PROSPECTS AND CHALLENGES OF EDUCATING A DEAF-BLIND STUDENT IN A UNIVERSITY IN GHANA

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Abstract:
This study explored the challenges and prospects of educating a deaf-blind student in a public university in Ghana. The study utilised an exploratory qualitative research design based on interviews and observation to explore how the deaf-blind learner navigated university life. The study found that the challenges experienced by all stakeholders included a lack of knowledge and understanding about deaf-blindness, communication challenges, inadequate preparation of educators/teachers and resource persons, lack of support structures for all stakeholders, and the time-consuming nature needed to educate the deaf-blind learner. The study recommends continuous in-service training on basic knowledge of deaf-blindness, instructional and socially inclusive strategies, and communication modes for deaf-blind learners for all stakeholders. A collaborative team approach to delivering training and inclusive education that involves all stakeholders is necessary. The study concludes that if lecturers of learners who are deaf-blind are provided with the necessary training on the skills and knowledge of facilitating communication with their students, this would, in turn, contribute positively towards teaching and learning.

Keywords: deaf-blind(ness), Ghanaian sign language, hearing loss, inclusive education, visual impairment

1. Introduction

In Ghana, there is no official definition of the condition. Deafblindness is difficult to define as a concept because of its rare nature or the duality of the concept which makes the onset quite difficult to detect early. Consequently, to define or describe deafblindness in the Ghanaian context, one has to do it mathematically thus, 1+1=1 and not 2. This means that the condition is very unique. It is a distinct condition that affects some

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individuals in every community globally. Many children who are deaf-blind are yet to be identified because of the complication of diagnosis owing to the comorbidities (National Consortium on Deaf-Blindness, 2008). Deaf-blindness refers to a dual sensory impairment, which means that it is a combined condition of a loss of hearing and vision co-occurring in the same individual (Dammeyer, 2014; Miles, 2008). It ranges from mild loss of hearing and vision to complete deafness and blindness depending on its differing combinations (Ask Larsen & Damen, 2014) and it can either be congenital or acquired (Dammeyer, 2014).

Persons who are deaf-blind have various needs across all areas of development, such as parent-child relationships, hospitalisations, communication, cognition, motor and perceptual development (Miles, 2008), which causes severe educational needs that cannot be accommodated in special education programmes solely for children with deafness or children with blindness (Riggio & McLetchie, 2008). Learning occurs through vision and hearing senses (Lopes et al., 2015); therefore, learners who are deaf-blind need services that are provided by a team of skilled professionals and paraprofessionals who can create appropriate communication and learning opportunities for them (Riggio & McLetchie, 2008). Providing learners who are deaf-blind with appropriate communication and learning opportunities is imperative because these learners depend on others to make language accessible to them and to provide them with the desire to communicate (Miles, 2008). There is a need for multiple communication strategies that should be implemented in both the home and school environments to ease the communication challenges for all stakeholders.

Articles 29 and 25 of the Constitution of the Republic of Ghana (1992); the Inclusive Education Policy of Ghana, 2015; Article 24 of the Convention of the Rights of Persons with Disabilities (CRPD) (United Nations [UN], 2006) and Sustainable Developmental Goals 4 (United Nations [UN], 2015) require authorities to provide equal educational opportunities to all learners, including learners with special educational needs. These legal initiatives make specific reference to those learners who experience barriers to learning and development or who have dropped out of the education system because of the inability to accommodate the diversity of their learning needs.

In Ghana, the provision of equal educational opportunities for all learners, especially those with special educational needs, was operationalized through the drive for inclusive education. Inclusive education, a field that has been given endorsement by law, requires that educators are knowledgeable about policies and practices in inclusive education and that they are competent to teach in classes with diverse learners (Hayford, 2013).

The role of teachers in the implementation of inclusive education cannot be overemphasized. Teachers play a pivotal role in achieving the goal of inclusive education and therefore need to improve their skills and knowledge and to further assist them in facilitating the development of new skills (Mangope & Mukhopadhyay, 2015). The Inclusive Education Policy of Ghana (2015) further highlights the significant difference that schools can make if they provide quality and equitable education for children with disabilities (UNESCO, 2009).

Challenges of implementing Inclusive Education in Ghana have been widely documented in the literature, such as in the works of Hayford (2013); Avoke (2004); Kuyini (2014); Mensah (2016); and Boakye-Akomeah (2015). The gap that exists in the skills and training of educators of children with special education needs, specifically in inclusive education and in the special residential school systems, has been highlighted as one of the significant challenges of inclusive education in Ghana (Agbenyega & Deku, 2010; Ocloo & Subbey, 2008), The results of the teacher training and skills gaps are evident in the quality of care and engagements that deaf-blind individuals experience (Janssen et al., 2003). Because of the lack of knowledge and skills in communication, educators of deaf-blind students often miss or misinterpret the subtle, slow-paced and often difficult-to-understand interactions of these children, resulting in frustration for both the educator and the learner with deaf-blindness (Janssen et al., 2003) and (Agbeke & Denkyirah, 2006). Gaps in the implementation of the Inclusive Education Policy and ultimately Universal Design of Learning (UDL), therefore, have negative consequences for both the deaf-blind learner and the educator.

During formal pre-service and in-service training, general education teachers do not receive, preparation on how to manage mainstream classrooms when teaching children with special needs (Republic of Ghana, 2006). Special education pre-service teachers from the University of Education, Winneba who receive professional training in single disabilities management are posted to special schools to teach single disability groups and are exempted from these training gaps. Educators experience specific challenges (such as inadequate preparation) to deal with learners who have multiple disabilities (such as deaf-blindness) because of their lack of adequate knowledge on different disabilities and the lack of training on communication modes, teaching, and learning strategies (Janssen et al., 2003; Arndt & Parker, 2016).

Maguvhe's (2014) study in South Africa where the perceptions of teachers of deaf-blind learners and parental involvement were investigated confirms the earlier studies. Maguvhe (2014) reported that there was a need to establish effective training for educators of deaf-blind learners and to also establish unit standards with achievable outcomes for teaching learners with deaf-blindness, which was in line with the requirements of the Education for All (EFA) initiative.

The aforementioned challenges are demonstrated in studies conducted in Ghana and elsewhere on the continent. For example, in Ghana, there is only one school for the deaf-blind in the country despite its wide cultural and linguistic background. Traditionally, there has been a deprivation of adequate and appropriate support services for learners, teachers, and schools educating learners with special needs (Osei, 2020).

There is therefore, a need for a shift towards the inclusion of educational support services in special schools (Gadagbui, 2010), specifically to include services of speech therapists and audiologists in schools for learners who are deaf-blind. Speech therapists and audiologists may work with students who are deaf-blind, alongside each other to address communication issues because of sensory losses and additional disabilities (Rodriguez-Gil, 2009). This can be done by introducing interventional strategies and alternative ways of communication with the deaf-blind learner. These will assist lecturers

in coping with the many special education needs of learners to ensure that the various learning difficulties are addressed. In that way, lecturers will be trained and supported on the job.

International studies on the subject of deaf-blindness have focused on the communication challenges experienced by learners with deaf-blindness and access to technology to increase communication access (Hersh, 2013; Wolsey, 2017), while others have highlighted the need for identification and intervention strategies for children who are deaf-blind (Anthony, 2016; Arndt & Parker, 2016). The disability is rare and has not been deeply explored on the African continent. The disability has generally been poorly researched and under-reported, with the majority of the studies focusing on the implementation of inclusive education in schools for learners with single disability groups. Deaf-blindness is one of those fields so often neglected, possibly because, as Maguvhe (2014) puts it, 'it is a minority within a minority', therefore making research in this area should be highly prioritized. The lack of ground-breaking research and support in the field of deaf-blindness is of much concern as it prolongs the continued social exclusion of this population, leaving them to contend with institutionalisation, stigmatisation, isolation, and lack of appropriate roles in society (Maguvhe, 2014), often with debilitating results. Ultimately, the rights of this population continue to be breached even though the CRPD has declared the rights to access for all (UN, 2006). In particular, there is a paucity of research focusing on the training of educators of children who are deaf-blind.

The purpose of this research was to explore the challenges and prospects experienced by lecturers of a deafblind student in a public university in Ghana, which specialises in the education of special needs learners in the country. The main research question was: what are the experiences of the deaf-blind learner and the lecturers of the learner who is deaf-blind? This study argues that if lecturers of learners who are deaf-blind are provided with the necessary training on the skills and knowledge of facilitating communication with their students, this would, in turn, contribute positively towards teaching and learning outcomes. Possessing the necessary skills to communicate with learners who are deaf-blind would potentially lessen the frustration of both parties. While teacher training is a step in the right direction, that alone would not be sufficient. Educators of learners with deaf-blindness need to be provided with adequate educational support from communication specialists, such as speech-language pathologists and audiologists to educational ophthalmologists and ophthalmic nurses.

In addition to educational and communication support from specialists, educators need to be provided with the services of psychologists who can provide special needs learners with emotional support and counselling.

2. Materials and Methods

2.1 Research Design
This study aimed to describe the challenges experienced by a learner who was deaf-blind as well as the lecturers of the learner at the University of Education, Winneba. To achieve

this goal, the study utilised an exploratory qualitative research design based on interviews and observation to explore how the deaf-blind learner navigated university life. Since exploratory research design is an enquiry approach in which the researcher investigates an area where there is a dearth of research already done (McMillan & Schumacher, 2001), the investigators employed this approach to study learner experiences and lecturers' challenges of educating the deaf-blind learner in the field of deaf-blindness which is under-researched, possibly because of the low prevalence of the condition (Miles, 2008). The study elicited responses to the following questions: (1) describe the barriers to teaching a learner who is deaf-blind; (2) 'What are the enablers of teaching a learner who is deaf-blind in a university like yours?' (3) 'What kind of support structures are available to lecturers of the deaf-blind learner'? (4) 'What are your experiences of pursuing university education in this institution?' and (5) 'What are some of your challenges in the pursuit of higher education?'

2.2 Participants and Study Site

A purposive sample of 14 participants was involved in the study. The ages of the participants ranged from 20 to 59 years, with the average age being 39.5 years.

Of the six female participants, two were lecturers and four were the deaf-blind student, her mother, her career, and her friend who was deaf. The eight male participants included the principal investigator, a sign language interpreter, four lecturers, the hall of residence manager, and a volunteer tactile sign language interpreter. Education qualification-wise, all the lecturers had a minimum of master's degree and terminal degrees. The study setting was a public university in Ghana, with a Department of Special Education that specialises in the education of learners with special needs – notably, visual and hearing impairments and intellectual disabilities.

2.3 Procedures for Data Collection

Before the start of data collection, ethical approval was obtained from the University of Education, Winneba Institutional Review Board (UEW IRB). All participants were provided with written consent forms for the interviews and for audio recordings before commencing with the interviews. There was no risk of harm to the participants. Anonymity and confidentiality were guaranteed and sustained. Participants were also informed of their right to withdraw at any point in the study if they felt uncomfortable, with no disastrous consequences.

Data were collected through semi-structured interviews and observations. The interview questions focused on the experiences of educating a learner who is deaf-blind in a higher education institution. All interviews were conducted in English and recorded onto a tape recorder using a digital recorder except that of the deaf-blind learner which was in braille format. Data were transcribed verbatim by the principal investigator. Transcripts were subsequently checked against the original data by the second author for accuracy.

2.4 Data Analysis

Data were analysed by the two authors using the inductive thematic procedures proposed by Braun and Clarke (2013), which involved familiarization, coding, searching for themes, reviewing themes, defining and naming themes, and reporting processes. Ultimately, themes were constructed from patterns in the data sources. For consensus, we relied on a coding procedure to identify themes from words, phrases, sentences, and paragraphs that represent or symbolize issues relating to the experiences of the participants.

2.5 Trustworthiness

Trustworthiness strategies, such as credibility, transferability, confirmability, and dependability, proposed by Guba (1981) and Ritter et al. (2023) were employed. The investigators established cordial relationships with the site and participants before collecting data. As investigators, we conducted debriefing meetings occasionally during the entire process of the study. The project was subjected to peer reviews for scrutiny to ensure quality control. During interviews, member checking, probes, and iterative questioning were applied. Additionally, we kept reflective journals to track the development of the study (Ritter et al., 2023).

2.6 Ethical Consideration

Ethical approval to conduct the study was obtained from the Institutional Review Board (IRB) of the University of the Education, and the Department of Special Education of the University.

3. Results and Discussion

Five themes emerged from the analysis of the data collected: (1) inadequate preparation of stakeholders, (2) communication difficulties, (3) challenges related to the learner with deaf-blindness, (4) lack of support structures for all stakeholders, and (5) Much time needed. The themes have been discussed below.

Theme 1: Inadequate Preparation of Stakeholders

Because of the lack of education and training regarding teaching learners with dual-sensory impairment particularly those with deaf-blindness, the majority of the participants reported being ill-prepared in their role of teaching the special learner. In answer to whether lecturers had any history of educating deaf-blind learners, participants shared the following:

> *"When I encountered a learner with deaf-blindness for the first time in class, I didn't have any idea about sign language so I was fascinated and curious"* (36-year-old, female assistant lecturer)

"My first challenge was that there was no in-service training. No workshops either were organized for us. No training whatsoever provided." (45-year-old, male, lecturer)

"Under normal circumstances, they can give us some one-week in-service training so we acquaint ourselves with how to handle the special learner alongside the non-disabled peers; hitherto, they used to give us some few days' training for the blind and deaf students before the start of every academic year but this time nothing happened…." (54-year-old, male, senior lecturer)

"I have never had any in-service training except that I went for observations at both the school for the Blind and the school for the Deaf … So, I never went to the Deaf-blind Centre at Mampong-Akwapim … but maybe it's because I also didn't know if there is anything to do with the deaf-blind learners." (43-year-old, female lecturer)

Findings from the study support the narrative that lecturers in the University did not have the knowledge and skills to educate children with deaf-blindness as they were not adequately equipped to educate dual-sensory impaired children. It is good that lecturers from the Department of Special Education have been trained in the education of single disability instruction. These influenced the teaching, handling, and communicating modes that they provided to support the learner with deaf-blindness (DeSimone & Parmar, 2006; Maccini & Gagnon, 2006). The lack of training on deaf-blindness results in all stakeholders believing that they were not adequately prepared to teach learners with deaf-blindness (DeSimone & Parmar, 2006), which may be time-consuming for them. Some lecturers found themselves in situations where they had to struggle to educate the deaf-blind learner, regardless of the lack of adequate preparation; consequently, they resorted to learning on the job (D. Dogbe, personal communication 17 March 2019).

Theme 2: Communication Difficulties
Participants in this study experienced difficulties communicating with the learner who is deaf-blind.

These communication difficulties have been attributed to the lack of skills necessary for lecturers to facilitate communication between themselves and the learner. Lecturers depended on volunteer sign language interpreters to facilitate tactile means of communication and braille competency. Furthermore, they reported difficulty in interpreting information communicated to them by the learner. Participants reported using their previous experiences of what worked with single disabled learners, to teach the learner with deaf-blindness but which was quite different in most cases.

These findings are expressed in the following verbatim quotations:

"I was never taught how to communicate with deaf-blind individuals. I only know the Ghanaian sign language (GSL) and elementary braille but this knowledge is not adequate to instruct a learner who is deaf-blind in the University." (49-year-old, male, lecturer)

"As for me, I cannot sign at all so I use braille if I am to communicate with the deaf-blind student. She can read and write Braille quite well. I have observed that she prefers to sign than to braille." (A 60-year-old male senior lecturer)

Finding out from the learner with deaf-blindness what her experiences in the university were, she expressed the following:

"Generally, it was required of every student in the university to work hard – therefore, much was expected from me - the deaf-blind learner but nobody helps the fresh student not even the one with disability. But I thank God that my lecturers have put structures in place for me. They arranged with the residence hall manager to provide me with decent accommodation for two of us, - myself and my carer/mother. Secondly, my sign language interpreter who came with me from Akwapim Mampong was also provided with a decent accommodation by the University management to be able to do his work without interference. He was seconded by the Ghana Education Service (GES) to come and help me at UEW." (29-year-old female deafblind learner)

"In class, I am accepted by my peers as I contribute in class by asking relevant questions and answering the lecturers' questions also." (29-year-old female deaf-blind learner)

In connection with the communication challenges, the learner who is deaf-blind expressed the following concerns:

"I am compelled to carry my braille machine with me wherever I go because according to the head of the Department of Special Education, I should do that for those who cannot sign to me but can braille to do that as a way of communicating with me. I understand this advice but the machine is clumsy and quite heavy to carry about. Again, the tactile sign language is faster and easier to communicate but not many people know how to sign." (29-year-old female deaf-blind learner)

Some lecturers also experienced communication difficulties as demonstrated in the following expressions:

"At first, I did not understand how a deaf-blind student could be included in the University. Even now I sometimes still feel that the Department of Special Education has rushed into this project; however, it is surprising how the University management and the Ghana Education Service have embraced the whole project. Anyway, I think that the lecturers in the Special Education Department are doing remarkably well and the deaf-blind student is also determined." (43-year-old, female, lecturer)

"What I want to know is how other people such as drivers communicate with the deaf-blind student since she picks taxis and other commercial vehicles on campus?" (59-year-old, male senior lecturer)

The findings of the study confirmed that the ability to foster a means of communication with a deaf-blind person is both the most important and the most challenging requirement (Miles, 2008). This is particularly true in institutions where educators lack training in communication strategies (Charles, 2014; Manga & Masuku, 2020). The obvious difficulty for the person who is deaf-blind is trying to communicate since very few people understand their communication modes (Aitken et al., 2000). Consequently, the lack of an effective communication system interferes with and hinders activities of daily living for individuals with deaf-blindness (Patrick, 2015). Communication challenges in persons who are deaf-blind are common, coupled with difficulties with self-regulation and self-monitoring, and this may trigger frustration and result in challenging behaviours in this group (Greg, 2017; Nelson & Bruce, 2016). Communication challenges can further cause frustration for the communication partners (Greg, 2017), who are the lecturers and significant others. It is therefore imperative that an effective method of communication is fostered to prevent misinterpretations between the communicating parties (Gendreau, 2011). This can be established by training stakeholders on deaf-blindness, communication strategies, and facilitation of preferred modes of communication.

Theme 3: Experiences of Deafblind Learners in the University

Ghana is replete with a variety of cultures. It is a multicultural and linguistically diverse country with many different beliefs, values, and practices that are unique to each culture. This diversity was also noted in the learners at the study site. The learner tried to speak inaudible (Twi) vernacular to her mother, and caregiver on a few occasions. Socially, she is religious and attends church and prayer meetings. This diversity presented a challenge for stakeholders as it had implications for the type and quality of sign language to which the learner is exposed, the level of support that the learner received from her family and the acceptable way of engaging with this deaf-blind adolescent learner. This is expressed in the following statements:

> *"Her attendance at social gatherings is encouraging given that communicating with her is problematic since she cannot express herself easily and fluently with others … It has again been observed that during social gatherings such as sports and games, she always tries to be present and I think the practice is commendable as it enhances her ability to ask questions and communicate with others. This easy-going tendency exposes her to many opportunities in the social realm so she does not remain isolated and ostracized."* (59-year-old, male senior lecturer)

The role of families in the education of learners with deafblindness has been observed to be very crucial, particularly in the case of adolescent deafblind females who are prone to abuse and misunderstandings. The mother of the learner was involved in the education of her daughter and stated the following:

"When she was young, I used to carry her on my back to the market. However, when she became old and heavy, I could no longer take her to the market with me so I used to leave her with her grandmother. Those times the old lady also was very busy always taking the granddaughter to the hospital now and then until she passed on. This was a very difficult moment for us so she suffered from isolation; even I the mother would not want to have her around me; because of economic reasons, I needed to get the chance to go to the market and not because I was feeling ashamed of having a child with disability. Yes, at times, I left her at home with her food and just locked her in the room to go look for food or do some job to earn some income." (54-year-old mother of deaf-blind student)

The findings of this study support the notion that educating and providing for the needs of children with disabilities is time-consuming (Donohue & Bornman, 2014). Factors such as family, social, and cultural environments and varied moods of the student make it difficult for stakeholders to cope with the level of sign language and communication needs (Omugar, 2016). It is a well-known fact that in special education contexts, learners often vary in terms of age, which makes it difficult for teachers to cope with specifically knowing how to deal with those deaf-blind learners going through adolescence (Omugar, 2016).

Theme 4: Lack of Support Structures for Stakeholders
The majority of stakeholders in this study had basic formal teaching qualifications as categorical special education teachers of single disabilities; furthermore, they had not been professionally trained to support deaf-blind learners. Lecturers were not provided with the requisite support that they needed in terms of workshops, in-service training sessions, guidance and counselling meetings, as described in the following remarks:

"Not in Ghana … no! … Nothing like that in Ghana. Nothing for deaf-blind individuals. There is only one centre for these people in the whole country and we do not hear of them. The Centre is an appendage of the Demonstration School for the Deaf at Mampong Akwapim with twenty students since 1978." (49-year-old, male lecturer)

Responding to a question on counselling services, one participant replied as follows:

"When the University is closed, the parent is informed to come for her ward but she ignores the invitation and/or obligation. The student thus stays in her hostel for about a week or more before we can convince her mother through counselling to come for her child. She explains that her socio-economic situation is precarious." (43 years old, female, lecturer)

The findings of this study corroborate other studies that have emphasized the need for stakeholders to be supported if adolescents with special educational needs, such as deaf-blindness, are to succeed in the inclusive education setting (Frankel et al., 2010; Nel

et al., 2016). The sustenance and care that educators are capable of offering to learners depend on the knowledge, skills, and resources provided to them (Nel et al., 2016).

Therefore, if teachers lack the necessary knowledge, skills, and resources, they will not be able to fulfil the necessary roles in adequately supporting learners with deaf-blindness. If the goal of inclusive education for adolescents with deaf-blindness is to be achieved, stakeholders need to be provided with new skills, training, and support, which will enable them to appreciate and address the complex learning needs of the deaf-blind learner (Frankel et al., 2010).

Theme 5: Time-consuming Nature of Educating the Deafblind in a University

It is evident from all the themes that the inclusion of deaf-blind learners in the university requires much preparation financially, academically, socially, and more importantly some amount of time and commitment from all stakeholders. First, inclusive education is a shared responsibility. Second, university education is a public good. It therefore behooves all and sundry to apply intensive effort to the wheel of progress to provide the needed support to educating ALL particularly the deaf-blind who in the absence of the two distant senses need guidance and direction to access university education to reach their potential. This undoubtedly is time-consuming and calls for total commitment from all stakeholders. Responding to how lecturers experienced teaching a student who is deaf-blind, the following expressions were some of their remarks:

> *"When I encountered the deaf-blind learner for the first time in my class, I was fascinated and very eager to teach the diverse students'. Apart from the sign language interpreter who attracted the attention of the other students initially, everything went on smoothly. The deaf-blind student contributed immensely in class by asking very important questions on emerging instructional issues under discussion. I must confess that including the deaf-blind learner in higher education warrants some essential resources and it is time-consuming. The student needs assistive devices such as a braille machine and refreshable braille display, tape recorders, and note takers.* (36-year-old, female assistant lecturer)

> *"I think that because including the deaf-blind student is time-consuming, the professional tactile sign language interpreter seconded to the university to assist lecturers to execute the inclusion job abandoned the assignment and the mother of the child also insisted that the carer left her assigned duty; the situation compelled the project initiator to insist that the student's mother be brought in to perform the duties of the carer and the services of some volunteer sign language interpreters were sought."* (51-year-old, male, senior lecturer)

Also, the time-consuming nature of the work exhausted some of the volunteers who wanted to be tactile sign language interpreters so they declined as time passed by. Their flimsy excuses were that the deaf-blind learner was possessive and would not allow them to have time for their work/studies.

"There is no doubt that the deaf-blind learner is a joy to work with but she will not let you have time for yourself once you are there to help her even for a brief moment', she would like to have you all day long but you know that that is not possible." (A 26-year-old male sign language interpreter)

3.1 Consequences for Inclusive Education and Transition to Adulthood

The role and influence of stakeholders in educating the deaf-blind cannot be over-emphasized. Communication is pivotal to the successful education of deaf-blind persons and therefore a clear and simple communication method that is understood by the lecturer and significant others close to the deaf-blind learner must be established early. A functional communication method is imperative in the deaf-blind learner's establishment of relationships, facilitation of social participation, facilitation of independence, access to social activities, and, most importantly, in their progress across their education pathways and lifespan.

Establishing a functional communication method, and ultimately ensuring access to quality education, for learners who are deaf-blind will not be possible if the lack of knowledge, skills, preparedness, and support on the part of all stakeholders continues as the norm in deaf-blind settings. The lack of proper training for teachers of learners who are deaf-blind is one of the major hindrances to effective quality education of these children; therefore, it needs to be addressed as a priority.

The Department of Special Education at the University of Education, Winneba therefore needs to train selected professional special education teachers and equip them through ongoing workshops and professional development courses on disability, specifically deaf-blindness, communication strategies to facilitate communication and other pressing needs of these learners. The Department of Special Education and the Ghana Education Service also realise the challenges associated with being a teacher and carer for deaf-blind learners and have to establish support structures in the form of peer support, counselling sessions, and workshops. Apart from lecturers, resource teachers, carers, and parents also play a vital role in the overall development of learners with complex learning needs; they all regularly support students on a one-on-one correspondence basis often without the direct supervision of teachers. Therefore, there is a need to include all stakeholders in the training that is provided for the professionals.

4. Conclusion

The findings of this study suggest that communication is at the centre of the deaf-blind learner–educator relationship. Therefore, if the right support is provided to stakeholders of deaf-blind individuals, learners will thrive in their educational contexts. Deaf-blind learners will also have the right to contact teachers who have specific knowledge and training on deaf-blindness and also to information and resources specific to their needs. Cutting-edge training needs must permeate the following areas: knowledge training on deaf-blindness, skills development on managing learners who are deaf-blind, and communication strategies for the deaf-blind, and it should be tailored to the individual's

cultural, health, and linguistic characteristics of the deaf-blind learner. Providing constant support to stakeholders of deaf-blind students would also ease the external challenges negatively affecting their role and social standing. Therefore, there is a need for a teamwork approach to delivering inclusive education that will encompass educators, therapists, and families of children with deaf-blindness as a means of supporting both the educator and the learner who is deaf-blind. Such collaboration will potentially result in positive outcomes for both the educator and the deaf-blind learner.

Conflict of Interest Statement
The authors declare no conflict of interest.

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