it was not enough and many places misused them. The government emphasized the use of PPEs such as hand washing materials, sanitizers, transparent masks and others in schools. Even though the funds given to schools were not adequate for schools to buy the necessary PPEs at the right time, it was

the right step in the right direction. Due to the fact that there was huge demand for PPEs, it affected the supply chain thereby contributing to a sharp rise in the price index.

As stated earlier, school management made sure that inclusive education was implemented in schools by way of creating conducive learning environment for students with disabilities being implemented. They also made sure that students with hearing impairment were not sidelined in the middle of COVID-19 with regard to the provision of PPEs. Some suppliers flooded the market with non-recommended PPEs like sanitizers and masks, (Mandala et al 2021). The study narrates use of non-recommended PPEs as a challenge to eradicate COVID-19. The Ministry of Health was supposed to sensitize the public about the recommended PPEs to protect the masses from falling prey to counter-feit PPEs on the market. The use of correct PPEs helped a lot in reducing the spread of COVID-19, even COVID-19 as it brought about a lot of misinformation to the public. By conducting sensitization campaigns to the public, people gradually started using PPEs correctly, despite that some influential world leaders were reportedly disseminating incorrect information about COVID-19 which created unfounded fear.

The School managers have the responsibility to ensure that policies are implemented at school level. With regard to COVID-19 they needed to come up with adaptive measures so that learning continued to run smoothly. The school manager is central in facilitating systemic change and leading schools to adopt new attitudes and practices concerning student's education so that the system becomes friendly to everyone.

These adaptive measures were both from the Ministry of Education and cascaded to the Division and school level. One of the adaptive measures was availability of PPEs to both teachers and

students. The schools received funds to buy PPEs even though they were not enough. They were supposed to buy the recommended PPEs from the recommended suppliers. The government provided funds to schools for the procurement of PPEs and the support received from well-wishers helped a great deal. The PPEs targeted various groups of students, including those with disabilities like HI since they were also heavily impacted by COVID-19. Cases of COVID-19 reduced drastically when PPEs were distributed and used by both teachers and students. Another adaptive measure was the introduction of online learning. Schools that had capacity to offer online carried them out for examination classes, namely form 2 and form 4. But as already pointed out, students with hearing impairment were not considered.

The actual implementers of the policy directives were teachers. They made sure all students were adhering to COVID-19 measures at all times, that is, washing hands frequently, using sanitizers, putting on recommended transparent masks all the time, unless they experienced breathing challenges. The teachers themselves were reminding each other to put on transparent masks so that students with HI could lip-read them.

Teachers' love for their students was shown when they were also concerned when there were communication challenges arising from not using the right PPEs like transparent masks which enables easy communication between them and students and also, students with HI being left out the time online learning was happening as they had no gadgets to use (Aljedaani. et al 2022).

Teaching is an enjoyable profession when there is effective communication in a classroom between teachers and students, and among students themselves, like during group discussions or pair work as we all learn from the society through interactions. However, there were some situations where

due to the level of disability a student would require special PPEs and someone was to help them on how to use them. It posed a huge challenge because such special PPEs could not be easily sourced locally.

By and by students started using PPEs correctly, after realizing the importance of using the recommended PPEs that helped to reduce the spread of COVID-19, (Mandala, et al 2021). Challenges experienced due to prolonged and severity of COVID-19 taught schools to be serious with preventative ways such as use of recommended PPEs. It is paradoxical to note that students were both beneficiaries and victims of COVID-19 preventive measures. It was the case because students with HI suffered from the interventions like translucent face masks which did not enhance lip-reading. Students also made sure they washed their hands regularly even though soap could not be available at all time. They could make sure that they used the available PPEs in the right way even though sensitization on importance of using PPEs came much later. Sensitization campaigns in some schools was not successful as COVID-19 was associated with a lot of myths and misconceptions

The PPEs helped students, especially those with HI as they were heavily affected in matters of communication. PPEs helped to reduce the spread of COVID-19 and enabled the schools to reopen as there was assurance that COVID-19 fatal factor was reducing. Apart from protecting themselves from the disease, PPEs also helped students to protect their parents from contracting the virus when they interacted at home.

Parents were happy that their children were provided with the PPEs since many of them failed to provide PPEs for their children at first parents feared contracting COVID-19 because they were not using PPEs. Being breadwinners of the families parents needed to take care of themselves too, so that they could continue taking care of their children's needs (Epstein. 2009). Nothing can be successfully implemented in the education sector without the involvement of parents and they need to be made aware of the vital role they are expected to play towards the education of their children.

Parents also felt happy seeing their children being protected at school. They encouraged their children to wear face masks and wash hands regularly to protect themselves and their family members at home. Even though it is the responsibility of parents to take care of their children by providing them with the needed resources, some parents could not afford PPEs due to poverty.

Research has found out that parental involvement in the education of their children could encourage them to actively engage and improve their academic achievement in schools (Epstein. 2018).

4.2.2 Screening and Testing Encouraged

According to the Division official, screening exercises related to COVID-19 and students with hearing impairments were emphasized in schools:

“Teachers and students are encouraged to undergo COVID-19 screening so that those found with the disease can be isolated to prevent the spread of the disease. We have also reminded about allowing students with hearing impairments that they should be going to access screening services to determine their hearing ranges for easy communications”.

The above testimony showed that much emphasis was on the need to undergo screening and testing to reduce the spread of the disease from both the teachers and students. Students were encouraged to access screening and testing right in the school campus. In the same vein, the school manager at School A, said that:

“We have intensified sensitization on the need for testing and screening to everyone, that’s both teachers and students for COVID-19 and hearing impairment as it helps for early intervention to come in as both COVID-19 and hearing impairment require early intervention if we are to win the war against the disease. Due to screening, many teachers and students who were found with COVID-19 were sent into isolation while receiving medical attention, and students with hearing impairment who were fully identified after screening were fully helped”.

The school managers at both School B and C experienced the same situations on both COVID19 and HI. The school managers did their best to conduct sensitization campaigns to students. Since teachers regularly interacted with students, it was easy for COVID-19 to spread to both teachers and students. One teacher highlighted that:

“We have been encouraged to be undergoing screening for COVID-19 and also for HI so that we determine our hearing ranges as its hearing that has been also affected by COVID-19. The screening has helped us to know our COVID-19 status early and if diagnosed with it, early intervention could follow”.

COVID-19 affected everyone in the school and screening and testing helped people to know if they had the disease or not. In the event that one tested positive to the virus, they were recommended for early medical invention. Even though not everyone had undergone screening and testing, the majority of teachers and students did and saw the importance of using PPEs.

Some students that participated in the study at School B said;

“Testing and screening for both COVID-19 and hearing impairment is so much essential since it helps to identify a problem before it gets worse. Early diagnosis of COVID-19 is

very important as you could receive medical support before the situation gets worse”.

Students being the most victimized group were happy that health personnel could come to their schools to conduct screening and testing. If someone was found positive, they could get medical attention instantly and be given special meals.

Parents also appreciated the need for screening services for both COVID-19 and HI. One parent at School C said;

“We were encouraged to be reminding our children to be going for early screening as it helps to identify the problem early so that early intervention can be given. We encouraged our children to be going for screening now and then and those who are young ones were being escorted by parents or guardians”.

Parents are an integral part of the teaching and learning process and they were happy when they heard that students were accessing screening and testing services right at the school.

Discussion on the thematic area on Screening and Testing Encouragement

Medical tests are supposed to be done on a human being as they are prone to various infections and early testing brings early intervention. Screening helps to identify people who are at higher risk of a health problem so that they can be given early treatment or intervention (WHO 2020). Provision of testing and screening services lowers the risk of teachers and student’s exposure to COVID-19. It also helps to know those who are at risk due to other underlying even other health conditions that can contribute to contraction of the virus as a result of compromised immunity. According to the Division official, testing and screening exercises related to COVID-19 and students with hearing impairments have been emphasized in schools. There are a lot of benefits for

going for early testing and screening. The Ministry of Health committed itself to providing such services to students right in their schools.

School managers were to provide a conducive environment for teachers and students to access testing and screening services from health personnel right in their schools. The school managers linked up with officials at the nearest health centers to their schools so that they could be coming to school on specific days to provide the services. In the event that one was deemed to be at high risk of being prone to COVID-19, they were advised on how they could protect themselves from contracting the disease, (Chiwaula, et al 2021). Those who tested positive were isolated and given medical attention as well as necessary diet in order to boost their immunity. This is also emphasized by Department for Education in England in their study on supporting pupils at school with medical condition, that it is the responsibility of the school managers to take care of medical needs of students (Department for Education, 2015).

The teachers are the ones on the ground with students. Their frequent interaction with students exposed them to the risk of contracting and spreading the virus. However, with the coming of testing and screening services in schools, it reduced the risk of contracting the disease and those found with it were quickly helped. Appeal was made to teachers and students to take care of themselves and help to sensitize those who were in dilemma to go for testing and screening services, (Chiwaula, et al 2021). The schools in general took an initiative to reduce the spread and impact of COVID-19.

Teachers played a pivotal role in sensitizing students on the importance of going for regular testing and screening regularly. There were so many myths and beliefs about COVID-19 which prevented some teachers and students from going for testing. For instance, some religious beliefs and practices prohibit their followers from taking any form of medication when they fall ill and therefore to convince such people to go for COVID-19 testing and medication was a tall order. Again, getting consent from parents of students who subscribed to such religious beliefs was simply unattainable. From this narration it can be seen that although teachers were not considered for COVID-19 allowance as was the case with their counterparts in the health sector, their lives were equally hanging on a thread as they could also contract the disease.

The real beneficiaries of the programmes were the students. They were at the center of it all. Everyone worked so hard to protect them from contracting the disease, even though it is said that children have a better immunity compared to the elderly. Students were a group that could easily spread the disease to their parents, teachers and peers. However, due to good sensitization programmes by teachers and health personnel, a good number of students received the services and those at risk were advised on how they could care for themselves. Those who tested positive to the disease were given medical care and put on special diet to improve their immunity. Students who were helped by the initiative appreciated the programme since they were receiving such free support right at the school. Those who were deemed to be prone to high risk and tested positive were fully supported by providing them with medical attention and special meals for their recovery, (Chiwaula, et al 2021).

Parents also appreciated the need for testing and screening services for both COVID-19 and hearing impairment. COVID-19 affected all students, but it was worse on the part of students with hearing impairment. That is why they were encouraged to undergo testing and screening for both COVID-19 and hearing range so that they could be fully assisted.

It was the duty of parents to support their children all the time. Parents acknowledged their role and took care of their children. They appreciated all the support that was rendered to their children at school.

4.2.3 Use of Assistive Devices to Boost Hearing

Due to the outbreak of COVID-19 and the consequent issue of social distancing and compulsory wearing of masks to reduce its spread, serious communication barriers were created for students with hearing impairment. The Division official highlighted that such challenges to students with hearing impairment were real and that corrective measures were being sought through the Ministry of Education. He had this to say:

“As a Division, we have noted the challenge and through Ministry of Health and other partners, we are addressing the situation. Our students with hearing impairment are facing communication challenges as of now both teachers and students are encouraged to be putting on face masks which do not hinder facial communication. We have also noted that social distancing too is hindering communication. Due to these challenges, we have intensified on the provision of assistive devices to both teachers and students with hearing impairments”.

The assistive device like hearing aids were provided to students with hearing impairment to boost their hearing. The devices greatly improved hearing ability of students resulting in improved

communication which helped the students to understand easily the lessons they were learning. Both teachers and school managers in the schools under study appreciated the tremendous role the assistive hearing aids played in improving communication as commented by one teacher at school B:

“Coming to the use of face masks is disturbing communication in classes since there is coverage of the whole face of someone making effective communication to be difficult. Issues of facial and lip-reading is difficult nowadays. However, we have encouraged our students to be using assistive devices like hearing aids to boost hearing instead of relying on facial and lip-reading”.

The teachers encouraged students to use assistive devices as they were available to them. They also helped students on how to use the devices as they were oriented on how to use such aids. Students at school A and C echoed the views of the teachers that communication among students themselves was a challenge when they were putting on face masks. It was even more challenging when the students with HI were not making use of hearing aids.

One student with hearing impairment observed that the importance of hearing aids need not be overemphasized:

“We no longer enjoyed communicating to each other when we started using face masks. It has even been worsened as we do not have hearing aids that can be used to boost our communication. The main challenge is that hearing aids are expensive and not easily found in Malawi, but we need them so that our learning should progress well”.

Students were happy to be given assistive devices in order to improve their hearing. They had missed a lot when they did not have the hearing aids, but with the provision of the devices even their teachers were happy that effective communication was improved. Every parent wishes that

their children get better and quality education notwithstanding the nature of disability they may have. However, a parent of a child at one school said:

“Our children are facing challenges with communication as they need hearing aids to boost their communication, but these hearing aids are expensive and usually not readily available. We all know that learning needs communication between a teacher and a child but since our children do not have the devices, effective communication does not take place in class and as such there is no learning”.

Parents were encouraged to take part in advising students to wear hearing aids whenever necessary so that they could communicate easily with people. Putting on the hearing aids also helps someone to get used to using them so that they should not be feeling bad when everyone is not using them, they are for their benefit.

Discussion on the thematic area on use of Assistive Devices to Boost Hearing

Assistive devices are used to increase, maintain, or improve functional capability for individuals with disabilities (Johnston, Beard, & Carpenter, 2007). Examples of assistive devices are a cane, wheelchair, scooter, walker, hearing aid, or special bed. Using technology can help students with disabilities to enhance and improve their independence in academic and employment tasks, their participation in classroom discussions. It also helps them to accomplish some difficult academic tasks.

However, due COVID-19 and the resultant social distancing and the use of face masks communication challenges for persons with hearing impairment were made even more difficult. One Division official highlighted that such challenges to students with hearing impairment were real.

“The provision of recommended assistive devices is a game changer on the students with hearing impairment as COVID-19 restrictions has worsened the situation. Providing hearing aids to students through government support or well-wishers was encouraged and the right personnel to help students manage the hearing aids is ideal”.

The school managers had the role to make sure that assistive devices were made available to learners with hearing impairment so that teaching and learning continued. Since focus was on students with hearing impairments, hearing aids were supposed to be available to students. School managers ensured that there was availability of trained personnel to help students with hearing impairments use the available assistive devices whenever they needed them. With good coordination among school managers, Division and organizations concerned with inclusive education, it was easy to source such assistive devices. Non-Governmental Organizations like St John of God Hospitaller, Starkey Foundation, SOS Malawi, and African Bible College Audiology Clinic, provided support towards the cause. These organizations could provide for free assistive devices and other services whenever they were needed, and this was due to resourcefulness of the school managers. However, some assistive devices were not for free because the devices with much value were being sold, and many students failed to purchase them as such they relied on those that were given for free (Singal, et al 2021)

Teachers being the ones who interact with students on a daily basis, had a bigger role to play in the whole process of sourcing, fitting them on students and managing them. Many assistive devices, like hearing aids, are expensive and delicate. They need proper care and good maintenance when they develop a problem. This was the appeal that was given to students during orientation on how

to use these assistive devices. There are several types of hearing aids and they differ on prices due to model, year of make and country where they are made.

Teachers from the school's understudy expressed similar sentiments about the challenge of relying on devices that were solicited from well-wishers most of which were out-dated. Parents should be reminded that they should desist from over-depending on handouts like hearing aids, but rather they should be responsible for buying for the school needs of their children, including assistive devices whenever they are needed (WHO, 2021).

Among students themselves, communication was equally a challenge because they were putting on face masks. The coming in of free assistive devices improved their hearing range. The time students received hearing aids, communication challenges were at least solved. Teachers and students enjoyed communicating to one another. However, students should know that it was the duty of their parents to provide for their school necessities and not always depend on donations.

Every parent wishes their child to get quality education regardless of any disability they might have as it is the right of every child to have access to education. Parents wish their children to be independent one day by either getting employed or venturing into business. Even though schools already had problems, the coming of COVID-19 worsened the situation (UNICEF, 2012). The challenge was even much more felt by students with hearing impairment as they already had hearing problems. However, due to good coordination between parents and teachers through PTA, parents managed to source some assistive devices that were given to students who needed them most depending on the nature of the hearing defect.

The worry that parents had earlier on were played down due to the availability of assistive devices that were donated by government and some organizations that are partners in education. Parents were also reminded to play their role of providing school resources to their children when need arises because that is their responsibility.

4.3 Suggested Interventions in Implementation of Inclusive Education

4.3.1 Additional Recruitment of Teachers

One Division official said that government has started recruiting teachers both on permanent and temporary basis to sort out the problem of shortage of teachers which has been worsened by the coming of COVID-19.

“As a Division, we have just initiated what government through our line ministry has told us. We have received names of teachers and we have done the posting of teachers to various schools. It has to be known that these teachers include those who did inclusive education in order for them to help in the implementation of inclusive education even sensitizing regular teachers on issues involving inclusive education.”

The Division official highlighted that they did not have enough teachers and the COVID-19 situation worsened the problem as some teachers were sent into isolation after they tested positive to the virus. In addition, the splitting of classes to reduce the spread of the disease created the need for more teachers. The temporary recruitment by both government and PTA committees helped to ease the teacher student ratio.

The recruitment of additional teachers was perceived as an important step in a positive direction and it was also supported by the school manager at school C, who said the following:

“The new teachers deployed are helping a lot as we already have few teachers to be teaching in the classes. We have benefited from government deployment of teachers and our school level initiative which is temporary, these teachers have helped having created split classes due to COVID-19 to reduce the spread of the disease”.

Due to de-congesting classes as a measure of reducing the spread of the disease, more classes were created, which needed additional teachers. The school managers were happy to be supported with new teachers by government as they really came at the right time.

The programme of deploying new additional teachers happened in all schools under the study and it helped to solve the workload of teachers even though the new teachers were not adequate. Teachers appreciated the coming of new teachers to support them and one teacher at school B could not hide his appreciation of such an intervention:

“We are relieved now, three new teachers are better than none, we have three new teachers and they are helping teaching in the new classes created due to COVID-19”.

The deployment of new teachers had put a smile on the face of the other teachers because it reduced their teaching workload. Prior to the recruitment of new teacher’s it was a common experience that most teachers worked like donkeys that they were exhausted by the time they were scheduled to attend to the final lessons of the day. Due to fatigue, most of the teachers would resort to absconding such classes. As already noted most schools had few teachers and the splitting of classes due to COVID-19 worsened the situation. Another teacher at school C, said that;

“Wow, we have been really helped. Teachers are needed here so that learning happens. How could Government introduce the policy of splitting classes while there are inadequate teachers. The teachers we have received have started to help us so much, we wish all were put on permanent basis since not all we have received are on permanent basis, some are on temporary basis which means one day they will go”.

The new teachers were of different categories, some on permanent and some on temporary basis. The wish of the school was that all could have been on permanent basis so that they keep on working even after COVID-19 was completely eradicated. This could help to at least sort out the situation of shortage of teachers experienced in the schools. The student enrolment was increasing every term and disproportionate to the decreasing number of teachers on the ground.

Students from all three schools were happy due to the coming of new teachers. Students at school C expressed their excitement as follows:

“Even though teachers are not enough, we have received four new teachers at our school. We used not to learn geography some days because we had no teacher for the subject, but now we have one and we are learning the subject”.

This was also concurred by fellow students at the other two schools under study.

Students were happy to have new teachers who could help to reduce the challenge of not being attended to due to lack of teachers. Many newly formed classes, due to splitting of the larger classes had no teachers for some subjects

Parents too were happy due to the coming of new teachers. Through PTA, parents played an active role in the recruitment of teachers on temporary engagement:

“We are happy that we have taken part in recruiting teachers using our resources, this school is ours and we are always supposed to take part in every programmes happening for the good of our children learning”,

One parent from school B expressed the above compliment which was echoed by parents from the other two schools. Parents also showed sense of responsibility by employing teachers through PTA, even though they were not enough. Parents are the owners of the schools and as such they need to take part in finding solutions to the challenges their schools face.

Discussion on the thematic area on Additional Recruitment of Teachers

One of the things to be done to improve education during COVID-19 period as a means of intervention was to recruit more teachers to teach in the new or created classes after splitting.

Malawi has already few teachers in its schools and the coming of COVID-19 has worsened the situation. The recruitment of new teachers had to include specialist teachers as students with disabilities were negatively affected by COVID-19.

According to the Ministry of Education, about 1.6% of total secondary school enrolment are students with special needs. This figure reflects an increased numbers from less than 2,000 students with SNE in 2009/10 academic year to nearly 5,000 students in 2017/18 academic year. The majority of these learners were those with vision, hearing, learning difficulties, physical disability, deafness and blindness.

Teaching and learning of students with disabilities is affected by limited specialist teachers as well as relevant teaching and learning materials and infrastructure (MoEST, 2019). The Division official said that government has started recruiting teachers both on permanent and temporary basis to sort out the problem of lack of teachers which has been worsened by the coming of COVID-19. The newly recruited teachers would help to teach the new classes created as a result of splitting of classes, even though some of them were on temporary basis. The government had set aside additional funds to recruit more teachers as soon as possible. In fact, some were already being recruited at school level using PTA using.

It could have been good if all these decisions on recruiting of teachers were made with urgency and putting all the newly recruited teachers on permanent basis so that the problem of lack of teachers should not resurface. It is better to bring a permanent solution rather than doing something on temporal basis. There was need to put in place clear legal instrument that during pandemics special funds were set aside towards the exercise of recruitment of teachers permanently into the system.

According to WHO (2020), adults who are 60 years and older and people with underlying health conditions are at a higher risk of severe disease attack and death. The decision to return to a teaching environment depends on the individual and it should include consideration of local disease trends as well as the measures being put in place in schools to prevent further spread. More teachers are needed since some are also being infected by the virus and mostly dangerous to older people and those with chronic illnesses.

The school managers are supposed to be requesting for additional teachers from the Ministry through their Divisions and they should never be tired of reminding the officials at Division about the need for additional teachers in schools. The school manager is the one who knows in which subject teachers are needed at their school through staff return records. School managers are usually supposed to be doing management work only, but due to lack of teachers, many school managers also have huge teaching loads apart from attending to administrative matters. This situation forces them to realize that they need more teachers to come in and support the work force so that they remain in their offices attending to other school matters. The issue of recruitment of additional teachers was supported by all school managers.

The programme of deployment of new teachers had happened in all schools under study and it helped to solve workload problem of teachers. Since government, NGOs and PTA were taking part in teacher recruitment, the exercise has helped to increase the number of teachers recruited at once, despite that some of them were on temporary basis. International organizations also helped with funds to recruit teachers as an emergency response to COVID-19 to support the Malawi Government to reduce the negative impact of COVID-19 on education.

Teachers are in a better position to know that the workload they have needs additional manpower reinforcement since they are always on the ground, teaching students in the classrooms. They often withstand too much workload in the schools and usually they teach more classes than expected. The teacher student ratio is supposed to be one teacher to 60 students in regular classrooms, but in many schools, students are more than 60 in a classroom and the teacher is supposed offer his individual support to all students, which is practically impossible while in an inclusive classroom, it is supposed to be 40:1 (MoEST, 2019). However, this is not the situation in many schools in Malawi. Teachers are handling more than 80 students in their classes which negatively affects the delivery of quality education. Teachers appreciated the recruitment and deployment of new teachers to support them. However, as secondary schools offer many subjects, there is need to balance the deployment of teachers according to the subject needs in schools and consideration of including special needs teachers in the recruitment process to help orient regular teachers on implementation of inclusive education (Munthali, 2021).

As the saying goes: ‘there is no school without teachers’, there is urgent need to recruit qualified teachers and these should comprise both regular and specialist so that students with disabilities are

fully supported. If this is done students with disabilities will achieve their educational goal and become self-reliant in future. Teachers are always positive about their work, but are overwhelmed by too much workload. The situation is further compounded lack of incentives such as allowances and low salaries.

Whenever teachers are not available for their lessons, students suffer a lot as they go back home without learning. The trend is very common in many schools in Malawi. Students with disabilities are not spared from this habit of teacher absenteeism (Singal et al 2021). Students with such disabilities as hearing impairment are already at a disadvantage of not effectively grasping lesson contents due to the communication challenges they face in class. The deployment of new teachers in schools therefore brought about tremendous excitement to students because it would ease the problem of the shortage of teachers. Students from all three schools were happy due to the coming of new teachers.

Every parent becomes happy when their children go to school. They are taught by their teachers and whenever children go to school but do not learn, it becomes a big concern to parents. Parents wish their children to be educated so that one day they will become self-reliant, by being employed or starting a business. People who are educated make good decisions in business and their businesses flourish. The coming in of teachers in all the three schools brought huge excitement to parents since their children would not be missing classes due to lack of teachers. In fact, parents took part in recruiting some teachers on temporally basis through PTA funds.

4.4 Personal Protective Equipment Enforcement

There was enforcement of use of PPEs in order to reduce the spread of COVID-19. People use PPEs to help in protecting themselves and others from contracting the disease. The Division official noted:

“Through guidance from Ministry of Health, we have trained school leadership on the use of personal protective equipment and everyone has to use them in schools. We have also allocated funds for COVID-19 fight in schools so that they are able to buy equipment. The PPEs mostly used include; recommended transparent masks, soap, hand sanitizers, gloves, gowns, aprons. The funds to buy PPEs came from government through COVID-19 Task Force Committee. We have also received donations from different well-wishers in terms of PPEs and we have distributed them to schools”.

Provision and use of PPEs were two different things. The PPEs were provided in schools but not everyone was using them. There was intensification of sensitization campaigns on the importance of correct use of PPEs and gradually, students started using them correctly even though sometimes they were in short supply. Most of PPEs were freely donated to students as many of them could not afford buying them. School manager for school C said;

“We received funds to be used to buy PPEs and we have bought them, and they are being used by both teachers and students. We have also received donations in material and cash for PPEs and we thank all those who have supported us to fight against COVID-19. In fact, materials have helped us to reduce the spread of the disease like washing hands, sanitizer use, transparent masks. Those who have been infected by the disease have been sent into isolation and keep on taking medication”.

The schools received funding from government to buy PPEs and also support from different organizations.

The school manager for school A also appreciated the provision of funds to buy PPEs from government and said;

“We have bought PPEs to be used for both teachers and students. The materials include’s buckets, sanitizers and soap. We have received a lot support from well-wishers both in cash and material to fight against COVID-19”.

The provision of PPEs helped to reduce the spread of the disease, but some of the PPEs were not the recommended ones because the market was flooded with a lot of counterfeit PPEs. They include surgical masks and other types of masks which are used for general use in hospitals. But since the demand for masks was very high, different masks flooded the market. Even some sanitizers were fake and people could buy anything on the market due to desperation due to the desperation created by the pandemic. The schools bought the needed PPEs even though they were expensive and scarce, but to find the correct PPEs like transparent masks was not easy. Both local and international organizations intervened to help in supplying the PPEs.

Teachers being in the front line of meeting with students on daily basis were at the potential risk of contracting the disease, but with the coming of PPEs it gave them a huge relief from the worries. One teacher at school B said:

“We can teach with ease as we have PPEs for protection. We were not feeling safe in crowded classes which were recipe for COVID-19, but with PPEs we are at least safe. In fact, effective teaching is happening now, even to students with hearing impairment as we are using transparent masks which enables us to easily use facial communication easily”.

The teachers too were not safe from COVID-19 since they were prone to infection due to frequent physical interaction with students. Teachers also handled students’ exercise books which were another medium of COVID-19 transmission.

This was supported by a teacher at school C, who said:

“COVID-19 is a deadly disease and working without PPEs was risking our lives, even though we were not given risk allowance. Protecting yourself from the disease was of paramount importance”.

The scenario was the same situation by teachers from school B. The teachers pretty well knew that the disease was deadly and claimed lives of teachers as well as students. Therefore, absence of recommended PPEs was worrisome to everyone as reports of COVID-19 fatalities were the order of the day.

Students were happy being given the required PPEs for them to protect themselves from the disease, one student with hearing impairment at school C said that;

“I am happy I can use transparent masks which enables me to see through it. I can now easily lip-read my teacher and fellow students. I can wash my hands regularly with soap or use sanitizers. Using translucent masks making lip-reading to be difficult, leading to communication failure”.

Another student at school A, concurred with his friend in appreciating the importance of PPEs in their school. Students were happy to access PPEs as these helped to reduce the spread of the disease. Transparent masks enabled students with HI to effectively communicate with everyone and this contributed to effective learning. Parents were happy to see their children were given PPEs in the schools because a number of them could not afford buying them due to poverty.

One parent had this to say:

“We appreciate that our children have been given PPEs to protect themselves from the disease. In fact, they are protecting us as well since we are old people at risk of contracting the virus. We encourage our children to be regularly washing their hands, putting on transparent masks and use sanitizers”.

This was concurred by other parents from the two schools. Parents played an important role in making sure PPEs were accessed by their children in schools. Parents were expected to be using PPEs as well so that they become role models in using PPEs. They were also expected to encourage their children to continue using PPEs.

Discussion on the thematic area on Personal Protective Equipment Enforcement PPEs for COVID-19 include surgical masks, particulate filter respirators (such as P2 or N95), gloves, goggles, glasses, face shields, gowns and aprons. PPE protects the wearer from infection and were used as a means of intervention so that teaching and learning continued. Proper use helps keep health workers safe and stops the spread of COVID-19 (Department of Health & Aged Care, 2022). The PPEs needed at school include transparent face masks, hand washing facilities and sanitizers. The Ministry of Education, through the Divisions, has encouraged schools to make available recommended PPEs to both teachers and students so that the spread of COVID-19 was reduced. The government, through COVID-19 Response Committee, made available funds to all public schools for the procurement of PPEs.

The proper use of PPEs proved to be of great importance towards the fight against the spread of COVID-19. Countries like China instituted strict measures that quickly helped to control the spread of COVID-19. One such measure was compulsory use of PPEs. This is reported in the

WHO COVID-19 report about the way China managed COVID-19 (WHO, 2020). Even though China used strict measures that infringed upon human rights, the measures effectively helped to reduce the spread of the disease. In Malawi, COVID-19 measures included the use of recommended PPEs which enforced through sensitization on its importance, with much community sensitizations campaigns in communities so that COVID-19 messages trickled down from the community to school level.

Funding is greatly needed for sensitization programmes to be successful. Due to misunderstanding of democracy in Malawi, many people still do not take COVID-19 messages even though COVID-19 related deaths are still being reported. Issues of relating COVID-19 to traditional beliefs also brought about misconceptions. However, with coordinated effort among all stakeholders, the battle against the pandemic will likely be won. Schools should stick to strict rules on upholding the correct and recommended PPEs. Government has also to make sure that deliberate efforts are put in place to ensure that funds for COVID-19 are not misused. On its part, the Ministry of Education should develop strict policies on eradicating COVID-19 in schools, particularly by dealing with the problem of congestion in classrooms which contributes to the spread of the disease, (Accelerated Funding for Malawi,2020). Although there has been an intensification of sensitization campaigns on the use of PPEs, there must be a serious enforcement of use of PPEs so that we reduce the spread of COVID-19.

The players who made sure that enforcement of PPEs was done included school managers. They ensured that such programmes were implemented in their schools. School managers know well about their school environments and they just needed enough financial resources to implement the

programmes since school managers know their staff members very well and they can easily select a team of staff members to champion the programmes. The team of teachers to champion the programme can easily come up with activities on how they will be reaching out students. Among others, the teachers could work with the students so that students develop a sense of ownership of the programme.

Students in schools have high respect for their school managers and teachers. With such advantage and good sensitization, many will adopt the idea of constant use of PPEs. The enforcement on use of PPEs has to consider all students, including those with disabilities. Students who cannot use the normal PPEs should be provided with the modified ones to suit them and those who cannot use PPEs due to disability, should not be forced (Aljedaani Et al, 2022).

As already highlighted above, teachers are vulnerable to COVID-19 due to regular interaction with students. By virtue of their authority over students, teachers command a great deal of respect among students (MoEST, 2020). This existing trust is a good foundation to convince students to start using all available and recommended PPEs for their own good. The enforcement should not reach a point of violating students' rights, but it should convince them that the use PPEs is for their own good. Teachers should be role models in the using recommended PPEs and in that way students will not find difficulties accepting and adopting the use of the PPEs when they see their teachers are using them.

Students were the key stakeholders in the drive to enforce the use of PPEs since the ultimate goal was to protect them from contracting and spreading the virus. However, it has to be noted that

students have different beliefs, both religiously and culturally which are beyond the control of school managers. As such school managers should try to engage the parents whenever they are planning programmes that will directly or indirectly impact on students. Parental consent is very important in whatsoever should be done on students, particularly with regard to COVID-19 programmes in schools (MoEST, 2020). Because of their background as stated above, some will not accept the use of PPEs and as such it should not be imposed upon them. Such students just need to be civic educated that PPEs are for their own benefit. Students have to know that using PPEs is for their own good and their parents, so if students contract the disease at school they can easily transmit it to their parents who are already in the risk age bracket of COVID-19 fatalities owing to natural decrease in body immunity due to old age.

The enforcement of use of PPEs cannot work if parents are left out of the equation. Parents are the custodians of the children and any decision at school concerning children should involve them. It has to be known that schools are owned by the community and enforcement of any programme should involve parents for effective implementation (Singal, et al 2021). Parents should take a leading role in implementing such ideas. Parents should provide suggestions on how the enforcement of the programmes will be done and the consequences that will follow when students fail to abide by the rules. However, with proper sensitization of parents easily implement programmes since they will monitor the use of PPEs right from their homes. Parents should take part in making sure PPEs are available in schools, either by buying for their children or indeed sourcing donations from organizations and people of good will. Parents will be happy to see their children being free from COVID-19 in the schools thereby minimizing its spread.

4.5 Assistive Device Provision

One of the changes that could be instituted in schools is the provision of assistive devices to boost hearing to students with hearing impairment. This is because one of the groups that had been negatively affected by COVID-19 was the students with hearing impairment as the pandemic affected their communication both in class and outside. One official from the Division acknowledged the need for the provision of assistive devices such as hearing aids:

“As a Division, we know the challenges faced by students with hearing impairments during COVID-19 as their challenges are much more compared to students without hearing impairments. We have intensified partnerships with organizations that can help us in the provision of assistive devices such ABC Audiological clinic, Starkey Foundation, St Johns Hospitaller, public hospitals and private ones. We are working on making available these assistive devices to all students who will need them so that their hearing range improves.

The school managers should take an initiative of being interested in networking with both public and private hospitals which have audiological services to be offered to patients. Some of the school managers showed their interest in making sure there was availability of assistive devices to students with hearing impairment that need them, as expressed by one of the school managers:

“Our school is much interested in making sure students with hearing impairments also access education by making sure they are provided with all the needed assistive devices for them not to face any communication challenge. We have intensified the implementation of inclusive education by orienting all teachers on how to implement it and also training those on how to make sure assistive devices given to students are working all the time like hearing aids. We are also making partnerships with organizations involved in inclusive education that is both educational and health related organizations both within and outside our country. The organizations help in the provision of assistive devices like Starkey

Foundation which comes now and then in Malawi to offer their services to Malawian people.

School managers at the other two schools also concurred with the first manager on what should be done to make sure students with hearing impairment have access to assistive devices when need arises.

Teachers need to take a keen interest in making sure that students with hearing impairments have access to assistive devices whenever they are needed as they improve their communication, as it was commented by the teachers:

“As teachers being in frontline in meeting with students almost every day, we know how important assistive devices are to students who need them to improve their hearing ranges. We have been oriented on how we can help students with hearing impairments by making sure they too participate in all class work, both in class and outside. We have also been involved in training students who use these assistive devices on how they can take care of such devices bearing in mind that the devices are expensive.

The responsibility of making sure assistive devices was available to students who need them was for everyone, that is, Government, private organizations, schools, parents and students alike. Parents should be in the forefront in making sure they provide assistive devices to their children whenever they are needed.

Discussion on the thematic area on Assistive Device Provision

Assistive devices are tools that help a person with disability to do a certain task. Examples of assistive devices include canes, wheelchairs, scooters, walkers, hearing aids and special beds. They are used to increase, maintain, or improve functional capability for individuals with disabilities"

(Johnston, Beard, & Carpenter, 2007). Using assistive devices help to reduce challenges that students with hearing impairments face, which have become worse with the coming of Covid-19 (Disability Horizons, 2018). They are facing challenges like:

- verbal abuse because they are not understanding what someone is saying to them.
- online lessons/classes.
- people sending voice messages to their phones.
- being victimized when you ask someone to raise voice so that you understand better.
- being on high-alert when waiting at busy places where they use voice messages only to communicate like at airports and train stations.
- the coming of using zoom meetings, phone interview is a challenge to them.

Using technology can help students with disabilities to enhance and improve their independence in academic and employment tasks. It also embraces their participation in classroom discussions and help them to accomplish some difficult academic tasks. Due to the coming of COVID-19 and the related issue of social, it has resulted in students with hearing impairment to face communication problems, apart from the already existing hearing challenge they have. Due to these challenges which they had which were worsened by COVID-19, they needed assistive devices to boost their hearing range without which effective communication would not be achieved (Singal, et al 2021).

One of the interventions that could be made include the provision of assistive devices to boost hearing ability of students with hearing impairment. This is because students with hearing impairment continue to face communication challenges both in class and outside. Provision of

assistive devices has been there but it ought to be improved since it has been made worse with COVID-19. There has to be deliberate measures to set aside funds for the provision of these devices in schools through the Ministry of Education. Again, line ministry should revise its partnership agreements with all organizations working in the education sector to include issues of disability in their programmes and activities (Singal, et al 2021).

The school managers should take greater initiative and interest of being interested in networking with both public and private hospitals that have audiological services to be offered to students with HI. Some of the school managers showed their interest in making sure there was availability of assistive devices to students with hearing impairment, but it has to be enhanced now that the challenge was getting bigger. The school managers should develop a good partnership with local organizations that provide support to of students with disabilities such as St. Johns Hospitaller, ABC Audiological Clinic, SOS and some international organizations like Starkey Foundation. These organizations help a lot in the provision of assistive devices as they are service providers to students with disabilities and their working together is of paramount importance (MoE India, 2020).

Teachers struggled in making sure that students with hearing impairments have access to assistive devices whenever they are needed since they improve their communication. The teachers experience situations where students have difficulties hearing important pieces of instructions due to lack of hearing aids. Teachers may link up with fellow teachers in other schools so that students are provided with masks whenever they need them. Teachers should develop tangible ways of identifying students with hearing impairment who struggle to hear in class because sometimes

these students suffer in silence since they do not know where to report their situation. There has to be an orientation to all teachers on how to handle students with hearing impairments.

4.6 Conclusion

The purpose of this chapter was to highlight the findings and discussions which emerged on account of the interviews and focused group discussions that were carried out according to research objectives. It is clear from the findings and discussions of this research study that COVID-19 has had a negative impact on the management of students with hearing impairments in inclusive school settings. As the narratives have shown, COVID-19 had so much devastating impact on education at large and a lot has to be done so that education continues during pandemics. However, on a positive note, COVID-19 had awakened us from slumber on developing ways of making sure education continues during pandemics and has also helped us to take serious steps on putting in place and enforcing hygiene practices.

CHAPTER FIVE: SUMMARY FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary Findings

The COVID-19 pandemic created many barriers to learning for all students, but it was worse to students with hearing impairment. The pandemic worsened the hearing problem that already existed in students with hearing impairment. The findings also uncovered the interventions that were developed to reduce the spread of the diseases which had a negative impact on the learning of students with hearing impairments.

One of the interventions which was introduced to reduce the spread of the disease was splitting classes to reduce classroom overcrowding which created a situation for the spread of the disease. However, the place to accommodate the split classes was not adequate since many schools, including those under study did not have rooms to accommodate split classes. The situation led to learning in the open ground and whenever rains came, classes were disrupted and disturbed.

COVID-19 preventive measures also worsened communication problem between teachers and students or among students themselves. This was due to the use of non-recommended PPEs, like face masks, which were not transparent to allow lip-reading and facial communication to students with hearing impairment. Another issue on communication challenges was on the creation of social distance which made it impossible for students to conduct group or pair work discussions. Again, teachers support to individual learners who needed help was discouraged in a bid to control the transmission of COVID-19.

The first objective was achieved by finding the impact of COVID-19 on management of students with HI. The negative impact included such issues as school closure, one metre social distancing between students, use of non-recommended PPEs like face masks among others. Although these measures helped in making sure learning continued, they had negative impact on the teaching and learning process of students with hearing impairments. The second objective was achieved by finding out that school managers tried their best to make sure that implementation of inclusive education continued amid COVID-19 measures. However, these measures did not fully benefit learners with HI despite that school managers encouraged the use of transparent face masks instead of ordinary masks for easy sign language interpretation. School managers also helped to procure recommended PPEs when using funds from government, they helped to recruit auxiliary teachers on temporary basis using school funds in liaison with PTA committees. The third objective was achieved by finding out interventions that were made and those that could be put in place in future to better support implementation of inclusive education during pandemic like COVID-19, Ebola, global warming among others. The findings reveal that schools came up with interventions such as requesting government to employ more permanent teachers, enforcement of the use of PPEs, provision of assistive devices, working on our curriculum and educational policies so that they should be able to respond to emergencies in education. All these objectives were achieved through data that was collected using multiple instruments.

5.2 Conclusion

The aim of this research was to find out the impact that COVID-19 brought on the management of students with hearing impairments. Through the findings, it was discovered that HI group was one

of the groups of students that was seriously affected by COVID-19 in the schools under the study in the Northern Education Division. All the three objectives were achieved through data that was collected and analyzed for good interpretation and recommendations. The research had shown how COVID-19 affected the education system largely by the abrupt and indefinite closure of schools. The group of students that was affected most was students with hearing impairments since the measures that were developed to keep learning going on were not friendly to them, such as distance and online learning. The other COVID-19 preventive that also affected students negatively included PPEs that caused barrier to effective communication between students and teachers like face masks that could cover the face thereby rendering lip-reading non-existent. The education system must bring immediate change through robust policies that will make sure inclusive education receives the full support that it deserves even during national or global calamities or epidemics. This change will make the management of students with hearing impairment possible even during the pandemics like COVID-19, as they also have right of equal access to education.

It is the duty of everyone to keep on working hard in insulating our education system from the effects of the pandemics. The pandemics are devastating to our education system. Therefore, changes have to be made to our education system so that it positively responds to emerging issues like natural disasters and epidemics.

It was important that school managers were committed to making sure that inclusive practices and principles that promoted the development of inclusion within the school community were followed. School managers were to ensure that every child was inclusively participating in the learning process in the middle of the measures that were put in place to reduce the spread of the

COVID-19.

5.3 Recommendations for Policy and Practice

The outbreak of COVID-19 changed many things worldwide as it affected all sectors of life, including education. We lost so many people both old and young. The education of students was negatively affected as it brought unexpected holidays and when schools re-opened, measures were instituted to reduce its spread and devastating impact. The measures however had a devastating impact on education such as the use of non-recommended face masks contributed to disruption of communication to students with hearing impairment who usually rely on lip-reading and facial communication. This awkward situation created a very difficult environment to the extent that students with hearing impairments could not be assisted accordingly. Pandemics like COVID-19 will be coming in the future, and this is a wakeup call to the education sector get ready and be prepared for more pandemics in future, so that even if they occur, schooling has to continue without slightest disturbance.

Some of the recommendations put forward in light of the finding include developing robust policies that will be able to help make the education system fairly respond to shocks. This would include, enough funding to the education sector that will be used during such emergencies like buying all materials that will be needed so that all students access education regardless of their disability, developing curriculum that can be used even during such situations like transitioning to using technology that will not hinder inclusive education, preparing teachers on how they can work with using modern technologies, setting aside risk allowances for teachers during such difficult times, as teachers lives are also in danger during occurrence of pandemics, providing psychosocial support to teachers since such times are terrifying to everyone, developing good partnerships with

non-governmental organizations and donors concerned with education, employing adequate teachers including special needs teachers that will help in inclusive education, orientating regular teachers and training more specialist teachers. With such recommendations, our education system might be able in future to withstand to other pandemics but currently, our education system has failed to withstand the COVID-19 pandemic shocks. If such suggestions are implemented, management of all students will be possible, including those with hearing impairment. COVID-19 has come as a wake-up call to education system so that immediate changes have to be instituted since no one knows when another pandemic might strike. It is said that failure to prepare, is preparing to fail. There must be a re-thinking on our education system so that it can respond to pandemics inclusively when measures are taken to keep on in trying to make learning continue without leaving some students behind since pandemics will keep always crop up.

5.4 Recommendations for further research

This study has only tackled the impact of COVID-19 on the management of students with hearing impairment. However, there are other disabilities that were affected due to COVID-19. Hence further studies are recommended to explore the impact of COVID-19 on teachers and students with other forms of disabilities.

5.5 Contribution of the Research

The research has helped to find out how prepared our education system is to withstand the pandemics and be in a position to continuously provide quality and accessible education to the populace. The study has revealed that there is much yet to be done in our education system so that

it can withstand deadly pandemics while enabling learners to have continuous access to quality instructional support during pandemics. While the Malawi Government did its level best within its capacity, a lot ought to be done so that access and equity to education meaningfully achieved without creating further disparities especially for the already disadvantaged group of learners, like those with hearing impairment. The research has revealed that lack of preparedness to handle disasters negatively impact on education, especially when it comes to provision of education to students with diverse needs, especially those with HI. Instead of equalizing opportunities for students learning, the measures to mitigate the spread of COVID-19 pandemic brought further inequalities. The study therefore, contributes to the education discourse on how best to balance between the measures to contain the pandemics without exacerbating the already existing barriers to learning for the already disadvantaged students.

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Appendixes

Appendix 1: Questionnaire for School Managers

Dear respondent

I am Emmanuel Kabuye, a student at Mzuzu University pursuing a Masters of Education in Leadership and Management. This questionnaire seeks information on how COVID-19 has affected management of implementation of inclusive education specifically to students with hearing impairment. The information to be gathered is for the academic purposes and will be treated with uttermost confidentiality.

NAME OF THE SCHOOL.....

A: PERSONAL QUESTIONNAIRE INFORMATION

SEX: Male..... Female.....

1. How is your school implementing inclusive education during this COVID-19 era?

.....

.....

2. How has COVID-19 affected the implementation of inclusive education in your school?

.....

.....

3. What changes has your school developed so that the implementation of inclusive education continues during this COVID-19 time mainly for students with hearing impairment?

.....
.....

4. (a) Are the changes developed helping in the implementation of inclusive education or not, give reason for your answer?

.....
.....

(b) Are the changes developed helping in the implementation of inclusive education, especially for students with hearing impairment?

.....

5. What do you think can be a solution to challenges your school meets in implementing inclusive education especially for students with hearing impairment during COVID-19?

.....
.....
.....
.....

Appendix 2: Questionnaire for Division Official

Dear respondent

I am Emmanuel Kabuye, a student at Mzuzu University pursuing a Masters of Education in Leadership and Management. This questionnaire is seeking information on how COVID-19 has affected management of implementation of inclusive education specifically to students with hearing impairment. The information to be gathered is for the academic purposes and will be treated with uttermost confidentiality.

NAME OF THE DIVISION.....

A: PERSONAL QUESTIONNAIRE INFORMATION

SEX: Male..... Female.....

1. How has the management of implementation of inclusive education been affected by COVID-19 at both division and in schools under the study?

.....
.....

2. How are school managements implementing inclusive education with focus to students with hearing impairment in your division mainly those who need sign language?

.....
.....

3. What are some of the effective ways or changes that have been brought so that learning continues for students with hearing impairment during COVID-19?

.....
.....

4. (a) According to your observation as you move around schools, are the changes helping in the implementation of inclusive education during COVID-19 era?

.....
.....

(b) Are the changes helping especially for students with hearing impairment?

5 What are your thoughts in moving forwards interms of the implementation of inclusive education during COVID-19 era or similar future pandemics?

Appendix 3: Questionnaire Focused Group Discussion Guidelines

Dear respondent

I am Emmanuel Kabuye, a student at Mzuzu University pursuing a Masters of Education in Leadership and Management. This questionnaire is an interview on how availability of Sign Language interpreters affects implementation of inclusive education specifically to students with hearing impairment. The information to be gathered is for the academic purposes and will be treated with uttermost confidentiality.

NAME OF THE SCHOOL.....

A: PERSONAL INFORMATION

SEX: Male..... Female

ITEM	YES	NO	COMMENT
Has Covid-19 affected your learning			
Have you been learning during school lockdown using online learning?			
Did you have gadgets to use during online learning?			
Was the sign language service available to those who needed it during online learning?			
Were the teachers helping you individually whenever you needed help during online learning?			
Were your parents helping you at home during online learning?			

How has the pandemic affected your education?			
What should be done to ensure you continue learning during Covid-19 and similar pandemics in future?			

:

Appendix 4 Questionnaire for Parents

Dear respondent

I am Emmanuel Kabuye, a student at Mzuzu University pursuing a Masters of Education in Leadership and Management. This questionnaire is seeking information on how COVID-19 has affected management of implementation of inclusive education specifically to students with hearing impairment. The information to be gathered is for the academic purposes and will be treated with uttermost confidentiality.

NAME OF THE SCHOOL.....

A: PERSONAL INFORMATION

SEX: Male..... Female.....

1. How has the outbreak of COVID-19 affected your child's teaching and learning?

.....

2. Explain how school management in conjunction with parents of students are implementing inclusive education during this time of COVID-19?

.....

3. What changes have been brought up from all school stakeholders so that the implementation of inclusive education continues during this COVID-19 era as well as for students with hearing impairments?

.....

4. How do you help your child in their school work during this time of the pandemic?

.....
.....

5. As parents, are you satisfied with the changes brought in or not, give reasons for your answer?

.....

6 What can be the best sustainable solutions to the challenges brought in due to COVID-19 situation?

:

Appendix 5 Questionnaire for Teachers

QUESTIONNAIRE FOR TEACHERS

Dear respondent

I am Emmanuel Kabuye, a student at Mzuzu University pursuing a Masters of Education in Leadership and Management. This questionnaire seeks information on how COVID-19 has affected management of implementation of inclusive education specifically to students with hearing impairment. The information to be gathered is for the academic purposes and will be treated with uttermost confidentiality.

NAME OF THE SCHOOL.....

A: PERSONAL INFORMATION

SEX: Male..... Female.....

1. How has school management helped in the implementation of inclusive education during COVID-19 time?

.....

.....

2. How is school management helping in the implementation of inclusive education during this COVID-19 time?

.....

.....

3. What are some of the effective ways of implementing inclusive education especially to students with hearing impairment during COVID-19 era?

.....
.....

4. How are the suggested changes helping in the implementation of inclusive education especially to students with hearing impairment during COVID-19 time?

.....
.....

5. What do you think is the solution to the challenges caused by COVID-19 in the implementation of inclusive education?

.....
.....

:

Appendix 6 Interview Guide for the Division Manager

1 How has COVID-19 affected the implementation of inclusive education in your division, especially to students with hearing impairment?

.....
.....

2 What suggested solutions has your office developed to make sure inclusive education is going on especially to students with hearing impairment?

.....
.....

3 How is inclusive education implementation in general going on in your division?

.....
.....

Appendix 7: Research Ethics and Regulatory Approval Letter from Mzunirec



MZUZU UNIVERSITY

DIRECTORATE OF RESEARCH

Mzuzu University
Private Bag 201
L u w i n g a
M z u z u 2
M A L A W I
TEL: 01 320 722
FAX: 01 320 648

MZUZU UNIVERSITY RESEARCH ETHICS COMMITTEE (MZUNIREC)

Ref No: MZUNIREC/DOR/22/47

12th April, 2022

Emmanuel Kabuye,

Mzuzu University,

P/Bag 201,

Mzuzu.

Email:

kabuyeemmanuel@gmail.com

Dear Emmanuel,

**RESEARCH ETHICS AND REGULATORY APPROVAL AND PERMIT FOR
PROTOCOL REF NO: MZUNIREC/DOR/22/47: ASSESSING THE IMPACT OF
COVID-19 ON MANAGEMENT OF STUDENTS WITH HEARING IMPAIRMENTS**

Having satisfied all the relevant ethical and regulatory requirements, I am pleased to inform you that the above referred research protocol has officially been approved. You are now permitted to proceed with its implementation. Should there be any amendments to the approved protocol in the course of implementing it, you shall be required to seek approval of such amendments before implementation of the same.

This approval is valid for one year from the date of issuance of this approval. If the study goes beyond one year, an annual approval for continuation shall be required to be sought from the Mzuzu University Research Ethics Committee (MZUNIREC) in a format that is available at the Secretariat. Once the study is finalised, you are required to furnish the Committee with a final report of the study. The Committee reserves the right to carry out compliance inspection of this approved protocol at any time as may be deemed by it. As such, you are expected to properly maintain all study documents including consent forms.

Committee Address:

Secretariat, Mzuzu University Research Ethics Committee, P/Bag 201, Luwingu, Mzuzu 2;

Email address: mzunirec@mzuni.ac.mw

Wishing you a successful implementation of your study.

Yours Sincerely,



Gift Mbwele

MZUZU UNIVERSITY RESEARCH ETHICS ADMINISTRATOR

For: CHAIRMAN OF MZUNIREC

Committee Address:

Secretariat, Mzuzu University Research Ethics Committee, P/Bag 201, Luwinga, Mzuzu 2;

Email address: mzunirec@mzuni.ac.mw

Appendix 8: Letter of Introduction for Collecting Data



MZUZU UNIVERSITY

**Department of Teaching, Learning and
Curriculum Studies**

Mzuzu University
Private Bag 201
L u w i n g a
M z u z u 2
M A L A W I

Tel: (265) 01 320 575/722
Fax: (265) 01 320 568
mdolo.mm@mzuni.ac.mw

14TH APRIL 2022

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION: MR EMMANUEL KABUYE

Mr Emmanuel Kabuye is a registered Master of Education (Leadership and Management) Program student at Mzuzu University. He has been cleared by the Mzuzu University Research Ethics Committee (MZUNIREC) to collect data for the research study he is conducting as a requirement for the program.

Kindly assist him accordingly.

Yours faithfully,

Dr Margaret M. Mdolo Program

Coordinator