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Exploring deaf student teachers' academic experiences at a teacher training college in Rwanda

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Abstract—From Eugenics to the institutionalisation period, Deaf students were discriminated against. Their education in African countries is minimal, especially in tertiary institutions, including Rwanda. The study explored the academic experiences of deaf student teachers at a Teacher Training College (TTC) in Rwanda. It used the interpretive paradigm and qualitative research approach. The study employed a narrative case study. The study population comprised two TTC administrators, two deaf student teachers, all the sixteen tutors who taught the deaf student teachers, and two library workers. One TTC administrator, two deaf student teachers, one teacher, and one library worker were purposively sampled, comprising five participants. The study found that the TTC did not have resources to educate deaf student teachers. The study also found that the tutors and the deaf student teachers relied on detailed notes, handouts, and an interpreter. It also found that deaf student teachers preferred Rwandan Sign Language because they had no communication options. The study recommended that the Rwanda Basic Education Board should provide resources for the education of deaf student teachers. Moreover, the Department of Special Needs and Inclusive Education should have a viable Rwandan Sign Language group to educate the hearing TTC community on Rwandan Sign Language.

Keywords: Academic experiences, deaf student teachers, Rwandan Sign Language, Special Needs and Inclusive Education, Teacher Training College

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I. INTRODUCTION

THE education of students with disabilities was not realised until after the Eugenics period. The end of the Eugenics period marked a new era in the education of children with disabilities. Principally, the development and systematisation of the Principle of Normalisation by Wolfensberger marked a new era in the education of children with disabilities in general and those who are deaf in particular. The Principle of Normalisation concerned availing daily life patterns to persons with disabilities, which were as close as possible to, or the same as, the mainstream society. The Principle of Normalisation was viewed as a human service that aimed at enabling learners with disabilities to access the services everyone in society accessed. For example, the Principle of Normalisation enabled children with disabilities, including Deaf children, to access education in regular schools in the inclusive set. To this effect, the Rwanda Basic Education Board (REB) decided to implement Special Needs and Inclusive Education (SNIE) in Teacher Training Colleges (TTCs) and came up with a curriculum in 2020. The implementation of SNIE witnessed the education of student teachers with Special Educational Needs (SEN) in TTCs, including deaf student teachers. It may be interesting to learn about the experiences of deaf student teachers in mainstream TTC.

II. LITERATURE REVIEW

The deaf race may be as old as humankind. Leigh et al. (2018) claim that deaf people have always been on the earth, but little has been done to improve their lives. Deaf people are proud of themselves and their Deaf culture. Their culture, which may differ from hearing cultures, may influence how they learn (*ibid*). To this effect, on the one hand, the Standard Rules on the Equalisation of Opportunities for Persons with Disabilities (SREOPD) (1993) and UNESCO (the Salamanca Statement) (1994) wholesomely advocate for the inclusion of learners with Special Education Needs (SEN).

On the other hand, they recommend that deaf students have separate schools owing to their language needs peculiar to them and different from spoken languages. Considering this, findings by Leigh et al. (2018) reveal that deaf students do not have SEN but are just a cultural minority group with a different language mode. They are just like any other cultural minority group with a different language. For example, when different cultural groups meet, they may not understand each other's language. To this effect, Dammeyer and Ohna (2021) reveal that the deaf Cultural Minority Movement was born in the 1970s, leading to the adoption of manual communication in the Scandinavian countries and, subsequently, several other countries. The systematisation of Special Needs and Inclusive Education emanated from the Scandinavian countries. Also, the Principle of Normalisation was born in the Scandinavian countries.

The Principle of Normalisation was developed and systematised by Wolfensberger from the late 1960s to the early 1970s (Wolfensberger, Nirje, Olshansky, Perske, & Roos, 1972). Although the Principle of Normalisation was the brainchild of Bengt Nirje, it was developed and popularised by Wolfensberger (1972). Wolfensberger noted that learners with Intellectual Challenges in the Scandinavian countries learned in institutions where they had no chance to live with their family members within their cultural norms and values. He further noted that once they enrolled with these schools, they had no opportunity to rejoin their families and would die there without any family member noticing this or attending their burial as was the norm with their 'normal peers.

Wolfensberger then decided to develop and systematise the Principle of Normalisation as a human service that precursed inclusive education. Although the principle of Normalisation was initially a service for learners with IC, Leigh et al. (2018) reveal that once institutions for the deaf were opened, the deaf students lived at these schools. Their lifestyle there led to the birth of the deaf community and its culture. Although the Principle of Normalisation made efforts to remove children with disabilities from special institutions to mainstream schools, the inclusion of deaf children in mainstream schools remained at the periphery (Dela-Fuente, 2021). The education of deaf children has been mainly concentrated in primary schools (DeafNet Africa Conference [DNAC], 2016).

Similarly, Batamula (2009) notes that in Tanzania, little effort is made to provide secondary education to deaf children, the education that will eventually lead them to tertiary education. In a related scenario, DNAC (2016) reveals that in South Africa, a significant number of deaf children are out of school, while a considerable proportion drop out of school not later than the ninth grade, and they can neither read nor write. The education of deaf students in secondary schools and higher learning institutions is probably not a priority. After the Principle of Normalisation, several international conventions took place. Signatories to the international conventions, including Rwanda, undertook to implement inclusive education as much as possible. These international conventions include the Salamanca Statement (1994), the Dakar Conference (United Nations Educational, Scientific and Cultural Organisation [UNESCO], 2000), the United Nations-Convention on the Rights of Persons with Disabilities (UN-CRPD) (2006), and the UNESCO (2015). Member states crafted pieces of legislation based on these international conventions. Both the international conventions and the pieces of legislation decolonised the education of the deaf. They gave them the right to learn alongside their hearing counterparts regardless of the assertion by the SREOPD (2006) that their education may be best implemented in institutions for the deaf. Similarly, Dudley-Marling and Burns (2014) express that the education of students with SEN is efficiently practised in special schools for their respective disabilities where there are relevant resources and positive attitudes towards them.

Member States to the international conventions came up with different pieces of legislation to govern the practice of inclusive education in their respective countries. Considering the international conventions, Malaysia enacted the Malaysia Persons with Disabilities Act (2008), stipulating that many learners with disabilities learn in inclusive set-ups (Miles, Khairuddin & McCracken, 2018). The law further recognises Malaysian Sign Language (MSL) as the official language for the deaf, with uppercase 'D' denoting those who subscribe to the deaf culture. Miles et al. (2018) observe that despite recognising MSL as the official language of the deaf, the Malaysian Persons with Disabilities Act does not mandate the implementation of MSL for teaching and learning purposes. MSL is the language of instruction by non-governmental organisations like the Malaysian Federation for the deaf.

The education of students with disabilities in the United States of America (USA) was marked by exclusion, segregation, and discrimination until the enactment of Public Law (PL) 94-142 (Education for All Children Act) and the Individuals with Disabilities Education Act (IDEA) (2004) (Dudley-Marling & Burns, 2004). The legislation allowed learners with disabilities to learn in inclusive set-ups for the larger portion of the day. These pieces of legislation legalised litigation, which led to the provision of free education by the districts. Osgood (2005) reveals that students with disabilities were viewed as uneducable and excluded from public schools further based on a lack of skilled personnel, including that the students with disabilities disturbed the smooth implementation of the mainstream school curriculum. On the contrary, Edward Stullken, a member and principal of the Illinois Council of Exceptional Children, quoted by Durdley-Marling and Burns (2014, p. 16) expressed that "In general, it is best not to segregate any individual by placement in a special group, if he may receive as good or better training in a normal group of pupils". Edward Stullken's views advocate for including students with SEN as much as possible. Similarly, IDEA (2009) mandates the learning of deaf students in the Least Restrictive Environment (LRE), with American Sign Language (ASL) being the language of instruction. Like in the USA, Education for the deaf in Scandinavia is free, with Sign Language as the instruction language.

Regionally, South Africa began revamping her education system in 1994 to match global trends, coinciding with the Salamanca Statement's (1994) recommendations on educating students with SEN. Further, in line with the UN-CRPD (2006), Higher Education Institutions (HEI) in South Africa have been guided by the Department of Education (DoE) (2001) to promote equal access and participation by all students who enroll with them, including those with disabilities. The DoE (2001) aims to create a free and just academic environment. Nevertheless, deaf students are still underrepresented in HEI (Brett, 2010) due to their complex and exorbitant needs, which are unique to each learner. Similarly, the Higher Educational Statistical Agency (HESA) (2011) expresses that apart from being underrepresented in HEI, deaf students are also under-supported globally and in South Africa, as an example of an African country.

Furthermore, little information is documented on the experiences of deaf students in institutions of higher learning in South Africa (Luckner, Slike & Johnson, 2012). Adding more weight to the observation, de Oliveira, Fuzeto, and Manoel (2020) note that despite clear legislation on the inclusion of deaf students, the introduction of Brazilian Sign language as a subject and the training of requisite personnel for the education of deaf students focus on the Brazilian basic education, ignoring tertiary education. A study conducted by Bell, Carl, and Swart (2016) established that deaf students do not complete their tertiary education and perform way below the performance of hearing students due to inadequate specific support for their needs. Unlike in Kenya, where Total Communication is the language of instruction for the deaf (Adoyo, 2007), South African Sign Language (SASL) is recognised as the official language for the deaf in all circles (Bell et al., 2016). While SASL is recognised as the official language for the deaf in South Africa, the literature reveals that deaf students in HEI have little support due to, among other things, a lack of skilled human resources. Generally, SA has established legislation and policies that decolonise the education of the deaf based on international conventions, like the Salamanca Statement (UNESCO, 1994), the UN-CRPD (2006), and the Incheon Declaration (UNESCO, 2015).

Two main models of disability are used in the discussions and management of deaf students: the medical/infirmity and the sociocultural model of disability. These perspectives or constructs help define how the deaf are viewed and managed in educational set-ups (Luckner et al., 2012). While the medical model of disability views the deaf as sick people who are passive recipients of services, the sociocultural construct views them as a sociocultural minority group with a unique language (Bell et al. 2016). Services to deaf students in tertiary institutions are provided based on these constructs. The medical model of disability is castigated for its treatment of deaf students as sick and passive students who require assistance every time. Therefore, the adoption of international conventions on Special Needs and Inclusion (SNIE) by many countries, including Rwanda, saw the adoption of the sociocultural model of deafhood. Signatories to the international conventions adopted the sociocultural construct because it views the deaf as active people who are equal members of society and can also be service providers. In light of this, deaf students may be viewed as capable of achieving academically, like their hearing peers. Hence, they may be given equal opportunities in education. Considering this, the government of Rwanda came up with a UNESCO Rwanda (2015) that is sensitive to the needs of students with SEN. The revised 2018 SNIE policy reveals that many children with SEN either do not access education or drop out of school due to a lack of appropriate teaching and learning resources and support services, including specialist

teachers in SNIE. Specific to improving deaf education, the policy shows the need to provide relevant assistive devices and implement Rwandan Sign Language (RSL) to harness communication challenges in an inclusive set-up. The policy indicates that assistive devices for deaf education are not available in schools, and where they are available, they are privately procured. The policy further calls for a flexible curriculum that may allow adjustments necessary for deaf education to prosper.

III. OBJECTIVE OF THE STUDY

This study explores deaf student teachers' academic experiences at a teacher training college in Rwanda.

IV. METHODS

Research paradigm, approach, and design

The study employed the interpretivist paradigm. Interpretivists view reality as being constructed in a social context by participants with different backgrounds, experiences, and assumptions that may lead to subjective interpretations of reality (Wahyuni, 2012). For this study, it was necessary to use the interpretive paradigm to engage participants in dialogue in social contexts to co-construct reality during data collection.

To align with the interpretivist paradigm, the researcher used the qualitative research approach to conduct the study. The qualitative research approach is concerned with descriptive data in the form of participants' written or spoken words as well as their observable behaviours during data collection (Taylor, Bogdan & DeVault, 2016), thereby enabling the researcher to understand participants' experiences at the same wavelength with them (Corbin & Strauss, 2008).

In line with the interpretivist paradigm and qualitative research approach, the researcher used the narrative case study as the road map to conduct the study. The proponents of narrative case study research design view it as important in capturing participants' experiences as they express them in their words (Clandinin & Connelly, 2000). Humans are storytellers; hence, they should be allowed to express themselves freely and fully during interviews (*ibid*). The researcher aimed to engage the participants in dialogue and capture their experiences in their words and observable behaviours during interviews. Moreover, using a case study enabled the researcher to collect rich data from the TTC case.

Participants

The study population comprised two deaf student teachers (DST), two TTC administrators, two library workers, and sixteen tutors who taught deaf student teachers. Two deaf student teachers, one TTC administrator, one library worker, and one tutor were purposively selected. The deaf student teachers were sampled to describe their academic experiences in the TTC. The administrator was sampled because she was the custodian of the deaf student teachers at the TTC and was responsible for the academic experiences. In contrast, the library worker was sampled to provide deaf student teachers' experiences as they accessed learning resources from the library. Finally, the tutor was sampled to provide deaf student teachers' academic experiences as he taught the deaf student teachers.

Data collection methods

Data on the experiences of deaf student teachers at the TTC were collected using face-to-face interviews with the TTC administrator, library worker, one tutor, and two deaf student teachers. Interviews were selected for data collection because they aligned with the interpretive paradigm, qualitative research approach, and narrative case study research design. Interviews enabled the researcher to engage the participants in dialogue to collect data in participants' words as they presented them, to ensure that the views presented were participants. Interviews also enabled the researcher to capture nonverbal expressions from the participants, thereby giving the researcher quality, rich, and detailed data. Interviews also enabled the researcher to probe the participants to fully understand their stories and co-construct the meanings of these stories.

Data collection procedure

Participants were notified of interview dates and schedules through the TTC administrator, who was also an interviewee. The deaf student teachers were the first to be interviewed in a private room, which kept the dialogue between the participants and the researcher private. Although the researcher could sign in Zimbabwean National Sign Language, he had to engage an interpreter owing to some differences between RSL and Zimbabwean National Sign Language, to ensure a smooth dialogue. The interpreter was a friend and confidante of the deaf student teachers; hence, they conversed freely. The next participant was the TTC administrator whose interview occurred in her office, a natural working place, with interference from outsiders. The researcher allowed the participant to relax and be ready to participate in the dialogue. Another participant was a tutor who happened to be an English tutor. Since tutors at the TTC did not have offices, he was interviewed in the TTC administrator's office in the absence of the administrator. He was also allowed time to relax and be ready for the dialogue. Finally, the researcher interviewed the library personnel. No one, except the library personnel, was in the library. The participant was, therefore, free to dialogue.

Research site

The study was conducted at a TTC in the Bugesera District, about twenty kilometers from Kigali. The TCC comprised eight hundred student teachers, two of whom were deaf. The TTC had four combinations: Science, the deaf student teachers were learning languages, and their phonology in LE class. The TTC was manned by two academic administrators, two library workers, and sixteen tutors who had direct contact with the deaf student teachers but were not necessarily specialists in hearing impairment and deaf studies. They were not able to sign. The TTC had no resource rooms for deaf student teachers. The deaf student teachers were the first individually interviewed in the dining hall. Next to be interviewed was the TTC administrator in the administrator's office, followed by the tutor in the same office after the administrator paved the way for the session. The tutor was interviewed in the administrators' office because tutors had no offices. Lastly, the library worker was interviewed. All the participants were interviewed on Friday, the 28th of June, 2024. Each interview lasted about forty-five minutes.

Data analysis

Data collected were presented in narrative form and analysed using Riessman's interactional model. Data were presented in the way participants narrated them, allowing readers to get first-hand data and enabling the researcher and the participants to co-construct the meanings of the data.

It was essential to ensure the study passed trustworthiness to keep readers confident in its findings. To this effect, the study findings were made credible through using interviews and capturing the participants' stories as they were told. This reduced researcher bias. Applying Riessman's interactional model would enable the readers to get the stories right from the participants, further reducing researcher bias and improving the credibility of research findings. Interviews and Riessman's interactional model made the research findings credible, dependable, transferable, and confirmable. Furthermore, using an interpreter enabled the researcher to capture the participants' stories accurately.

Ethical considerations

The researcher sought permission from the REB and TTC administration to conduct a study at the TTC. After he was granted permission, the researcher informed participants of this intention to involve them in the study, with the study's objectives spelled out to them. The participants consented to participate in the study. The participants were also informed that they could withdraw from participating in the study whenever they felt like it. Moreover, they were assured of confidentiality. Their identities and information were going to be treated with confidentiality. Throughout the study, no

suggestive information on their identities would be used. Furthermore, the participants were assured that the data collected were strictly for this study.

V. RESULTS

The data analysed revealed the following themes and subthemes:

Resources

Owing to their hearing status, deaf student teachers could require resources unique to those of hearing student teachers. Therefore, the TTC was supposed to have resources specific to the deaf students it enrolled.

Material resources

Material resources are important in the education of deaf student teachers. Materials like hearing aids, acoustic infrastructure, and audiometric assessment tools could help educate student teachers in a mainstream TTC. A tutor, an administrator, and a deaf student teacher revealed the following in respect of material resources for the education of deaf student teachers at the TTC:

"*Absolutely no resources for deaf student teachers. Completely nothing*" (Tutor).

"*We do not have resources for the deaf student teachers. We have some resources for the blind but do not have these student teachers. Resources are from REB, not us. They are just for teaching Special Needs and Inclusive Education lessons*" (TTC Administrator).

"*We do not get resources from the TTC. We just bring in our ordinary resources like stationery*" (DST 2).

The participants unanimously agreed that there were no material resources for deaf student teachers. The only resources mentioned were for the blind, such as Perkins Brailler and white canes. There were no blind student teachers at the TTC. Hence, the resources were only used for teaching purposes. This could suggest that no ecological inventory was conducted on the student teachers with special educational needs who were enrolled and their needs. As such, only resources for teaching purposes were procured instead of resources that could assist both the deaf and hearing student teachers. The hearing student teachers were going to benefit from seeing how deaf student teachers used resources like implication devices and how they benefitted from the acoustic environment as well as from the use of these resources during lessons on hearing impairment. It was unclear why the procurement of materials for the deaf did not have precedent since they had deaf student teachers on the ground.

Human resources

The TTC was supposed to have personnel qualified in deaf studies to handle the students. A lack of specialist personnel could lead deaf student teachers to miss out on information that could disadvantage them in various areas within the TTC. On the human resources available for the education of deaf student teachers, one administrator and two a deaf student teacher expressed the following:

"*There are no specialised human resources, not even one, to help or teach deaf student teachers in the TTC. REB has been notified they are not responsive. I suggest they pay attention to this scenario and hire tutors who can teach RSL scattered across the country*" (TTC Administrator).

"*No worker at this TTC can sign. Even in the library, sometimes we miss some important information*" (DST 2).

The TTC had no specialist personnel to manage the deaf student teacher. Attention was brought to the attention of the employer, but they seemed to turn deaf despite the availability of tutors who could provide RSL in the country. It was unclear whether the employer's unresponsiveness resulted from a lack of suitable candidates for the post from those in the country or whether it was by design. The lack of people knowledgeable in RSL disadvantaged deaf student teachers in various departments in the TTC. In light of this, it may be safe to say that the TCC did not practise the 'right to equal education' principle due to a lack of equal opportunities.

Communication mode of teaching and learning of deaf student teachers

Culture

The researcher sought to establish the culture to which the deaf students subscribed to have a background on the communication mode they could prefer. In light of this, both deaf student teachers revealed that:

"*I subscribe to the hearing world. I have never heard about it [deaf culture]. I have tried hearing aids but left them because I was not benefitting from them. I want to hear, although my parents and three siblings are deaf*" (DST 1).

"*Although my parents and siblings are deaf, I want to hear because I live in the world where the majority are hearing, not because I belong to the deaf culture. I do not know about it. I use RSL because that is the only option available for me. Hearing aids did not help me*" (DST 2).

The excerpts from the deaf student teachers reveal that they subscribed to the hearing culture despite being born and growing up in families of deaf parents and siblings. Both student teachers tried using amplification devices to no avail. Furthermore, both student teachers unanimously revealed that they were unaware of the deaf culture despite coming from families of deaf people. Lack of knowledge of the deaf culture possibly resulted from their parents' lack of exposure to it, resulting in them missing out. It could also be that deaf culture was not well established in Rwanda, a position that could need to be pursued in further research. The deaf student teachers, therefore, resorted to RSL for communication purposes because it was their only alternative language.

Preferred mode of communication by deaf student teachers

Deaf people may have a different mode of communication, which may not be understood by those who speak in a spoken mode. Learning in an inclusive set-up may pose some experiences. To this effect, the deaf student teachers said:

"*I cannot hear, so I prefer RSL, which does not require hearing. I prefer using RSL for all my communication*" (DST 1).

"*I cannot hear, so I cannot use spoken language that requires listening because I have not heard any spoken language sound*" (DST 2).

The student teachers were deaf, and although they wanted to hear, they could not; as revealed earlier, they could not benefit from amplification devices. The deaf student teachers, therefore, preferred RSL as their mode of communication in academic scenarios. Spoken language was not an option because it required listening, yet they could neither speak nor hear. It was difficult for them to use a spoken language due to a lack of spoken language input. A spoken language needs listening to have an input, which would eventually be output as a spoken language. The deaf student teachers, therefore, preferred using RSL for all their communications.

Strategies to include deaf student teachers in teaching and learning

After enrolling deaf student teachers, the TTC needed to ensure they benefitted from the teaching and learning processes. In light of the lack of resources for the education of deaf student teachers and the tutors' inability to sign, the researcher sought to establish how deaf student teachers were included in the teaching and learning processes, and the following emerged:

"*Tutors cannot sign. To communicate with me, they write, or my two hearing friends who can sign and interpret the communication. The two who can sign learned RSL out of their will to learn from us. Hearing student teachers, except two, cannot sign. A few can fingerspell*" (DST 2).

"*The tutors cannot sign. Only one tutor can sign one or two words. In my class, some tutors give me notes before the lesson. When I have questions, I tell my friend who can sign to ask them, or I must write the question and give it to the tutor. The tutor either writes or speaks the answer, and my friend signs to me*" (DST 1).

"*I cannot sign, but we try to accommodate the student teachers by communicating through other means like writing or using interpreters*" (TTC Administrator).

"*I cannot sign. When I want to communicate with deaf student teachers, I write on the board, or I ask their friends who can sign to explain the situation to the deaf student teachers*" (Tutor).

"*These student teachers can read, so they write what they want, or they*

bring in their friends who can sign to explain what they want" (Library Worker)

The participants unanimously revealed that college personnel and hearing student teachers, except two, could not sign, exposing the student teacher to communication challenges. Apart from the two student teachers who could sign, the rest's best signing was a word or fingerspelling. There were, however, efforts to ensure that deaf student teachers were included in TTC services and activities. Forms of communication with the deaf student teachers included reading and writing as well as signing from the friends of the deaf student teachers. The major driving force in including deaf student teachers was the ability to read and write, a key mode of communication with hearing people in the TTC. The two student teachers who could sign learned it out of their zeal, suggesting that it was out of intrinsic towards RSL that hearing people could learn it. This suggests that those who could not sign did not have intrinsic motivation to learn RSL from the deaf student teachers they were supposed to interact with daily. It is important to note that the tutors exercised patience to listen and respond to the deaf student teachers' needs. This was a great stride towards including deaf students, considering that these tutors were not specialists in the education of deaf student teachers. Efforts were, therefore, made to ensure that teaching and learning of deaf student teachers was taking place.

Deaf children's academic challenges at the TTC

Considering the lack of resources for the teaching and learning of deaf student teachers and communication differences, they were bound to encounter some challenges. These challenges likely impacted equal educational opportunities for deaf and hearing student teachers at the TTC. On the challenges the deaf student teachers encountered, the deaf student teachers, TTC administrator, and a tutor presented the following:

"*I have problems with abstract subjects, Religious Studies, and non-sign languages, for instance, Kinyarwanda, French, and English. In languages, my major challenge is amasaku (Phonology). How can I be forced to learn and do well in phonology when I have never heard any speech sound? That was too abstract for me. There is no RSL in the college, and no one can use it except my deaf friend, one hearing student, and me"* (DST 1).

"*Languages, except RSL. I am taught phonology when I cannot hear. Things I cannot see are difficult to understand"* (DST 2).

"*Languages, especially phonology and Music. They also have problems with the National Examination and School Inspection Authority in these subjects. At one time, a deaf student tutor got a zero in phonology and was angry with the teacher, to whom she demanded that he put phonology in her brain so that she could understand it. She said that her ears did not. Hence, the only way she could understand phonology was when the tutor put it in her brain because he was the one who wanted her to under it. The teacher was dumbfounded"* (TTC Administrator).

"*Their problem mainly emanates from languages and communication in spoken languages, like French, Kiswahili, or Kinyarwanda. They rely heavily on writing and a friend who can sign for communication. There are no hearing aids, and I think classrooms should be such that they do not allow them to see what is outside. Once they see something fascinating out there, it becomes difficult to draw their attention back. You must touch them or assign someone to return their attention to the lesson*" (Tutor).

It emerged from the participants that the major academic challenges of deaf student teachers were abstract concepts, including languages. Outstanding in their challenges in languages was phonology. Managing speech sounds was conspicuously difficult for deaf student teachers because they did not have speech sound input. Considering that the deaf student teachers had profound prelingual deafness, they had no experience with speech, let alone speech sounds. The deaf student teachers found learning speech sounds absurd since they had no experience with speech sounds, could not imagine what they were, and could not even produce them. In light of this, the teaching and learning of RSL as a subject was supposed to take precedence to ensure that deaf students benefitted when most people could sign.

Furthermore, the nature of the classrooms allowed the deaf student teachers to pay attention to outside activities. They had no curtains. Hence, student teachers could look outside, requiring teachers to find means to draw their attention back to classroom activities. The TTC had no resources to facilitate the teaching and learning of deaf student teachers.

Discipline

Discipline entails self-control based on following set rules and regulations of an institution. All student teachers were expected to be disciplined. Deaf student teachers were no exception. On disciplinary issues concerned with deaf student teachers at the TTC, the administrator revealed that:

"*Generally, our deaf student teachers do not have disciplinary challenges. Whenever they encounter problems, we ensure that they have presented their issues in all possible ways to ensure that we hear them well before we handle them accordingly. Student teachers can present their stories in writing or with the aid of an interpreter"* (TTC Administrator).

Despite their lack of hearing, deaf student teachers did not pose disciplinary problems. Owing to their deafness, one would expect the deaf student teachers to miss out on some instructions and cut corners of TTC rules and regulations. Nevertheless, they were not caught on the wrong side of the TTC rules and regulations, a sign that they made efforts to understand the TTC rules and regulations and keep them for their good names. Whenever they encountered challenges, they had the platform to present their stories to the TTC administration in the ways they understood, like writing or spoken language, through an interpreter.

VI. DISCUSSION

The TTC generally did not have resources for the education of deaf student teachers. In particular, the study found that the TTC did not have material resources for the education of deaf student teachers or personnel qualified to teach deaf student teachers. Considering this, Bell et al. (2016) note that deaf students mostly do not complete their education beyond the primary school level due to a lack of necessary resources, such as skilled personnel in the education of deaf material and financial resources. Specifically, Brett (2010) and Miles et al. (2018) reveal that deaf students were still very few in institutions of higher learning due to their complex and unique needs. Similarly, Batamula (2009) asserts that in Tanzania, little effort has been made to provide deaf education at the secondary school level or beyond. A similar scenario was witnessed in South Africa. It may be a regional trend that education for the deaf beyond the primary education level is not much of a concern to the stakeholders. It may be essential to find out why this scenario prevails regionally through research. Above all, their needs may not be readily accessible and may be exorbitant. Institutions of higher learning and the student, who may have other expensive needs, may not afford them.

On the mode of communication that was used to teach deaf student teachers, the study found that deaf student teachers preferred hearing, but they were not able to. They did not know about deaf culture. They had never been to institutions for the deaf where they could learn about the culture (Leigh et al., 2018). They used RSL because they had no option owing to their lack of hearing and absence of intelligible speech. These deaf student teachers subscribed to the hearing world. Hence, they did not belong to the category Leigh et al. (2018) referred to, which entails that the deaf do not have SEN but require communication in the cultural minority language, RSL, in this case. The deaf student teachers preferred and were comfortable communicating in RSL. No legislation, however, was conspicuously promoting the use of RSL in the teaching and learning of deaf student teachers. This was different from the Malaysian scenario, where a law supporting the use of MSL in the education of deaf students was enacted in 2008 (Miles et al., 2018). Despite the stride in enacting the Malaysian Persons with Disabilities Act (2008), it was not mandatory to implement the law, a scenario that could imply a non-existent legislation. Closer home in SA, it is mandatory to use SASL when communicating with the deaf in social

and academic spheres (Bell et al., 2016). The tutors were not able to sign. Hence, they used a spoken language that the hearing student teacher interpreted for both parties.

Moreover, the student teachers and tutors used a written mode of communication. These three modes of communication were instrumental in communicating between deaf student teachers and TTC personnel in academic spheres. This was consistent with the Kenyan scenario, where total communication was used to teach deaf students (Adoyo, 2007). Although the DoE (2001) calls to promote equal access and participation by all students with SEN, deaf students are still underrepresented in HEI (Brett, 2010; Miles et al., 2018) due to their complex and exorbitant needs unique to each learner.

Similarly, the Higher Educational Statistical Agency (HESA) (2011) expresses that apart from being underrepresented in HEI, deaf students are also under-supported globally and in South Africa, as an example of an African country. On the strategies used to include deaf student teachers in teaching and learning, the study found that the tutors prepared comprehensive and explicit notes and handouts for deaf student teachers. These would compensate for the information they lost during the teaching and learning processes. This was contrary to findings by de Oliveira et al. (2020), which indicate that in Brazil, it was mandatory to use Brazilian Sign Language to teach deaf students in an inclusive set-up. Furthermore, studies have shown that Kenya uses total communication (Adoyo, 2007) while SA uses SASL (Bell, 2016) in the teaching and learning of deaf students. Besides using notes and handouts, an interpreter was instrumental in the communication equation. Both tutors and deaf student teachers relied on the interpreter. The tutors and deaf student teachers would ask the interpreter to relay and pass information from each side. These findings were consistent with the sociocultural model of disability, which states that learners with disabilities need an enabling environment to learn like any other learner (Luckner et al., 2012; Bell et al., 2016). Their disability in learning was socially constructed rather than a disability existing within them. However, Harris (2018) postulates that deafness has existed since the beginning of humankind, but no efforts have been made to improve their lives and education. If the TTC and its stakeholders subscribed to the sociocultural model of disability, providing resources for the education of deaf student teachers would be a priority. In this case, there were no human, financial, or material resources to improve the education of the deaf student teachers and, eventually, their lives. REB was conscious that there were no resources for the education of deaf student teachers, but no efforts were made to provide the requisite resources.

VII. CONCLUSION AND RECOMMENDATIONS

Based on research findings, the study makes some recommendations as follows: After it emerged that there were no qualified personnel to teach deaf student teachers and material resources, the study recommends that REB hire qualified personnel to teach deaf student teachers and give preference to procuring resources for those who were enrolled. Regarding the mode of communication, the study recommends that REB should facilitate the teaching and learning of RSL by all student teachers as a language so that many people in the TTC can sign. On strategies for teaching and learning deaf student teachers, the Department of SNIE should have a strong RSL club and incorporate hearing tutors and students to develop a wide base of people who can sign.

VIII. CONFLICT OF INTEREST

There are no conflicts of interest, financial or material.

REFERENCES

Adoyo, P. O. (2007). Educating Deaf Children in an Inclusive Setting in Kenya: Challenges and Considerations. *Electronic Journal for Inclusive Education*, 2(2), 1-11.

Batamula, C. (2009). Deaf education in Tanzania: an overview of the current situation. *Education 895, Final*. http://fcatanzania.weebly.com/uploads/1/0/4/7/10473141/deafintz.pdf.

Bell, D., Carl, A., & Swart, E. (2016). Students with hearing impairment at a South African university: Self-identity and disclosure. *African Journal of Disability*, 5(1), 1-9. http://doi.org/10.17645/si.v6i4.1643

Brett, M. (2010). Challenges in managing disability in higher education, illustrated by support strategies for deaf and hard of hearing students. *The Open Rehabilitation Journal,* 3, 4–8. http://dx.doi.org/10.2174/1874943701003010004

Clandinin, D. J. and Connelly, F. M. (2000). *Narrative enquiry: Experience and story in qualitative research*. San Francisco: Jose Bass Publisher.

Corbin, J., & Strauss, A. (2008). *Basics of Qualitative Research: Techniques and Procedures of Developing Grounded Theory*. Thousand Oaks: Sage.

Dammeyer, J., & Ohna, S. E. (2021). Changes in Educational Planning for Deaf and Hard of Hearing Children in Scandinavia over the Last Three Decades. *Scandinavian Journal of Disability Research, 23*(1), 114–123. https://doi.org/10.16993/sjdr.680

de Oliveira, E. L., Fuzeto, A. P., & Manoel, P. A. F. (2020). The Inclusion of Deaf Students in Higher Education: Didactic-Pedagogical Strategies Applied to the Teaching and Learning Process. *Psycho. Beh. Sci Int .J., 15*(1), 001-008.

DeafNET Africa Conference. (2016). *Deaf Education: Empowering Deaf Persons in Africa through knowledge-Post Conference Report.* Johannesburg: South Africa.

Dela-Fuente, J. A. (2021). Implementing inclusive education in the Philippines: College teacher experiences with deaf students. *Issues in Educational Research, 31*(1), 94-110.

Department of Education. (DoE) (2001). *Education White Paper 6. Special Needs Education: Building an inclusive education and training system.* Pretoria: Government Printers.

Higher Education Statistical Agency (HESA) (2011) First year UK domiciled HE students by level of study, gender, mode of study and disability status 2010/11. http://www.hesa.ac.uk/dox/dataTables/studentsAndQualifiers/download/disab1011.xls
http://doi.org/10.1093/deafed/env028

IDEA (2004). *Individuals with Disabilities Education Act, 108th Congress*, USA.

Incheon Declaration (2015). *Towards inclusive and equitable quality education and lifelong learning for all*. UNISCO: United Nations.

Leigh, G., Ching, T. Y. C., Crowe, K., Cupples, L., Marnane, V., & Seeto, M., (2015). *Factors affecting psychosocial and motor development in 3-yeqar-old children who are deaf or hard-of-hearing. The journal of deaf studies and deaf education, 20*(4), 321-342.

Luckner, J. L., Slike, S. B., & Johnson, H. (2012). Helping students who are deaf or hard of hearing succeed. *Teaching Exceptional Children 44*(4), 58–67. http://dx.doi.org/10.1177/004005991204400406

Miles, S., Khairuddin, K. F., & McCracken, W. (2018). Deaf learners' experiences in Malaysian schools: access, equality and communication. *Social Inclusion*, *6*(2), 46-55. https://doi.org/10.17645/si.v6i2.1345

Osgood, R. L. (2005). *The history of inclusion in the United States*. Washington, DC: Gallaudet University Press.

Public Law 94-142 Act (1975). *Education for All Handicapped Children Act.* Authenticated U.S. Government Information.

SREOPD (1993). *Standard rules on the Equalisation of Opportunities for persons with disabilities.* United Nations.

UN-CRPD. (2006). *United Nations Convention on the Rights of Persons with Disabilities.* United Nations.

UNESCO. (1994). *The Salamanca Statement and Framework for Action on Special Needs*. Salamanca: UNESCO.

UNESCO. (2000). *The Dakar Framework for Action. Education for All: Meeting our collective commitments.* UNESCO: United Nations.

UNICEF Rwanda (2015). *Curriculum Framework Pre-primary to upper secondary 2015.* UNICEF: United Nations.

Wahyuni, D. (2012). The research design maze: Understanding paradigms, cases, methods and methodologies. *Journal of Applied Management Accounting Research*, 10(1), 69-80.

Wolfensberger, W. P., Nirje, B., Olshansky, S., Perske, R., & Roos, P, (1972). *The Principle of Normalization in Human Services.* Books: Wolfensberger Collection. 1. https://digitalcommons.unmc.edu/wolf_books/1