

International Journal of Studies in Inclusive Education

E-ISSN: 3008-1866, P-ISSN: 3008-1858

Vol 1, No. 1, pp 25-31. https://doi.org/10.38140/ijsis.v1i1.1269

GAERPSY Publishing, 2024

Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-No Derivatives (CC BY-NC-ND 4.0) licence.



History of the Article

Submitted 08 July 2024 Revised 29 July 2024 Accepted 09 August 2024 Published 01 September 2024

Dropping out of learners with hearing impairment from inclusive classes in urban schools in Bulawayo

¹*Loveness Dube

¹Department of Inclusive Education, Faculty of Education Muramba Teacher Training College, Ngororero, Rwanda

^{1*}Primary author: <u>dubeloveness071@gmail.com</u>

Abstract — This study explored factors contributing to the dropping out of learners with a hearing impairment from inclusive classes. It used the interpretivism theory to extract rich data and the qualitative research approach to conduct the study. A case study was used as a research design. In this study, participants were purposively selected. Semi-structured interviews, observations, and document analysis were used to collect data. The findings from the study revealed the challenges encountered in the teaching and learning of learners with hearing impairment. These include curriculum adaptation, social interaction with peers, negative attitudes of teachers and hearing learners, parental involvement, communication barriers, lack of interpreters, high learner ratio, and lack of resources. The findings further revealed that some opportunities are being gained by learners with hearing impairment in inclusive classes, such as access to a wider curriculum, social interaction, enhanced communication, and learning in local schools. However, challenges seemed to outweigh the opportunities gained by learners with hearing impairment, compelling them to drop out of inclusive classes. Therefore, the study gave some recommendations to help curb the dropping out of learners with hearing impairment from inclusive classes. These include allocating more resources in inclusive classes to address the problem of inadequate materials and the fact that government policies on inclusion should be made available to all educators and fully implemented. In addition, supervision, monitoring, support from parents, and evaluation of the system should be done to facilitate the learning of learners with hearing impairment in inclusive classes.

Keywords: Dropping out, Learners with hearing impairment, Inclusive classes, Urban schools

To cite this article (APA): Dube, L. (2024). Dropping out of learners with hearing impairment from inclusive classes in urban schools in Bulawayo. *International Journal of Studies in Inclusive Education*, 1(1), 25-31. https://doi.org/10.38140/ijsie.v1i1.1269

I. INTRODUCTION

NCLUSIVE education seeks to accommodate all learners with different disabilities to access education equitably (Shaeffer, 2019; Graham, Medhurst, Tancredi, Spandagou & Walton, 2020). Such a move ensures that every learner attains education at maximum capacity. This is because education is a concrete base for progress in the sustainable development of an essential human right and a noble step toward ending the segregation of learners with disabilities. It is, therefore, everyone's obligation to make sure that education is provided to all learners, taking into cognisance the nature of the individual's needs and capacity. According to Shaeffer (2019), if education is provided through a national system and at truly inclusive institutions, it has a better chance of fostering equity and social justice for learners with hearing impairments. However, developing countries continue to experience a surge of learners with hearing impairment dropping out of schools, even though several preventative and educative mechanisms exist in various dimensions (Mulat, Lehtomäki & Savolainen, 2019). In support of this, literature revealed that one-third of the learners with hearing impairment entering school in many countries fail to finish their primary education (UNICEF, 2016).

Historically, deaf learners were viewed as disabled welfare recipients taught in separate special schools (Musengi, 2019). However, this separate education was perceived as fundamentally discriminatory, and therefore, policies advocating for education in mainstream schools

alongside hearing peers were formulated (Musengi, 2019). Among the policies are the educational policies advocating for the inclusion of learners with special needs in the mainstream to learn alongside hearing learners. These include the Salamanca Statement on Inclusive Education (1994), which mandates the education of all children in mainstream schools within their communities, taking into cognisance the unique abilities and learning needs of learners with special needs (Musengi 2019). The Convention of the Rights of Persons with Disabilities (2008) promotes the right of persons with disabilities to inclusive education (Article 24) (Right to Inclusive Education 2016). The most recent effort that restates previous efforts in ensuring education for all and committed nations toward a 2030 target of inclusive and equitable quality education and lifelong learning for all is the Incheon Declaration (ESCAP, 2022; Morganti & Signorelli, 2019). These policies advocated for deinstitutionalisation, and learners were included in mainstream schools.

As a signatory of these international conventions, Zimbabwe made a great stride in developing policies and legislation to support the education and inclusion of learners with disabilities. It became the first country in Africa to adopt disability legislation, the Education Act of 1996 and the Zimbabwe Disabled Act of 1996, which advocates for non-discrimination in education and providing the welfare and rehabilitation of persons with disabilities. Some policies include the Commission of Inquiry into Education and Training (Nziramasanga Commission, 1999), which recommends adopting inclusive education in schools. It also recommends that a specific policy on special education be made, which includes teaching Zimbabwe sign language and

providing quality materials for learners with disabilities. The 2013 Constitution Amendment Act (Article 56) recognises the rights to education of persons with disabilities. Additionally, the 2019 Amended Education Act stipulates in section (56) that every registered school provides suitable infrastructure for learners with disabilities, including those with hearing impairment, all of which focus on the education of learners with disabilities, including those with hearing impairment.

Policies and legislation have been enacted in Zimbabwe, and everything appears to be in place to assist the education of all learners with disabilities. The reason why learners with hearing impairment are still dropping out of inclusive classes is a mystery that leaves the researcher with questions. Therefore, the study aimed to explore why learners with hearing impairments are dropping out of inclusive classes.

Attitudes of teachers and other learners

Teachers' negative attitudes toward learners with hearing impairment influence their learning (Alasim, 2020). Different factors influence the negative attitude of teachers towards these learners, including teachers' low expectations of the academic achievement of learners with hearing impairment. (Tedla & Negassa 2019; van der Straaten, Briaire, Dirks, Soede, Rieffe & Frijns, 2021; Maizere, 2020). The teachers' low expectation of academic achievement of learners with hearing impairment is due to the low participation of these learners in class due to the language barrier (Maizere, 2020). This implies that teachers could have a negative attitude towards learners with hearing impairment in an inclusive environment as they think they may negatively affect their class pass rates. In addition, literature revealed that teachers' attitude towards learners with hearing impairment emanates from their inability to use sign language and lack of skills as well as their negative perception towards deafness (Alegre de la Rosa & Villar Angulo, 2019, Mumba, Kasonde-Ngandu & Mandyata, 2022). In support of this, a study by Ngobeni, Maimane, and Rankhumise (2020) indicated that society, teachers, and other learners tend to discriminate against learners who use Sign Language due to incompetence in Sign language.

Scarcity of interpreters

A sign language interpreter acts as a bridge between the teacher and learners with hearing impairment to deliver information, and a lack of interpreters means a lack of communication between learners with hearing impairment and hearing people at school. However, the study by Tedla and Negassa (2019) and Majoro (2021) indicated that interpreters working in government schools do not have adequate skills to effectively work with deaf learners in inclusive live classes since they cannot interpret the content of the subjects taught. In some schools, interpreters are unavailable, and teachers and learners use body and written language (Tedla & Negassa 2019). A previous study revealed that the unavailability of interpreters brings about frustration among learners with hearing impairment and teachers (Adu, 2016). He added that interpreters are the source of information for learners with hearing impairment, so if they are not at school, learners may leave because there will be no reason for them to be in the class where they do not benefit.

Shortage of resources

The most common problem identified in nearly all research on the difficulties encountered by learners with disabilities in regular classrooms is a lack of resources (Al-Maskari, Al-Riyami & Kunjumuhammed, 2022; Ford & Minshall, 2019). Learning materials and human resources are limited in most inclusive schools. The literature revealed that infrastructure for learners with disabilities needs to be modified to suit the needs of the learners with hearing impairment (de Andrade & Stonestreet, 2023; Mahmoud, Abbas & Yaseen, 2019). According to a 2017 study by Chataika, Kamchedzera & Semphere, different people learn differently. Some people learn best by hearing, seeing, or doing, while others learn best by feeling, touching, and smelling (Tedla & Negassa, 2019; Honig, 2019). Therefore, to address the needs of every learner, teachers must employ various instructions and use learning materials that will enhance the use of all senses (Tedla &

Negassa, 2019). Lack of appropriate resources, such as assistive devices in schools (Masonbrink & Hurley, 2020; Rueda & Cerero, 2019; Fernández-Batanero, Cabero & López, 2019) and ignorance of how to help learners operate the devices further impede teachers' ability to successfully instruct learners with hearing impairments in their efforts to adopt and promote inclusive education.

Lack of communication skills

In an inclusive setting, communication issues can arise, causing hearing learners and teachers to occasionally interact with learners with hearing impairment (Tanure Alves, de Souza, Grenier & Lieberman, 2024; Ntinda & Tfusi, 2019). Teachers and hearing learners' ignorance of sign language could cause rejection of interpersonal relationships and social engagement (Asogwa et al., 2020) with hearing impairments in school (Ntinda & Tfusi, 2019; Samuel, 2017). This can result in poor academic performance and increase low self-esteem in learners with hearing impairment (Asogwa et al., 2020). This is consistent with the study done by Snoddon (2020), who alluded that in inclusive settings, there is little or no provision for sign language as a medium of instruction for deaf learners. Tanure Alves et al. (2024) alluded that there is no sign language teaching in schools and that teachers are ignorant of Deaf culture. As a result of the gap caused by the language barrier, learners with hearing impairments are missing many opportunities (Calgaro et al., 2021). Ineffective communication causes academic problems, which causes learners with hearing impairments to feel isolated and drop out of inclusive classes (Brydges & Mkandawire, 2020).

Adequate training

has shown that dealing with learners with hearing impairment is difficult if one is not skilled. Research showed that most teachers teaching inclusive classes lack the skills and language to teach learners with hearing impairment. This was supported by (Tedla & Negassa 2019), who added that teachers of deaf learners lack the required training in the area and, as a result, are unable to meet the needs and interests of deaf children, making the learning and inclusion of learners with hearing impairment challenging (Chibuike, 2020). Teachers are normally assigned to schools without the required training or experience to work with learners with different disabilities and teach inclusive classes (Mwanyuma, 2016; Majoro, 2021). In support of the above sentiment, Majoro (2021) and Hidayat et al. (2020) assert that conventional school teachers lack the necessary training to support learners with hearing impairments. In addition, literature revealed that the teachers' training programmes do not equip teachers well to deal with learners with hearing impairment (Ntinda & Tfusi, 2019). This has a detrimental effect on how learners with hearing impairments are taught in inclusive settings (Aldabas, 2021) since the quality of teachers determines teaching methods and educational standards (Taole, 2020; Rafiola, Setyosari, Radjah & Ramli, 2020).

Teachers with inappropriate professional training may not give their learners the attention they deserve and encounter problems teaching learners with hearing impairments. Accordingly, learners with hearing impairment miss essential information while learning. Proper professional training helps teachers become more self-assured, inspires their learners, facilitates their learning path, and transforms them into active and self-assured learners (Majoro, 2021). It is interesting to note that the incompetence of teachers may cause learners with hearing impairment to perform poorly, forcing them to drop out of inclusive classes. Therefore, there is a need for teacher training programmes (Ginja & Chen, 2020) that equip teachers with skills to respond to learners' diversity.

Support from school staff and family

Literature indicates that other factors that contribute to the high rates of school dropout of learners with hearing impairments include the absence of support from parents and other stakeholders (Whicker, Muñoz & Nelson, 2019; Khalid & Asghar, 2021). Family support for learners with hearing impairment is necessary, and the immediate family members and or guardians play a significant role in facilitating

the learning of learners with hearing impairment. Majoko (2016) alluded that families provide information about learners with hearing impairment that will help teachers appropriately deal with their educational needs. In addition to family support, support from all teaching and administrative staff is desirable for the effective teaching and learning of learners with hearing impairments in inclusive classes (Maluleke, Khoza-Shangase & Kanji, 2021; Majoko, 2016). The possibility of parental resistance, inadequate administrative oversight, and a lack of support from the community, other staff members, and other learners in the school may all present obstacles to the effective learning of learners with hearing impairment. (Hayes & Bulat, 2017). Therefore, their involvement reduces barriers encountered by learners in inclusive classes. (Mitchell & Sutherland, 2020).

II. RESEARCH QUESTIONS

- 1- Which resources are available for the teaching and learning of learners with hearing impairment in inclusive classes?
- 2- What is encountered in the teaching and learning of learners with hearing impairment?
- 3- What opportunities do learners with hearing impairment have in inclusive classes?

III. METHODS

Research paradigm

In this study, the interpretivism research paradigm has been adopted to guide the study since it is the only common paradigm that favors qualitative research. The qualitative research approach was used as a methodological approach to conduct the study. The qualitative approach allows the researcher to make knowledge claims based primarily on a constructivist perspective and multiple meanings of individual experiences as the researcher interacts with those in the study. The case study was used as a research design in this study. The study used it to gain an in-depth understanding of why learners with hearing impairment are dropping out of inclusive classes. The approach was selected as it allowed the researcher to interact with selected participants.

Participants

This research's target population involved primary school administrators, teachers, parents, and learners from the two selected schools. Participants were purposefully selected. Purposive sampling was used since it offered the researcher the advantage of selecting participants directly involved with the phenomenon under study. The sample consists of twenty people from both schools, six teachers teaching inclusive classes, and three specialist teachers. Two head teachers, six parents of learners with hearing impairment, and six learners with hearing impairment

Data collection instruments

Interviews, observation, and document analysis were used to gather data. Semi-structured questions were used in the interviews, allowing the researcher to collect as much data as possible. Observation enabled the researcher to capture data in a more naturalistic manner. This research context helped add more depth to the data quality collected using other data collection instruments. Document analysis was used, and different documents were analysed, allowing the researcher to get more information from various documents.

Trustworthiness

The researcher established trustworthiness by engaging in triangulation and prolonged engagement Stahl and King (2020) define triangulation as using several sources of information or procedures from the field to establish identifiable patterns repeatedly. Dado, Spence, and Elliot (2023) state that prolonged engagement with participants enables the researcher to develop a relationship and co-construct meanings with said participants. The researcher used a data triangulation approach to collect data through three instruments: interviews, document analysis, and lesson observation.

Data analysis

Data was presented using a thematic approach. The researcher engaged in thematic data analysis, using the themes that emerged from the findings. Data analysis brings order, structure, and meaning to the collected data. It is a search for general statements about relationships among categories of data. It is the practice of extracting useful information from raw data by conventional theories, technologies, and tools (Sarker, 2021). Data analysis enables the researcher to deduce the meaning of a social phenomenon by looking at people's perceptions and attitudes toward it, as well as their knowledge and understanding of social phenomena, values, feelings, and experiences (Maree, 2016). The data acquired from observation, document analysis, and interviews were reviewed, and notes were compiled and sorted into categories or themes for analysis. The thematic analysis allowed the researcher to determine what is familiar with the data and make sense of the data collected.

Ethical considerations

Approval was sought from the Ministry of Education, and permission to carry out the research was granted. The researcher conformed to ethical conduct in the research by maintaining ethical issues. Participants were given an informed consent form to sign that clearly described their right to decide to take part after being informed of the study's goal. The participants also received guarantees of secrecy and anonymity, and their contributions were solely for scholarly purposes. Selected schools were given dates for data collection to lessen the likelihood of disappointments and to give participants time to make all necessary arrangements.

IV. RESULTS AND DISCUSSION

Resources

Human resources

Participants state that one of the biggest challenges igniting the dropping out of learners with hearing impairment is the scarcity of human resources, especially trained personnel like audiologists, psychologists, speech therapists, and interpreters skilled in sign language and pedagogy. Some interview excerpts are reported as follows:

"We do not have specialists to work with us in helping the learners with hearing impairment, like school psychologists and interpreters" (Participant 1)

"If stakeholders work collaboratively, learners with hearing impairment can learn effectively and not drop out from inclusive classes" (Participant 8).

From the above sentiment, research revealed that parents and other stakeholders can facilitate teaching learners with hearing impairment. However, some parents are not there to provide support for their children's learning who are deaf. Some scholars highlighted that parents play a crucial role in ensuring the inclusion of learners with diverse and unique needs (Majoko, 2016; Paul, Rashmi, & Srivastava, 2021). They have comprehensive information about the learner that can benefit the teacher. This suggests that the collaboration of stakeholders, especially teachers and parents, is essential in promoting the education of learners with hearing impairment. Trained personnel who know how to deal with learners with hearing impairment are crucial in supporting their inclusion; this makes it easy for teachers, especially if interpreters are working with them.

Learning materials

Results indicated that teaching and learning in inclusive classes is difficult due to lacking learning materials. With the aid of learning materials, delivering lessons becomes easy. Masonbrink and Hurley (2020) concurred with this by saying that a lack of relevant resources and a lack of knowledge on how to assist learners operating the devices further impede teachers' capacity to effectively instruct learners with hearing impairments in their efforts to learn. One participant said this:

"One of the biggest challenges we have is the lack of teaching materials. There are no materials that one uses to teach these learners" (Participant 1).

Another participant mentioned this:

" I think for effective learning, learners with hearing impairments need a whole lot of materials to assist them to excel in inclusive classes, but in this school, there are no special resources or teaching and learning materials that were brought especially for learners with hearing impairments. We also need trained personnel to assist these learners" (Participant 2).

Infrastructure

Regarding infrastructure, respondents alluded that since classrooms are not acoustically treated, the school infrastructure becomes unfriendly for learners with hearing impairment. One of the participants said:

"Learners with hearing impairment are being obstructed by noise both from the class and from outside and need acoustically treated classrooms" (Participant 14)

In support of this, some scholars postulated that learners with hearing impairment are highly affected by noise in terms of understanding, so the classroom with learners with hearing impairment should have noise reverberation reduction like carpets and other materials that absorb noise (de Andrade & Stonestreet 2023; Mahmoud, Abbas & Yaseen, 2019). It is worth noting that a conducive environment promotes learning in all learners, and noise is an obstacle to learning for learners with hearing impairment.

Financial

There is an indication that most of the challenges encountered by learners with hearing impairment in inclusive classes result from a shortage of finances. Responses from participants indicated that funds to facilitate workshops and support teacher training are unavailable. In addition, learning resources such as computers and video tapes to facilitate the learning process are scarce because the schools do not have enough funds to supply the resources. Most importantly, learners with hearing impairments do not have assistive devices to facilitate their hearing. However, some participants gave recommendations that the government and other stakeholders should supply with all the requirements for effective learning of learners with hearing impairment in inclusive classes as indicated by participants:

"Shortage of money to buy learning material is a problem, I think the government should provide everything needed in class for these learners to learn effectively" (Participant 1).

"We do not have money to buy assistive devices for the learners with hearing impairment" (Participant 2).

"I do not have hearing aids, so it is difficult for me to understand my teacher when teaching since she uses spoken language most of the time" (Participant 5)

Communication skills

Lack of sign language proficiency

Results showed that teachers' incapacity to communicate effectively in sign language with learners with hearing impairment increases the learner's lack of interest in participating in class activities, resulting in poor academic achievement.

"I think all teachers teaching inclusive classes should undergo serious training in teaching inclusive classes, especially in learning Sign language because when we trained as Special Needs teachers, we did not get time to learn Sign language effectively. This makes learners lose interest in learning" (Participant 7).

Findings indicated that giving instructions in class is problematic for teachers since they cannot communicate in sign language. Scholars support the idea that effective communication improves academic performance, self-esteem, and social interaction by including learners with hearing impairment (Asogwa et al., 2020). It is worth noting that social interaction and active participation in school activities are fueled by effective communication. Findings suggested that for effective interaction, teachers and other hearing learners should learn sign language at school to interact with learners with hearing impairment effectively. A participant stated that:

"We are failing to interact with our hearing friends because we cannot communicate well, they cannot use Sign language, and also teachers are not fluent in Sign language, and we are missing a lot since we do not have interpreters to interpret for us" (Participant 4).

From the statement mentioned above, there is an indication that effective communication brings about understanding of each other and effective participation of learners with hearing impairment in inclusive classes.

Interpreters

In support of the above sentiment from participants, there is an indication that learners with hearing impairment are finding it hard to learn efficiently since interpreters are scarce and those around do not have pedagogical expertise. This concurred with the study done by Tedla and Negassa (2019) and Majoro (2021), who indicated that interpreters working in government schools do not have the necessary skills to effectively work with deaf learners in inclusive classes since they cannot interpret the content of the subjects taught. In addition, Schwab, Wimberger, and Mamas (2019) research indicated that effective communication in inclusive classes makes learners feel socially integrated, have friends, interact with their peers, and feel accepted. It is worth noting that if learners feel accepted, they develop a sense of belonging and self-esteem that can make them perform well in class. Some of the interview excerpts that indicated challenges caused by scarcity of interpreters are as follows:

"The biggest challenge is that we do not have Sign language interpreters. Learners are just relying on the little skills that we have in signing. It is becoming hard for us to disseminate information to learners with hearing impairment" (Participant 6)

"Few interpreters who take turns to come here do not have pedagogical skills, and it was not easy for them to interpret some of the content" (Participant 7)

"I believe it would be better if we work with interpreters to help us communicate with learners with hearing impairment" (Participant 3)

This is consistent with Snoddon's (2020) study, which indicated that in inclusive settings, there is little or no provision for sign language as a medium of instruction for deaf learners. The issue of sign language is a cause of concern in schools because it makes it difficult for learners with hearing impairment to communicate effectively, resulting in missing essential information.

Attitudes

Lack of skills and knowledge

The findings indicated that teachers' negative attitudes could emanate from a lack of skills and expertise in working with learners with hearing impairment. It was discovered that the main issue hindering the teaching of inclusive classes and dealing with learners with hearing impairment is a lack of knowledge and skills. Participants revealed that most teachers find it difficult to interact with learners with hearing impairment since they are not proficient in sign language, making it hard for them to work effectively. Lack of sign language skills may hinder effective communication among learners and affect the teaching and learning process. Some participants said that:

"The causes of dropouts are the attitudes of teachers caused by lack of skills to deal with learners with hearing impairment and lack of communication skills to communicate with hearing impairment" (Participant 6).

"We are facing communication problems with our teacher and other learners because they cannot use Sign language" (Participant 4).

It is evident from the above sentiments that the negative attitudes of teachers towards learners with hearing impairment are because of their deficiency in signing skills and lack of knowledge to teach learners with hearing impairment. This conquers with other scholars who highlighted those interpersonal relations and social interaction among learners with hearing impairment and other people in the school environment are compromised because of a lack of knowledge and understanding of sign language by teachers and hearing learners (Samuel, 2017, Ntinda & Tfusi, 2019, Tanure Alves et al., 2024). In addition, findings indicated that teachers find it challenging to utilise ICT tools because they lack the necessary skills and, in most cases, the ICT gadgets are insufficient. One of the participants pointed out that:

"We do not have enough skills in using ICT gadgets, and we are failing to assist learners with hearing impairment" (Participant 3).

This is consistent with previous findings of other scholars who

suggested that teachers lack the necessary skills to use ICT (Rueda & Cerero, 2019; Fernández-Batanero et al., 2019). It is worth noting that the absence of ICT and teachers' insufficient skill regarding the use of ICT becomes an obstacle to the learning and inclusion of learners with hearing impairment.

High learner ratio

The results indicated that a high learner ratio could affect teachers' ability to deliver their lessons properly. Most teachers fail to cater to individual differences because too many learners have different abilities in one class. As highlighted by one of the participants:

"The class that I am teaching is so big that I am failing to cater to individual differences. The class size must be reduced so that we can help learners as per their needs" (Participant 5).

In support of the above sentiments, previous studies hinted that a high teacher-pupil ratio, for example, one to forty in many Zimbabwean primary schools, means that teachers are left with no room to successfully teach learners with hearing impairment (Maizere, 2020, Maizere & Robert, 2024). A high learner ratio-makes it difficult for teachers to control the learners, which can impact how they deliver their lessons.

Curriculum adaptation

Findings indicated that learners with hearing impairment are not benefiting enough from the current curriculum; therefore, the curriculum needs to be adapted. Ludago (2020) postulated that even though curriculum adjustments are being made, they are not diversity-based. In addition, with the time allocated per lesson and teacher-learner ratio, teachers find it hard to help learners individually and adjust the curriculum to suit them (Ludago, 2020). As a result, most hearing-impaired learners do not benefit from the regular education system because there is no curriculum modification trend. Similarly, Khalid, Asghar, Masri, and Akhter (2021) reported that not incorporating diversity-based specific adaptations in the curriculum, teaching strategies, and assessment for learners with hearing impairment may make mainstream education inaccessible. In support of the above information, some interview excerpts are reported as follows:

"I feel that our syllabus is designed for learners without special needs. The learners with hearing impairment should be taught about the here and now, meaning their learning is situational, so it was difficult to follow the syllabus" (Participant 8).

"The curriculum content is too much for learners with hearing impairment to grasp because of the challenge of language and time being taken to deliver a lesson" (Participant 6).

In this regard, learners with hearing impairment experience a gap in their learning when following a curriculum that does not suit them. Curriculum adaptation can be understood as related to changes in learning programmes regarding content, instructions, a methodology that must be task-analysed, material resources, devices, user-friendly gadgets, and learning environment. It is evident from the findings that the learning of learners with hearing impairment in inclusive classes is being compromised because of the curriculum's loopholes. Failure to modify the curriculum to suit all learners poses challenges to teachers with negative attitudes toward inclusive classes. Therefore, the curriculum adaptation must be diversity-based to benefit all learners in inclusive classes.:

Opportunities gained

Despite the challenges learners with hearing impairment face in inclusive classes, findings indicated that learners with hearing impairment also have some opportunities they gain by being in an inclusive class. These include:

Social interaction

Responses from participants indicated that learners with hearing impairment are gaining tolerance experience in mixing and mingling with other learners without hearing impairment. They can also develop ways to communicate, including using Sign Language. The interview excerpts from the respondents are presented below:

"Learners are now having a chance to mix and mingle with hearing learners. Communication skills among learners are being developed through interacting with each other" (Participant 3).

"I do have so many friends, and I am happy that some of my hearing friends can now communicate with me in Sign language" (Participant 5).

It can be deduced from the interview excerpts that social interaction among learners improves communication. As they interact with each other, a good rapport develops among them. This concurred with the study done by (Schwab et al., 2019), who indicated that when learners with hearing impairments become part of an inclusive education classroom, they are more likely to become socially accepted by their peers, that is, socially communicative. This makes them feel socially integrated and have a chance of creating friendships with hearing peers.

Acceptance in community schools

Findings indicate that learners with hearing impairment can now learn in schools within their communities and interact with a diverse group of learners. It has been indicated that some learners with hearing impairment appreciate being in inclusive classes as they feel it is an excellent opportunity to mix and mingle with hearing learners. As said by one of the participants:

"Learners with hearing impairment are now learning together with hearing learners, allowing them to be understood and accepted by others and communicate with others in many different ways. They are learning at a school near our home and are getting an opportunity to play with another learner" (Participant 3).

It is evident from the results that, in inclusive classes, learners with hearing impairments get a chance to interact with a diverse group of people. This creates an opportunity for them to be accepted by the hearing world and a chance for them to understand each other. In addition, they also benefit from hearing learners.

V. CONCLUSION

Inclusive education seemed to embrace good opportunities for learners with hearing impairment to obtain quality education. However, some factors have made it difficult for these learners to learn effectively in inclusive classes. Negative attitudes and perceptions have perpetuated the obstacles in the learning of learners with hearing impairment in inclusive classes. The study has confirmed that factors such as lack of support, communication, mode of instruction, shortage of interpreters, and inappropriate infrastructure have prevented learners with hearing impairment from attaining positive learning outcomes, hence dropping out from inclusive classes.

In addition, insufficient teaching materials and resources are major challenges in teaching and learning of learners with hearing impairments since they cause difficulties for them to learn effectively. Social interaction is another challenge that came out strongly due to communication or language barriers. Another conclusion drawn from the study is that teachers' lack of skills and knowledge directly impacts the performance of learners with hearing impairment in inclusive classes. All these stimulate the dropping out of learners with hearing impairment from inclusive classes.

VI. RECOMMENDATIONS

Based on the findings and to make schools more accessible and accommodative to learners with hearing impairments, the following recommendations were made:

The coming of the new heritage-based curriculum should take cognisance of inclusivity, that is, focusing on the challenges encountered by learners with hearing impairment. On the other hand, universities and colleges training special needs education teachers need to provide more practical sign language activities than theory to equip trainee teachers with signing skills. More importantly, Sign Language should be made compulsory at teacher training colleges and universities to reduce attitudes towards Sign Language and increase communication between all teachers and learners with hearing impairment. In addition,

Int. j. sud. incl. educ. Dube, 2024

human resources, mainly Sign Language interpreters, need to be provided with suitable educational skills and someone with pedagogical skills. There is also a need for constant professional development sessions and in-service training for teachers of inclusive classes to boost and enrich their expertise in dealing with learners.

Furthermore, there should be an expressive and dynamic partnership between the school, parents, and other stakeholders to safeguard the smooth learning of learners with hearing impairment in inclusive classes. Providing more teaching and learning resources, such as ICT gadgets and assistive devices, to promote sustainable learning for learners with hearing impairment is necessary. Government policies on inclusion should be fully implemented, and stakeholders should be conscientised through awareness campaigns. Supervision, monitoring, support, and evaluation mechanisms should be implemented.

VII. CONFLICTS OF INTEREST

There are no conflicts of interest in this study.

REFERENCES

- Adu, J. (2016). Social and academic experiences of students who are deaf at the University of Education, Winneba (Unpublished Masters thesis), Winneba: University of Education, Winneba, Ghana. Retrieved from http://41.74.91.244:8080/handle/123456789/3943
- Alasim, K. (2020). Inclusion programs for students who are deaf and hard of hearing in Saudsi Arabia: Issues and recommendations. *International Journal of Disability, Development and Education, 67*(6), 571-591. https://doi.org/10.1080/1034912X.2019.1628184
- Aldabas, R. (2021). Barriers and facilitators of using augmentative and alternative communication with students with multiple disabilities in inclusive education: Special education teachers' perspectives. *International Journal of Inclusive Education*, 25(9), 1010-1026. https://doi.org/10.1080/13603116.2019.1597185
- Alegre de la Rosa, O. M., & Villar Angulo, L. M. (2019). Attitudes of children with hearing loss towards public inclusive education. *Education Sciences*, 9(3), 244. https://doi.org/10.3390/educsci9030244
- Al-Maskari, A., Al-Riyami, T., & Kunjumuhammed, S. K. (2022). Students' academic and social concerns during COVID-19 pandemic. *Education and information technologies*, 27(1), 1-21. https://doi.org/10.1007/s10639-021-10592-2
- Asogwa, U. D., Ofoegbu, T. O., Ogbonna, C. S., Eskay, M., Obiyo, N. O., Nji, G. C., ... & Eze, B. C. (2020). Effect of video-guided educational intervention on school engagement of adolescent students with hearing impairment: Implications for health and physical education. *Medicine*, 99(23), e20643. https://doi.org/10.1097/MD.0000000000020643
- Brydges, C., & Mkandawire, P. (2020). Perceptions and experiences of inclusive education among parents of children with disabilities in Lagos, Nigeria. *International Journal of Inclusive Education*, 24(6), 645-659. https://doi.org/10.1080/13603116.2018.1480669
- Calgaro, E., Craig, N., Craig, L., Dominey-Howes, D., & Allen, J. (2021). Silent no more: Identifying and breaking through the barriers that d/Deaf people face in responding to hazards and disasters. International journal of disaster risk reduction, 57, 102156. https://doi.org/10.1016/j.ijdrr.2021.102156
 - centered early intervention for children who are deaf or hard of
- Chataika, L. E. M., Kamchedzera, E. T., & Semphere, N. K. (2017). An exploration of the challenges faced by regular primary school teachers in planning instructional strategies for inclusive classrooms. *African Journal of Special and Inclusive Education*, 2(1), 12-21.
- Chibuike, E. (2020). The Challenges of Teaching Sign Language to Pupils with Hearing Impairment in Special Education Primary School, Ibom Layout, Calabar. Ibom Layout, Calabar (April 1, 2020). http://dx.doi.org/10.2139/ssrn.3568246
- Dado, M., Spence, J. R., & Elliot, J. (2023). The case of contradictions: how prolonged engagement, reflexive journaling, and observations can contradict qualitative methods. *International Journal of Qualitative*

- *Methods,* 22, 16094069231189372. https://doi.org/10.1177/16094069231189372
- de Andrade, V., & Stonestreet, M. (2023). Small Changes Have Big Effects: Non-Structural Sound Absorbing Furnishings and Reverberation Time in a Preschool Classroom. *Journal of Educational Studies*, 22(1), 6-25. Retrieved from https://hdl.handle.net/10520/ejc-jeds-v22 n1 a2
- ESCAP, U. (2022). Framework for disability policies and strategies in Asia and the Pacific. Retrieved from https://hdl.handle.net/20.500.12870/4668
- Fernández-Batanero, J. M., Cabero, J., & López, E. (2019). Knowledge and degree of training of primary education teachers in relation to ICT taught to students with disabilities. *British journal of educational technology*, 50(4), 1961-1978. https://doi.org/10.1111/bjet.12675
- Ford, S., & Minshall, T. (2019). Invited review article: Where and how 3D printing is used in teaching and education. *Additive Manufacturing*, 25, 131-150. https://doi.org/10.1016/j.addma.2018.10.028
- Ginja, T. G., & Chen, X. (2020). Teacher Educators' Perspectives and Experiences towards Differentiated Instruction. *International Journal of Instruction*, 13(4), 781-798. https://doi.org/10.29333/iji.2020.13448a
- Graham, L. J., Medhurst, M., Tancredi, H., Spandagou, I., & Walton, E. (2020). Fundamental concepts of inclusive education. In Inclusive Education for the 21st century (pp. 27-54). London: Routledge.
- Hayes, A. M., & Bulat, J. (2017). Disabilities inclusive education systems and policies guide for low-and middle-income countries. RTI Press Publication No. OP-0043-1707. Research Triangle Park, NC: RTI Press. https://doi.org/10.3768/rtipress.2017.op.0043.1707
 - hearing. Family & Community Health, 44(1), 59-71. https://doi.org/10.1097/FCH.000000000000276
- Hidayat, D. S., Rahmat, C., Fattah, N., Rochyadi, E., Nandiyanto, A., & Maryanti, R. (2020). Understanding Archimedes law: What the best teaching strategies for vocational high school students with hearing impairment. *Journal of Technical Education and Training*, 12(1). Retrieved from. https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view
- Honig, A. S. (2019). Outdoors in nature: Special spaces for young children's learning. *Early Child Development and Care*, 189(4), 659-669. https://doi.org/10.1080/03004430.2017.1337609
- Khalid, L. A. I. L. A., & Asghar, M. Z. (2021). Exploring Institutional Support for Inclusion of Hearing-Impaired Learners in Regular Primary Schools. *International Review of Social Sciences*, 9(5), 258-270.
- Khalid, L., Asghar, M. Z., Masri, S., & Akhter, M. (2021). Parents 'perspectives on Challenges Faced by Hearing-Impaired in Inclusive Primary Schools. *PalArch's Journal of Archaeology of Egypt/Egyptology,* 18(08), 963-984.
- Ludago, T. B. (2020). Practices, challenges, and opportunities of inclusive education implementation in Kambata Tambaro Zone, Ethiopia. Open access library journal, 7(2), 1-23. https://doi.org/10.4236/oalib.1105989
- Mahmoud, R. M., Abbas, A. H., & Yaseen, R. H. (2019). Assessment of Noise Pollution and Architectural Solutions for The Colleges and Universities. REVISTA AUS, 26, 445-453. https://doi.org/10.4206/aus.2019.n26-48
- Maizere, J. (2020). Exploring academic experiences of deaf children in a primary school in Zimbabwe (Unpublished PhD thesis), Bloemfontein: University of the Free State, South Africa.
- Maizere, J., & Robert, M. K. (2024). Exploring the curriculum for d/Deaf and hard of hearing children at a regular school in Zimbabwe. *Rwandan Journal of Education*, 7(2), 97-112.
- Majoko, T. (2016). Inclusion of children with autism spectrum disorders:
 Listening and hearing to voices from the grassroots. *Journal of autism and developmental disorders*, 46, 1429-1440. https://doi.org/10.1007/s10803-015-2685-1
- Majoro, N. E. (2021). Challenges of using sign language interpreting to facilitate teaching and learning for learners with hearing impairment (Unpublished PhD theis), Maseru: National University of Lesotho, Lesotho.

Int. j. sud. incl. educ. Dube, 2024

Maluleke, N. P., Khoza-Shangase, K., & Kanji, A. (2021). An integrative Maree, J. G. (2016). Career construction counseling with a mid-career black man. *The Career Development Quarterly*, 64(1), 20-34. https://doi.org/10.1002/cdq.12038

- Masonbrink, A. R., & Hurley, E. (2020). Advocating for children during the COVID-19 school closures. *Pediatrics*, 146(3), e20201440. https://doi.org/10.1542/peds.2020-1440
- Mitchell, D., & Sutherland, D. (2020). What really works in special and inclusive education: Using evidence-based teaching strategies. London: Routledge.
- Morganti, A., & Signorelli, A. (2019). Social and emotional learning and inclusive education. In *Index for Social Emotional Technologies* (pp. 7-47). London: Routledge.
- Mulat, M., Lehtomäki, E., & Savolainen, H. (2019). Academic achievement and self-concept of deaf and hard-of-hearing and hearing students transitioning from the first to second cycle of primary school in Ethiopia. *International Journal of Inclusive Education*, 23(6), 609-623. https://doi.org1080/13603116.2018.1441913
- Mumba, D., Kasonde-Ngandu, S., & Mandyata, J. (2022). Perceptions of teachers and pupils on factors affecting academic performance of pupils with hearing impairment in primary schools in Zambia. *European Journal of Special Education Research*, 8(4), 48-64. http://dx.doi.org/10.46827/ejse.v8i4.4399
- Musengi, M. (2019). The place of Sign Language in the inclusive education of Deaf learners in Zimbabwe amid CRPD (mis) interpretation. *African Disability Rights Yearbook*, 7. https://doi.org/10.29053/2413-7138/2019/v7a5
- Mwanyuma, R. M. (2016). Factors influencing the academic achievement of deaf learners in Kilifi County, Kenya: A case of Sahajanand School for the Deaf (Unpublished PhD thesis), Nairobi: University of Nairobi, Kenya.
- Ngobeni, W. P., Maimane, J. R., & Rankhumise, M. P. (2020). The effect of limited sign language as a barrier to teaching and learning among Deaf learners in South Africa. South African Journal of Education, 40(2), Art. #1735, 7 pages, https://doi.org/10.15700/saje.v40n2a1735
- Ntinda, K., & Tfusi, B. (2019). Experiences of Teachers of Deaf and Hard-of-Hearin Students' in a Special Needs School: An Exploratory Study. *Journal of Education and Training Studies, 7*(7), 79-89. https://doi.org/10.11114/jets.v7i7.4274
- Nziramasanga, C.T. (1999). Report of the presidential commission of inquiry into education and training. Harare: Government Printers.
- Paul, R., Rashmi, R., & Srivastava, S. (2021). Does lack of parental involvement affect school dropout among Indian adolescents? evidence from a panel study. *Plos one*, 16(5), e0251520. https://doi.org/10.1371/journal.pone.0251520
- Rafiola, R., Setyosari, P., Radjah, C., & Ramli, M. (2020). The effect of learning motivation, self-efficacy, and blended learning on students' achievement in the industrial revolution 4.0. *International Journal of Emerging Technologies in Learning (iJET)*, 15(8), 71-82. https://doi.org/10.3991/ijet.v15i08.12525
 - review of current practice models and/or process of family-
- Rueda, M. M., & Cerero, J. F. (2019). Main barriers to ICT teacher training and disability. Research in Social Sciences and Technology, 4(2), 96-114. https://doi.org/10.46303/ressat.04.02.7
- Samuel, H. (2017). The interaction between deaf learners and hearing learners in mainstream schools in Oshana and Khomas regions (Unpublished Masters thesis). Windhoek: The University of Namibia, Namibia.
- Sarker, I. H. (2021). Data science and analytics: an overview from datadriven smart computing, decision-making, and applications perspective. *SN Computer Science*, 2(5), 377. https://doi.org/10.1007/s42979-021-00765-8
- Schwab, S., Wimberger, T., & Mamas, C. (2019). Fostering social participation in inclusive classrooms of students who are deaf. *International Journal of Disability, Development and Education, 66*(3), 325-342. https://doi.org/10.1080/1034912X.2018.1562158
- Shaeffer, S. (2019). Inclusive education: a prerequisite for equity and social justice. *Asia Pacific Education Review*, 20(2), 181-192. https://doi.org/10.1007/s12564-019-09598-w

- Snoddon, K. (2020). The social and epistemological violence of inclusive education for deaf learners. Canadian Journal of Disability Studies, 9(5), 185-213. https://doi.org/10.15353/cjds.v9i5.695
- Stahl, N. A., & King, J. R. (2020). Expanding approaches for research: Understanding and using trustworthiness in qualitative research. *Journal of developmental education*, 44(1), 26-28. Retrieved from http://www.istor.org/stable/45381095
- Tanure Alves, M. L., de Souza, J. V., Grenier, M., & Lieberman, L. (2024). The invisible student in physical education classes: voices from Deaf and hard of hearing students on inclusion. *International Journal of Inclusive Education*, 28(3), 231-246. https://doi.org/10.1080/13603116.2021.193171
- Taole, M. J. (2020). Diversity and inclusion in rural South African multigrade classrooms. *International Journal of Inclusive Education*, 24(12), 1268-1284. https://doi.org/10.1080/13603116.2018.1520310
- Tedla, T., & Negassa, D. (2019). The inclusive education for deaf children in primary, secondary, and preparatory schools in Gujarat, Ethiopia. *Humaniora*, 31(2), 177-187. https://doi.org/10.22146/jh.v31i2.44767
- UNICEF. (2016). Monitoring Education Participation: Framework for Monitoring Children and Adolescents who are out of School or at a risk of Dropping out. UNICEF Series on Education Participation and Dropout Prevention,1, Geneva: UNICEF.
- van der Straaten, T. F., Briaire, J. J., Dirks, E., Soede, W., Rieffe, C., & Frijns, J. H. (2021). The school career of children with hearing loss in different primary educational settings: a large longitudinal nationwide study. *The Journal of Deaf Studies and Deaf Education*, 26(3), 405-416. https://doi.org/10.1093/deafed/enab008
- Whicker, J. J., Muñoz, K., & Nelson, L. H. (2019). Parent challenges, perspectives and experiences caring for children who are deaf or hard-of-hearing with other disabilities: a comprehensive review. *International Journal of Audiology*, 58(1), 5-11. https://doi.org/10.1080/14992027.2018.1534011