

UNIVERSITY OF EDUCATION, WINNEBA

**TACTILE AND SIGN LANGUAGE INTERPRETING EXPERIENCES
OF INTERPRETERS OF UNIVERSITY OF EDUCATION, WINNEBA**



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INTERPRETERS OF UNIVERSITY OF EDUCATION, WINNEBA**



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Faculty of Educational Studies, submitted to the School of
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Master of Philosophy
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DECLARATION

STUDENTS' DECLARATION

I, Emmanuel Adu-Gyamfi, declare that this Thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

Signature:

Date:



SUPERVISORS' DECLARATION

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of Thesis as laid down by the University of Education, Winneba.

Name of Supervisor: Dr. Daniel Fobi

Signature:

Date:

DEDICATION

I dedicate this work to my parents Samuel Nantwi, and Lucy Nantwi, whose encouragement has brought me this far.



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ABSTRACT

This study examined the tactile and sign language interpreting (TSLI) experiences of interpreters who are with deaf and deafblind (DDB) students at the university of education winneba (UEW). A qualitative research approach and a phenomenological design were used. Semi-structured interview guide was used to gather data from 15 interpreters. A thematic approach was used to analyse the data. The findings of the study revealed that sign language interpreters could not interpret some courses such as; mathematics, early childhood, basic education, and graphic design because the interpreters were not familiar with the content of these programs. It was revealed that some of the interpreters preferred interpreting at the lecture hall to interpreting at a social gathering because the lecturers provide them with their lecture slides. Also, it was revealed that majority of interpreters preferred interpreting simultaneously because it enabled them to interpret well for the DDB students. The findings of the study revealed that interpreters at UEW were trekking by foot from one geographical area to another (campus to campus) to provide interpreting services for DBB. Furthermore, it was revealed that team interpreting was supporting approach that helped interpreting work. Recommendations made included providing means of transport services to support the interpreters in moving from one campus to another, to deliver their services and providing in-service training for interpreters at least twice a semester to help interpreters improve their signing skills.



CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

The University of Education, Winneba (UEW) is one of the universities in Ghana that provides tactile and sign language interpreting (TSLI) services for deaf and deafblind (DDB) students in their lecture halls, at social gathering, and workshops. Interpreters at UEW provide various support services such as serving as a mediator between DDB students and other stakeholders in the university such as lecturers, colleague-students, health workers, school administrators, and note-taking to DDB students. The interpreters at UEW are required to interpret for students at different faculties and departments, during lecture hours and at social gatherings such as the student orientation, matriculation, graduation ceremonies, and workshops organized by various departments. The nature of some programs at UEW requires interpreters to interpret for longer hours and also be involved in the activities whilst other programs require interpreters to be actively involved in their activities. The nature of the program could therefore create varied experiences for the interpreters at UEW which need to be studied.

In this study tactile interpreting refers to non-verbal communication which involve touching or a hand-over-hand method for people who receive signed information through touch. Tracking is used by Deaf-Blind people who have some vision but rely on understanding signed information by touching the interpreter's wrist or forearm to visually follow their hands. And also sign language interpreting is non-verbal communication use of a sign language to convey the information contained in an audio (speech and other important sounds) to viewers who are deaf and for whom sign language is their first language.

Interpreters serve as facilitators for linguistic and cultural exchanges between those who use sign language and those who use spoken language. Cokely (2015, p.4) describes interpretation as, the competent and coherent use of one naturally evolved language to express the meanings and intentions conveyed in another naturally evolved language to negotiate an opportunity for successful communicative interaction in real-time within a triad involving two principal individuals or groups who are incapable of using or prefer not to use, the language of the other individual or group.

Interpreters work in a variety of environments including but not limited to education, government, business, social services, and medical and legal fields. Considering the various work settings where tactile and sign language interpreting services are needed, it is expected that interpreters have a strong base knowledge and appropriate skill sets to interpret an array of topics (Napier, et al 2004). This knowledge is the foundation for effectively and accurately communicating the interactions occurring in those specialized settings. Cokely (2015) claims interpretations will be unsuccessful if the interpreter does not understand the original meaning or intent of the speaker. This requires interpreters to know the languages of those within the exchange, but also the nature of the communication acts which include context, linguistic register, communication goals, listening styles, directness, and language choices of participants (Cokely, 2015). Further, interpreters should identify cultural influences on communication and interpersonal behavior (Alcorn & Humphrey 2007). In essence, while interpreters are noting cultural and linguistic features, they are also managing turn-taking and interaction dynamics while simultaneously conducting an interpretation (Wadensjo, 2014.)

In Ghana, evidence in the literature reveals that studies have been conducted on the experiences of students who are deaf on their interpreters (Adu, 2016, Appau, 2021, Fobi 2021, & Oppong, et al 2018), however, there is a dearth of literature on the experiences of interpreters for DDB students at the University of Education, Winneba. Since tactile and sign language interpreting is seen as the best way in providing access to the curriculum for DDB students, there was a need to explore the experiences of professionals who have been executing the interpreting (Schwenke, et. al, 2014).

1.1 Statement of the Problem

Interpreters work as a team, when one is actively interpreting, the other is monitoring to ensure accuracy. And after sometimes they switch roles. At UEW, interpreters are expected to convey the exact information from lecturers, colleague-students, administrators, and health workers, whose mode of communication is spoken language to DDB students. The interpreters at UEW interpret for longer hours without a term interpreter supporting them. Over the years the interpreters at UEW have been complaining of health issues such as, joint pains, malfunction upper limbs, constant and repetitive on muscles strain and carpal tunnel syndrome. Interpreting involves both physical and mental interactions, which sequentially generate biomechanical tension and injury; constant and repetitive strains of muscles, and carpel tunnel syndrome (Bontempo & Napier, 2011; Bevan, 2018). These are indications of occupational over-use on the part of interpreters which could affect the well-being of interpreters, and also could also affect the output of the interpreting work. the tremendous duties of interpreters have resulted some of the interpreters developing some health issues, such as joint pain and malfunction of the upper limbs. Interpreters at UEW might be going through diverse experiences, especially in the classroom and social gatherings (Fobi, 2021). However, little scholarly attention has been given to

interpreters for DDB students in their academic-related and social-related experiences. Hence this current study sought to explore the experiences of interpreters for DDB students at UEW. Interpreters play an important role in interpreting for DDB students. Interpreters are tasked to interpret messages from a source through a particular mode, either through the sense of hearing or that of sight, comprehending, analyzing, and processing the message to use semantically equivalent statements in the target language and produce such idea or message in an appropriate mode to the target audience (Schwenke, et. al, 2014).

1.2 Purpose of the Study

The purpose of the study was to explore the experiences of interpreters for DDB students at UEW.

1.3 The objective of the Study

The objectives of the study were to explore;

1. The Experiences of Interpreters at UEW
 - a. The Academic-related Experiences of Interpreters at UEW
 - b. The Social-related Experience of Interpreters at UEW
2. How interpreting demands and interpreting resources influence sign language interpreters' job performance at UEW
3. The support services available for interpreters at UEW

1.4 Research Questions

The following research questions were raised to guide the study

1. What are the experiences of interpreters at UEW?
 - a. What are the academic-related experiences of interpreters at UEW?
 - b. what are the social-related experiences of interpreters at UEW?

2. What are the interpreting demands and resources for interpreters at UEW?
3. What are the support services available for interpreters at UEW?

1.5 Significance of the Study

The results of the study would reveal the experiences of interpreters for deaf and deafblind students at UEW. This would help the Heads of departments, the Deans of faculties, and the Vice Chancellor of UEW to take appropriate measures to support the Interpreters. Also, the result of this study would reveal the academic experiences of interpreters for deaf and deafblind students at UEW. This would help the interpreters to effectively manage their job demands to enhance their interpreting service for the DDB students at UEW.

Again, the findings of the study would reveal the social experience of interpreters at UEW. This study would help the University and the Special Education Department to understand the well-being of interpreters as they interpret for DDB students at UEW.

Again, the findings of the study would help stakeholders of UEW to find out the support services available for interpreters at UEW. And, help the University and Special Education Department to support the interpreters to manage their job resources to improve their interpreting job.

Lastly, it will generate a new understanding of the issues raised that will be useful for future researchers.

1.6 Delimitation

The study was delimited to the experiences of interpreters for DDB students. This study was delimited to interpreters who have one semester and above experience in interpreting for DDB students at the University of Education Winneba. The

interpreters included in the study comprised 10 males and five females who interpret for students in their academic and social settings at the university of education. The study was delimited to the experiences of interpreters for students who are deaf/deaf blind.

1.7 Limitations of the Study

There were difficulty scheduling appointments with the interpreters for the interview since they were interpreting for DDB students and they had different timetables for their interpreting assignments. I overcame this challenge by consulting interpreters to schedule the interview after their free day.

1.8 Operational Definition Terms

Sign Language: A language that employs signs made with the hands and other movements, including facial expressions and postures of the body, used primarily by people who are deaf.

Sign Language Interprets: They are facilitators and mediators for lectures and deaf students. They interpret from spoken language and from sign language to spoken language

Experiences: An event or occurrence which leaves an impression on someone.

Burnout: the experience of long-term exhaustion and diminished interest, especially in one's career.

Deaf: Usually refers to a hearing loss so severe that there is very little or no functional hearing

Interns: A student or trainee who works, sometimes without pay, to gain work experience or satisfy requirements for a qualification.

Deafblind: This is a combination of sight and hearing loss that affects a person's ability to communicate, access information, and get around. It's also sometimes called "dual sensory loss" or "multi-sensory impairment and they benefit tactile interpreting.

Tactile signing: is a combination of the sign language of the deaf and the interaction of the blind, and involves many forms of deaf and blind communication

1.9 Organization of the Study

In line with the in-house style of the University of Education, Winneba, this thesis was presented in six chapters. Chapter one comprised the background to the study, statement of the problem, the purpose of the study, objectives of the study, research questions, significance of the study, delimitations of the study, limitations, operational definition of terms, and general layout of the study. Chapter two focused on the literature review taking into account the research objectives and the theoretical framework of the study. Chapter three dealt with the methodology including research approach, research design, population, sample and sampling technique, the instrument used in data collection and analysis, and description and distribution of instruments. Chapter four covered the presentation and analysis of data collected and chapter five focused on the interpretation and discussion of results. Chapter six dealt with the summary, conclusions, and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of related literature on the Experiences of Interpreters Interpreting for Deaf and Deaf-blind Students (DDB). The literature reviewed also included research articles, journals, and books. The literature reviewed also empirical studies and a theoretical framework supporting the main issues addressed in this study. Areas discussed were:

- Theoretical framework
- The experiences of interpreters
- The academic-related experiences of interpreters
- The Social-related experience of interpreters
- How interpreting demands and interpreting resources influence interpreters' work
- The support service available for interpreters

2.1 Theoretical Frame Work

Dewey's Theory of Experience

Dewey's theory of experience (Dewey 1934, Schmidt, 2010) holds that experiences result from an interaction between the principles of continuity and interaction. The principle of continuity provides a way of assessing the quality of experience or its educative value (Schmidt, 2010). As we continuously interact within environments, the changing world brings various challenges to our usual ways of interaction. Although DDB students, lecturers, colleague-students, administrators, and health workers may endeavour to create an educational experience for interpreters, they cannot fully anticipate the interpreters' experiences. Admitting diverse construction of

a situation poses a great challenge to interpreters. Dewey explains that experience means more than knowledge, but a complex, multidimensional life laden with value and emotions (Noddings, 2007).

The principle of continuity holds that every experience has bearing on a future experience. As such, it goes beyond the current quality of experience, to assess its effect on growth and development, as well as its value on future experiences and the direction it will lead (Schmidt, 2010). Because interpreters lived experiences determine the quality of activity for them (Dewey, 1938a, 1938b), interpreters need to endeavour to provide more academic and social-related experience based on their deep understanding of their interpreting experiences. In the context of this study, it was important to understand the experiences of interpreters for DDB students in tertiary education.

Dewey considered society as an ecosystem, in which human beings are dynamically interacting with their surrounding (Dewey 1916, Noddings, 2007). The principle of interaction introduces another criterion for assessing the quality of experience (Schmidt, 2010). The principle of interaction holds that situational or environmental circumstances influence the experience. This implies that knowledge is derived from our interaction with the environment, and the world can only be understood by our active participation (Noddings, 2007). Because of such reasoning, it is not only meaningless trying to represent the world away from our experience but also impossible to understand the world separately from our interactions within it. Dewey believed that to understand the world, we need to purposefully engage in the world as active participants, rather than contemplating the remote world. Continuity and interaction with different environmental circumstances help in building the capability to deal with different situations (Dewey, 1938a).

Under Dewey's theory of experience, the value of experience should be determined by looking at how it affects a person's theory of experience, as well as his/her present, future, and role in society. For this study, an interpreter's future experiences could be assessed by how the interpreter utilized academic experience (Dewey, 1938b). Dewey's theory of experience will be tested by looking at the impact of the number of academic-related experiences when dealing with interpreters in the classroom, in group discussions, and in their social experiences.

2.2 Experiences of Interpreters

Interpreters' background knowledge of the content-having knowledge and understanding of the contents that interpreters are required to interpret in the classroom gives them the control and the flexibility to facilitate communication effectively among lecturers and DDB students. When an interpreter has knowledge on the content, it makes their work much easier for them and it helps the deaf students to understand whatever the interpreter signs or communicates with them. Heyerick and Vermeerbergen (2012) stated that it is crucial that interpreters not only familiarize themselves with the vocabulary of the content they interpret but also need to learn how to communicate those concepts for their consumers to understand. Heyerick and Vermeerbergen stressed that it is unfortunate that as the vocabulary of different academic contents in higher education institutions keeps expanding rapidly, most interpreters struggle to 'keep up. Again, the way languages are encoded also differs and that leads to lexical gaps of different kinds for which interpreters need to catch up. Interpreters need to have some knowledge of the context they work in and adopt the best strategies to help in bridging the language and communication gaps to be counter-productive in the field they work in to avoid omitting some signs. (Heyerick and Vermeerbergen, 2012, Napier, 2002, Napier, 2005, Napier, 2011, Napier, 2016).

For instance, an interpreter who chooses to omit certain information based on not knowing the specific sign may deny the deaf consumer from learning the new terminology the teacher introduces in their class. The interpreter who works in the educational setting needs to be well-prepared and also be able with knowledge of the content to be effective in the classroom.

The preparation needs to go beyond just reading through the content the teacher will present in class beforehand. It also includes having time to learn the appropriate signs related to the content and find the appropriate signs that will communicate the content to the deaf students. It sometimes even requires that interpreters get the lecture slides from the lecturers and prepare themselves and also meet with deaf students and agree on the signs to use on new vocabularies that may come up, in case there are no specific signs for those concepts. Interpreters need to also have access to additional materials such as sign language dictionaries and videos that will assist them with the new concepts in the content they interpret. Before every lesson, interpreters need to get a holistic view of what teachers' intentions for lessons are (Napier, 2011, Napier, 2016). What goal is the teacher trying to achieve in the lesson, and what does the teacher want the students to learn in that lesson? Is the lesson practical, factual or theoretical? All these will guide the interpreter to know the best interpreting strategy to employ to help in achieving the goal of the lesson. The next aim after understanding the goal of the lesson is to find ways of understanding the terminologies in the content. The interpreter needs to review teachers' lesson plans and the materials that will be presented in class. Interpreters need to contact teachers should there be any further clarifications needed in understanding the lesson. Additionally, interpreters need to analyze any material the teacher will present in class and predict the strategies and structure of the presentation the teacher to prepare

accordingly for such a lesson. It is important that whilst the interpreter reflects on the goals of the teachers, they predict the language that a teacher is likely to use and find signs appropriate for that language. Bontempo (2012) stated that as opportunities for higher education for deaf students increase, they are likely to venture into any field of interest to them which may not be in the domain of the interpreters. However, interpreters must be well-read and familiarize themselves with the contents of different fields. By this, interpreters will be able to provide accurate interpretations to DDB students in their chosen fields in higher institutions. A challenging task for most interpreters in higher institutions as Bontempo noted is that there are a growing number of deaf and deafblind students who use cochlear implants or are late learners of sign language who require interpreters who are versatile and cognizant of the needs of such students and find appropriate means of dealing with them. Witter-Merithew and Nicodemus (2010) have advocated that for interpreters who practice in tertiary institutions to have control of the contents they interpret, there should be some specialisations in the field. They stressed that specialisation in interpreting can exist either through 'de facto' or 'de Jure' processes. Witter-Merithew and Nicodemus explained de facto specialists as those interpreters who have practiced in a particular setting, with particular populations, and within unique functions. De jure interpreters according to Witter-Merithew and Nicodemus are those who have adhered to national standards and have completed advanced educational programmes in specialist areas and have been certified to practice in those areas. When interpreters are specialists and work within those areas, they do not struggle to function and are very familiar with most of the concepts in those areas. A look must be given to interpreters who work in tertiary educational settings since they encounter different areas of speciality that they need to interpret. It will be good if more specialist interpreters are trained for

deaf students in tertiary institutions to maximize the potential for effective communication in those settings and also allow deaf students to select programmes of their choice.

2.2.1 Academic-Related Experience

In classroom settings, interpreters interpret what teachers or hearing students say in spoken language into sign language for deaf students. They also interpret what DDB students sign into spoken language for hearing students and lecturers. Interpreters' presence in the classroom settings facilitates interactions between lecturers, hearing colleagues and DDB students. They are not to participate in the class. Interpreters in educational settings are tasked to ensure that whatever information is accessible to hearing students in the class is also accessible to deaf students. Even the distractions caused by students in the form of coughing or whispers should be made known to deaf students in the class. Any comments or questions from DDB students should also be made known to the hearing people in the class. By doing this, interpreters ensure that information is available and accessible to both parties equally (Fobi &Oppong, 2019, Napier, 2002, Napier, 2005, Napier, 2011, Napier, 2016, Witter Merithew & Nicodemus, 2010).

In educational settings, interpreters must participate in meetings such as staff meetings, and individualized education programs (IEPs) (Schick & Williams, 2007) not only staff meetings but departmental meetings, group meetings etc. Schick and William explained that interpreters can provide meaningful contributions to students in staff meetings, departmental meetings and group meetings and can respond to some of the questions about the students. However, it is important that when interpreters work as staff members, they should not interpret in meetings since that will not allow

their effective participation in the meetings. Furthermore, when interpreters are available in meetings to interpret, they should ensure that they do not participate in the meeting. Bontempo & Napier (2007) surveyed the perceptions of the knowledge, skills and abilities that interpreters need for effective practice in Australia. Interpreters were required to rate the significance of the identified key knowledge, skills and abilities for professional practice based on the literature. They also rated their competence as practitioners on the parameters identified in the literature. Again, interpreters rated their competence based on their perceptions of their performance at work.

Bontempo & Napier ran a skill gap analysis to determine whether or not the differences between the ratings on importance and competence on each knowledge, skill, and ability were significant. They found that the interpreter accreditation level came up as a significant dimension in the context of the self-reported level of competence and skill for interpreters. What Bontempo & Napier did not consider in their study was the expectation of DDB students on the interpreters and the collaboration that exist between the consumers of interpreting services and the interpreters to ensure classroom interactions that facilitate learning. This study would address the academic experiences of the interpreters in interpreting tertiary classrooms. Again, this study will analyze the academic experience of interpreters in an academic setting.

Sign language interpreters for DDB students in the mainstream schools for which they are trained. Increasing numbers of DDB students are receiving their education in general education settings with special support from interpreters trained in deaf education. There is research evidence to suggest that the academic success and experiences of students who are deaf are a result of some complex factors such as the

characteristics of students and their interpreters, environments as well as the experiences inside and outside school (Marschark, Shaver, Nagle, & Newman, 2015). Specifically, these factors constitute characteristics of students such as language fluencies and mode of communication; features of their family situations like socio-economic status and parent level of education; and experiences both inside and outside the school, for example, the school location. Additionally, the roles of interpreters for DDB students are changing rapidly as are the classroom settings and demographics of the students in schools (Knoors & Marschark, 2014; Shaver, Marschark, Newman, & Marder, 2015) demanding more skilled interpreters in special education to meet the needs of the students.

Hearing impairment is a broad term that refers to hearing losses of varying degrees from hard of hearing to total deafness (Davis, Elfenbein, Schum, & Bentler, 1986). The major challenge facing students with hearing impairments is communication. Hearing-impaired students vary widely in their communication skills. Among the conditions that affect the development of communication skills of persons with hearing, impairments are personality, intelligence, nature and degree of deafness, amount and type of residual hearing, the extent of benefit derived from amplification by hearing aid, family environment, and age of onset of impairment (Marschark & Spencer, 2001). DDB students require support in one or more of four broad areas of need such as communication and interaction, cognition and learning, behavioral, emotional and social development, and sensory or physical aspects of development (Agomoh & Kanu, 2011; Marschark, Morrison, Lukomski, Borgna, & Convertino, 2013). However, this study focuses on the academic experiences of interpreters for students who are deaf, since they have been given support to students who are deaf in the area of communication and interaction, cognitive and learning, and behavioral,

emotional, and social development. This study seeks to know the experiences of interpreters in supporting students who are deaf in an academic setting.

Interpreters have a very critical role to play in assisting these students in excelling in their educational endeavours. Deafness affects children's learning in the development of receptive communication skills if interpreters are not literate in the deaf language. As interpreters, we most often interpret between one signed and one spoken language. Comparing spoken and signed languages, we will find a difference in the manner in which is doing what, and to whom is expressed. Many spoken languages rely heavily on word order to express these relationships. Even though the same words are used, there is a major difference between saying: The dog bit the postman, and saying: The postman bit the dog. Many spoken languages that do not rely on word order to express this use other grammatical markers and are still essentially sequential as words are produced one after the other in spoken languages. In sign languages, signs are not only sequentially produced one after the other. The area in space around us, known as the 'signing space', is also used for linguistic purposes when signs are produced. This has been discussed in the literature on various sign languages using, for example, concepts such as 'localization' (Ahlgren & Bergman, 1994) and 'locus' (Lillo Martin & Klima, 1990, amongst others). In cognitive linguistics, this phenomenon is described by saying that signs can be 'meaningfully directed' (Leeson, 2014). In addition, there is a particular way of signing which has previously been described using concepts such as 'role shift' (Mandel, 1977), 'role play' (Lillo-Martin & Klima, 1990), or 'constructed dialogue' (Winston, 1991; Metzger, 1995). According to Leeson, (2014), the signer becomes a visible 'blended entity' and a 'surrogate blend' is created. Liddell's model, in turn, is based on Mental Space Theory (Fauconnier, 1985) and Conceptual Blending Theory (Fauconnier & Turner, 1996).

These additional possibilities in sign languages add an extra dimension to the task of interpreting between a sign and a spoken language (Padden, 2000), compared to that of interpreting between two spoken languages, and are central to the difference between older and newer ways of describing language. According to the earlier view, a referent must be identified before it can be 'located' or 'placed' in the signing space, and a referent must similarly be identified before the signer can 'take on the role of that person. If the signer is going to refer to something by pointing in a specific direction, the belief has been that the signer also has to identify that entity before pointing signs can be used to refer to it. However, interpreters work from different environments to support the students who are deaf to benefit, however, this literature focuses on the academic experience of the sign interpreters for students who are deaf in an academic setting.

2.2.2 Interpreting in the Lecture Hall

Classroom learning and teaching mediated by interpreters create a triadic interaction between deaf students, lecturers and interpreters (Leeson & Foley-Cave, 2007). Classroom interactions are meant to be between the student and teachers, when interpreters become part of the process, it creates an intersubjective relationship between all three actors of the classroom who may have distinct socio-cultural backgrounds and experiences (Janzen & Shaffer, 2008). Interpreters bring their views, experiences, expectations and intentions into the classrooms to mediate the interactions between the students and the lecturers. These interpreters' attributes may not always correspond to those of DDB students and lecturers engaged in classroom interactions (Janzen and Shaffer, 2008). For example, there may be instances where there are mutual uncertainties about the professional responsibilities of lecturers and interpreters in the classrooms (De Meulder & Hauland, 2019; Ringsø & Agerup,

2018), and this may lead to a lack of collaboration and dialogue. Wolbers et al. (2012) indicates that when these mutual uncertainties occur, interpreters may take on some tasks that usually belong to the lecturer (e.g., explaining concepts to deaf students), without the students' or lecturer's knowledge or consent and any pedagogical training. DDB students aside from seeking concept clarifications from their interpreters, may also perceive the interpreters as 'lecturers' and ask course-related questions from the interpreters. At UEW context, most classroom interactions are in a traditional lecture mode which may not be as interactively participatory as other triadic settings (e.g., interactions between a doctor and a deaf patient), it is nonetheless a situation in which two languages are being used, typically in simultaneous mode, with the potential for communication breakdown (Leeson & Foley-Cave, 2007).

Turner and Harrington (2000) suggested that when interpreting becomes part of education, then studies in such settings should focus "on, for and with" stakeholders. Such studies should dwell on those that the inquiry has an impact on (Knoors & Marschark, 2014, Power, 2003). When interpreting mediates inclusion for DDB students, various actors play active roles (Heyerick & Vermeerbergen, 2012, Napier, 2011). The actors involved in interpreting in interactive classrooms should aim to set up conditions that will facilitate effective interpretations that support improved learning outcomes for DDB students (Salter et al., 2017). Although interpreting research in tertiary classrooms is a developing sub-discipline of interpreting and translation studies (Napier, 2011, Napier et al., 2006, Witter-Merithew & Johnson, 2004), there is a need to examine the perspectives of all the actors regarding inclusion, and how they could put together their expertise and use available resources to support the practice.

Whereas school-based empirical evidence in inclusive learning environments abounds in the literature, there continues to be a paucity of evidence from the classrooms on the understanding of the actors regarding the practices and their enactment of inclusion in these settings (Liasidou, 2015; Salter et al., 2017).

Therefore, the experiences of interpreters for DDB students in their academic-related experiences in classroom settings need to be examined to ascertain the roles of interpreters in facilitating the goal of inclusion in educational settings.

2.2.3 Interpreting Styles

There are several approaches to interpreting the college classroom available to the interpreter and the deaf students. The type of interpretation most successful for students in higher education was also questioned (Marschark, Leigh et. al., 2006; Napier & Barker 2004) and through experiences varying interpreted vs. transliterated lectures and testing scores Marschark, Leigh et. al., 2006). A transliterated is when the interpreter provides the lecture following English grammar and using an English-like signing lexicon where an interpretation follows American sign language grammatical structures. Researchers found that deaf students learning did not differ depending on the format of the sign they were provided but students did give a preference for either interpreting or transliterating (Marschark, Leigh et. al., 2006; Napier & Barker, 2004). Several students preferred a combination of the two modalities, as it allowed the interpreter to process overarching concepts but transliterate the minute vocabulary included in a lecture that might show up on an exam.

A study conducted by Fleischer (1975), on the experiences and comparison of interpreting and transliteration, found that deaf high school students comprehended more of a lecture communicated via interpreting than by transliteration. Although the information on the student's sign language skills was not reported, Fleischer suggested that students' language fluencies might interact with a mode of communication. However, Murphy and Fleischer (1997) replicated Fleischer's (1975) study, comparing interpreting and transliteration with groups of students who are deaf who reported preferring one mode or the other and found no differences in comprehension due either to mode of communication, communication preference or their interaction.

Livingston, Singer, and Abramson (1994) explored the experiences of students who are deaf in interpreting and transliteration and the mode-match issue. In the study, college students were designated as "oriented toward American sign language (ASL) or English-like signing" by deaf adults working with the investigators, looking ahead, it is noteworthy that comprehension scores were quite variable, ranging from 50 to 74 per cent, with an overall mean score of only 62 per cent. More importantly to Livingston et.al. (1994). However, was the finding that of the students who had seen an interpreted lecture, those designated as ASL-oriented scored significantly higher overall than students designated as oriented toward English-like signing. There was no advantage of transliteration for students in the latter group, however, and when a narrative presentation rather than a lecture was interpreted, neither comparison was reliable. The experiences of DDB students in this study revealed that interpreting is not necessarily (or generally) better for classroom communication than transliteration, nor is the matter one of simply matching the mode of interpreting to student language skills. The findings of this study revealed that DDB students prefer either interpreting

or transliteration depending on their language proficiency and the nature of the lecture.

Napier and Parker (2004) conducted a qualitative study in which they examined deaf university students' experiences and preferences for "free interpretation" (general interpreting) versus "literal interpretation" (transliteration). They found that students who are deaf preferred free interpretation in social settings and some academic settings nevertheless wanted literal interpretation (transliteration) in more technical courses so that they could acquire the same vocabulary as hearing peers. At UEW context the interpreters mostly use simultaneous interpreting due to the mode of the lectures. That consensus was consistent with Napier's (2002) finding that university-level interpreters routinely code-switch to provide students who are deaf with information necessary for their academic success. The experiences of students who are deaf in Napier and Parker's (2004) studies suggest that interpreters should use both free interpretation and literal interpretation during instructional hours.

2.2.4 Consecutive Interpreting

Consecutive interpreting is the oral translation of the speaker's words into another language when the speaker has finished or paused for interpreting. Consecutive interpreter awaits his turn and does not start speaking until the speaker allows him the time to do so. It means that the interpreter takes notes while listening to a speech, and then does his or her interpretation during pauses. In an academic setting it is somehow difficult for interpreter to resort to consecutive interpreting because of the mode of lectures. Most lecturers don't wait for the interpreter to sign what they have said to the DDB students before they proceed on their lecturing. Especially in the context where the lecturers have little knowledge about interpreting, they don't factor the interpreter

in their teaching which makes it difficult for an interpreter to resort in consecutive. However, some of the interpreters love to use consecutive interpreting because it helps them to sign what the lecturers means to the DDB students. Commonly used when there are just two languages at work; for example, if the American and Indonesian presidents were having a discussion. Meanwhile, the consecutive interpreter would interpret in both directions, Indonesian to English and English to Indonesian. It was the process of learning that the researchers tried to describe, and it was in line with the statement of the problem conducted by the researchers in this research. In line with Pratiwi, (2016:128) there are main types of errors in consecutive interpreting are literal translation, inadequate language proficiency (grammatical and lexical), errors in register conservation, distortion, additions, omissions, (protocol, procedures, ethics), and non-conservation of paralinguistic. Language, as a communication tool, plays a vital role in the activities of human life, especially in interpreting subjects. Communication helps us to understand others. The inability to communicate can lead to a lot of problems, both personally and professionally. Robbins (2013), explains that an interpreter is a bridge of communication between two different languages, an interpreter should master the source language and the target language. Mastery includes mastery of vocabulary, grammar, and basic conversation. Also, must be accompanied by a skill of the culture that accompanies the target language, as well as others, and must also be known to keep to understand all communication so that there is no meaningful misunderstanding. This research found that the main difficulties faced by students in the interpreting subject were the lack of mastery of the source target language, especially vocabulary. Frequent ambiguity and translation errors cause in the interpreting process. When students listen to sentences from the source speaker, sometimes they need a long time to

translate them into the target language. Lack of grammar mastery is also a barrier to the translation process because grammatical errors can cause misunderstanding.

In the interpreting process, there is a component of the sender, channel, news, gain the effect, and a single component response when the interpreting process takes place. One element of the interpreting process is a message and then responding in the form of translation to the target language. (Nosratzadegan, 2014). The method of giving a response to interpreting is through speaking. In the process of observation, it was found that students of the interpreting subject also experienced difficulties when listening to the source of language and anxiety when talking to the target language. Complications in listening occur because of pronunciation problems. Students do not understand the sentence from the source language. This also happens in the process of delivering translations. Sometimes there is a mispronunciation that ends in a misunderstanding of the audience or listener. (Robbins, 2013). Consecutive interpreting works best for small groups or one-on-one conversations. The interpreter waits until the speaker is finished before relaying the message in the listener's language, and vice versa.

This type of interpreting is a popular option during both formal and informal occasions. These include Interviews, HR meetings, Parent-teacher conferences, Court depositions, Client-attorney meetings, and Medical consultations. Consecutive interpreting has the advantage of being more like a conversation, with both parties able to speak uninterrupted by an interpreter. However, it usually takes about twice the amount of time since the interpreter has to wait until each party finishes speaking before beginning the interpretation – in essence doubling the conversation time. Albl-Mikasa (2016)

2.2.5 Simultaneous Interpreting

A communication, either simultaneously or consecutively, between two or more users of different languages. A simultaneous interpreter is as you can tell by looking at the words someone who interprets for someone in another language while the speaker speaks without interruption. This is the opposite of consecutive interpreting because a consecutive interpreter awaits his turn and does not start speaking until the speaker allows him the time to do so. Simultaneous interpreting is one of the most common kinds of interpreting, but also the most difficult one. Very few translators (who are used to getting the time to think about their translations) can do it, and not even all interpreters can do it well. (Kemin Fang, 2004).

Simultaneous interpreting has some indisputable advantages over consecutive interpreting: efficiency in conducting international events in which several languages are used; less expenditure of time and money: the event proceeds at its own pace regardless of the language of the speaker this decreases the time necessary to hold the event and the material resources required; convenience for the listeners: the participants can hear the presentation in the original language without interruption for translation. (Kemin Fang, 2004).

It is a very complex process to interpret simultaneously, one that only very few interpreters can handle well. A speaker is speaking, and that speaker does not stop or pause. He keeps talking. Therefore, the interpreter must do the following while the speaker is talking: listen to what the speaker is saying; translate it in his mind; render the translation in his microphone, and (and this is the most difficult part) at the same time listen to what is being said while he is speaking himself. This requires a kind of mental miracle, and that is why it is an unusually demanding and complex activity to

carry out, one that requires an unusual level of concentration, which tires out the interpreter rather soon which affects his concentration, which, in turn, affects his performance. (Seeber, 2013)

Simultaneous interpreting is not only an art but also a technology. Therefore, certain basic principles can be followed during the process of interpreting to achieve goals more efficiently. The following principles can be employed to guide our simultaneous interpreting:

Syntactic Linearity: According to the original structure of the sentence that the interpreter has heard, he divides the whole sentence into several parts, and then combines them with various skills to express the entire meaning. Simultaneous interpreting requests the interpreter to give the target version nearly at the same time as the speaker's speech, and a qualified simultaneous interpreter should try his best to shorten the time between interpreting and speaking, therefore, the method to interpret based on the original structure is an important feature in simultaneous interpreting. (Nan Xue. (2007).

Adjustment: It is a vital step in the interpreting process. The interpreter should adjust structure, correct mistakes and add the missing information with the new content he receives. In English, the adverbial modifiers about time and place are usually placed at the end of a sentence.

Anticipation: A good simultaneous interpreter should know how to predict what the speaker would say next with his language ability, knowledge and experience, which can save a lot of time and energy, thus following the pace of the speaker. For instance, in lots of conferences, such cliché is used in the opening ceremony. During

interpreting, with the help of his own experience, the interpreter can interpret the whole sentence, please allow me to be on behalf of ... to extend our warmest welcome to the participants of this conference. when the speaker says that he should predict what the speaker will say next (Nan Xue, 2007).

2.2.6 Collaboration

Teachers have numerous roles and responsibilities they must adhere to which include following their district and school's policies all while planning lessons, teaching, and implementing different strategies to meet each student's needs (which could include students with different learning disabilities) all while maintaining control of behavior in the classroom (Arends, 2015). Teachers already have a hectic load and the arrival of a DHH student may feel a bit overwhelming at first. If, however, the teacher and interpreter learn to collaborate then there are ways they can help each other lessen the stress of their workload. The teacher and interpreter are both academic professionals, who as a team, can help each other meet their goals and potentially improve everyone's access to education. "Ideally the two come together as one, creating a strong bond of people committed to working together toward goals and purposes that they share" (Sergiovanni, 2004, p. 51). This research hopes to explore and explain the idea of teaming to see how teachers and interpreters currently interact, what they can improve upon, and how they can help each other achieve goals. A teaming relationship may feel foreign for teachers and interpreters. Human nature causes uneasy emotions any time we experience change, so when teachers have a new adult enter their classroom, they may feel threatened or unsure if they do not understand what this new person's role entails. Interpreters may also feel strange walking into a new classroom if they do not know the teacher's teaching style or the DHH student. These feelings come to any time humans experience change, but by forming an equal

relationship with clearly defined roles and open communication, teachers and interpreters can help each other provide access to education for all students (King, 2018).

Each interpreter probably has a different method for establishing professional relationships with teachers, but I continue to follow the advice I was given by my agency when I first began working for them. I was taught to walk into every class professionally and friendly, greet teachers immediately, shake their hands, introduce myself, and ask where they would like me to sit. I have found that this establishes a great first impression. After the first class, I try to find time to chat with the teacher about our relationship. I explain that if they have any lesson plans, books, or worksheets that they can give me access to ahead of time then I would greatly appreciate it. I tend to use this opportunity to gauge whether they have worked with any interpreters before, briefly explain my role, and expectations, and inquire about their expectations. All of this sets the tone for our relationship. While some teachers respond positively, others are more hesitant or resistant. With my research, I hoped to examine how other interpreters and teachers address their introductions and whether they establish a teaming relationship (Lytle. 2003).

Another type of relational practice is achieving. This “uses relational skills to enhance one’s own professional growth and achievement” (Fletcher, 2004, p. 278). This type of practice is rooted in connecting with others, maintaining a connection with them, and establishing "good, solid working relationships" with them (p. 278). This is the type of relationship I hope to encourage teachers and interpreters to create. It encompasses saving face, understanding each other's perspectives, respecting one another's roles, and "relational asking" (Fletcher, 2004, p. 278). According to Fletcher

(2004), relational asking is a technique one can use to ask for assistance in a way that will make it more likely that they would get the feedback or help they need to be successful. This way of asking for assistance keeps them equal with the recipient showing that they think highly of them and believing they can learn from them. Interpreters and teachers should make sure that when they are having discussions, they do not try to hierarchize their position. They are equals who can each learn from the other's input. Fletcher's (2004) relational practice of "creating team" (quoted in original text) establishes an environment for the group to flourish in. Teachers and interpreters have the same end goal of providing DHH students access to an education, so ideally, they would be more successful in doing so if they worked together. "Creating team" practice results in "cooperation, collaboration, trust, respect, and collective achievement" (Fletcher, 2004, pp.280).

Working with DHH students requires that the educational team, including the interpreter and teacher, must get together to consider alternative or additional roles/positions which will benefit the student's learning needs (Ministry of Education, 1994). This does not mean that the interpreter will be required to perform other roles such as teaching or tutoring, but they can serve as an "expanded role" if formally decided in an IEP meeting (King, 2018, p 43). IEP teams are required to meet once a year to update the student's goals and progress, so working together daily may be a foreign concept to team members. In fact, according to (Hwa-Froelich, & Westby, 2003). "Although the number of schools employing interpreters continues to rise," one thing is for sure is that "general education teachers receive little if any orientation concerning the educational interpreter" or their role (p.38). The fact that teachers have not received any training on who and what an interpreter is can be found in numerous educational 16 interpreter readings within this review (Arends. 2015, Hwa-Froelich,

& Westby, 2003). stated that "most schools have little or no experience with educational interpreting" (p.6) and this lack of knowledge leaves interpreters with little support making their job more difficult, which then could hinder the DHH student's educational experience (Biggs, J. 2003). This lack of access to information about interpreters leaves hearing teachers "expressing concern about working with educational interpreters" and unsure of what the interpreters' roles entail (Biggs, J. 2003).

Teachers should know that the interpreter's role in their classroom depends upon the job at hand. Similar to how a teacher may teach topics in different ways to students who learn differently, the interpreter may have to adjust their interpretation and potentially their role to be able to provide the student access to their education. According to Hwa-Froelich and Westby (2003), "the interpreter may assume many roles, including listener, speaker, gatekeeper, interviewer, social agent, and conversationalist" (p. 82). The interpreter has two tasks to focus on: how to interpret and how to listen. However, the role they take on depends on the IEP team's service providers communicating together and determining which role would benefit the student the best (Hwa-Froelich and Westby, 2003). These service providers are the IEP team members responsible for ensuring the student is on track to meet their educational goals (Ministry of Education, 1994). Meeting the DHH student's goals means that the teacher and interpreter are working together, understand each other, and have a clear understanding of each other's roles and abilities.

2.2.7 Team Interpreting

In the team of interpreters, there is one interpreter who is the target interpreter. This is the interpreter that is on. The other interpreter is the feed. This interpreter feeds information to the target interpreters. The team must negotiate for breaks so the team has a real break. One interpreter should not be left alone during the interpretation, because the other interpreter is having a break. Or you could try to get two sets of team interpreters, that is, four interpreters altogether. One team can then have a break while the other team is interpreting (Bentley-Sassaman & Dawson, 2012). A team can also consist of three people, with two working as either the feed or the target interpreter while the third team member rests. The length and complexity of the content will influence these choices. Example: a 5-day conference compared to an all-day hearing. Many interpreters find it more tiring to provide the feed on a signed message coming in (voicing). This requires a tremendous amount of concentration. Again, it is important to have breaks because both the target and the feed interpreter are focused on the interpretation (Napier & Stone, 2018).

Team interpreting refers to interpreting situations where two or more interpreters are working together intending to create one interpretation, capitalize on each other's strengths, and support each other for consistency and success. A foundational premise in team interpreting is that all team members are responsible for the success or failure of the work (Napier & Barker 2004). This is an important aspect when building team practices, in that it forms the foundation for sharing preparation work, actively supporting each in producing a cohesive interpretation, and managing any problems that may arise during the work. However, when teams are new to working with each other, these practices may need to be honed. The following information may enhance the experience of teaming. When asking interpreters about their most successful team

interpreting experiences, it would appear that the success came from a shared guideline and responsibility that "anything is talkable". However, the challenge today may be that hearing interpreter are more comfortable having these conversations in English, and when working with deaf interpreters, they must find new ways to talk about the work in GSL. The idea that "anything is talkable" may be a new way for those who view teaming preparation sessions to involve only a discussion of how long each person will interpret and compensation considerations (Birr,2008 & Hoza, 2010).

Napier, Carmichel and Wilshire (2008) investigated the teamwork between a deaf presenter and his interpreters. They filmed the preparatory briefing, interpretation of the presentation and post-assignment debriefing. In the briefing, the participants defined which cues to use for holding, pacing, monitoring and the use of nods, eye contact and waving of the monitor interpreter. The main signals used were eye contact, pauses and nods. The participants were all convinced that these cues only work when negotiated and agreed upon beforehand. The team members need to be familiar with their use, confident and trustful in their mutual relationship to efficiently apply them for controlling the pace of the interpreter-mediated communication.

Before you start interpreting, give your team member some clues as to what information you want the other interpreter potentially help you with (Examples: fingerspelling comprehension, dates, technical terms). If you want feedback from your partner on your interpretation, it is better to ask beforehand if she would give you some feedback on your skills after the assignment. Ask: "How can I improve?" Or, "I've been working on my fingerspelling. Can you tell me if it is clear and

readable?” Bring paper and pen and write down some specific examples (Hetherington 2010).

Team members need to be attuned to each other to be able to anticipate the team members' thoughts and react correspondingly. To find the same 'wave length', they need to have time to get to know each other and to adapt. Successful teams need to be built to make a team out of a group (Napier and Barker 2004).

In any interpreting assignment, preparation is always a consideration. In a team-interpreted situation, the interpreters need to agree upon who will get information about the topic and content (including any handouts) Carnet, (2008). It is equally important to discuss how and when this information will be shared with the other interpreter. Both interpreters should be fully prepared for the assignment. When going into a team situation, each interpreter needs to be fully aware and honest about his/her strengths and weaknesses Birr, (2008). One of the benefits of a team is that together, the two interpreters can capitalize on their strengths and minimize their weaknesses. Hoza, (2010), commented that to have a balanced team, the individual interpreters often bring different strengths. A team in which the interpreters complement each other is probably ideal. As you begin to forge a way of working together, it is helpful to share information about your background how and when you learned ASL, where you learned to interpret; your range of register and style, how you do your best work; what types of situations are you most comfortable with and what situations make you least comfortable. In addition, both individuals must be able to communicate with each other effectively about a variety of other issues including; knowledge and comfort with the topic, how they process incoming information and how they would like information fed. Considerations for the sign-to-voice and voice-to-sign will need

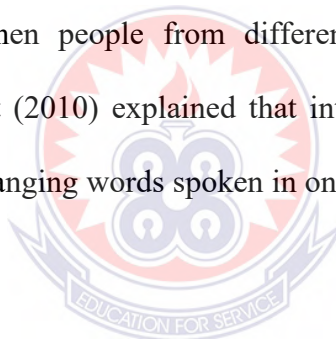
to be addressed. One very practical function of the feed interpreter is to be a constant monitor of the visual environment. Although the interpreter can hear what is going on, she may not be able to see everything that is happening in the room. The feed interpreter can use handouts from the presenter as necessary to provide a specific spelling of a name or other information (Bontempo and Napier 2011, p. 85).

The feed interpreter should also have a notepad and pen handy. This is useful in communicating with your partner in a non-distracting way about some aspect of the interpretation or the situation. When the interpreters switch to a voice-to-sign situation, the person taking on the role of the "feed" interpreter can read any notes jotted down by his or her partner (Napier and Barker 2004). An interpreter may also want to jot down a note related to the interpretation that would be appropriate to discuss at another time. Notetaking, when used professionally, can be an asset to both interpreters. It is a common tool used by spoken language interpreters. Both interpreters need to discuss how the feed will be accomplished. This involves the positioning of the interpreters, the volume of the voice or the size of the signs, and how the feed interpreter will know that his/her input is necessary. When voicing, interpreters often sit side by side, very close together. Sometimes one interpreter is slightly more forward than the other. The timing of the feed is a particularly critical issue. It is important to discuss how much information you want to be fed when you want it fed and how you want it communicated. It is very distracting to have the "feed" interpreter constantly jumping in to help without regard for the "on" interpreter's style. By discussing their processing styles and comfort zones, interpreters are better able to predict and accommodate their partner's needs (Birr, 2008).

Collaboration in team interpreting is only possible through interdependence. Interdependence involves both independence and dependence. For interdependence, both interpreters should have the necessary competencies to complete the interpreting tasks independently overall, and yet they should be able to depend on each other's skills, knowledge, or expertise when necessary. Interdependence, then involves each interpreter working independently, as possible, and relying on each other for assistance as needed. Interdependence requires mutual effort, good communication, a desire to look honestly at one's abilities, and an open attitude about working together. (Delaney, 2018)

2.2.8 The Social-Related Experience

Interpreters are used when people from different languages and cultures come together to interact. Obst (2010) explained that interpreting consists of much more than “bilingual people changing words spoken in one language into the same words of another language”.



Interpreters need to consider more than just the words used; they must consider the implied meaning, power/authority dynamics, intent, communication style, emotions, objectives, tone, mood, cultural and non-linguistic information, and more (Dean & Pollard, 2013; Mindess, 2006). This study focuses specifically on the education of people involved in or preparing to be involved in the interactions between Deaf people and hearing people in the United States. The Registry of Interpreters for the Deaf (2007) explained: Tactile and sign language interpreting makes communication possible between people who are deaf or hard of hearing and people who can hear. Interpreting is a complex process that requires a high degree of linguistic, cognitive and technical skills in both English and American Sign Language (ASL). Tactile and

sign language interpreting, like spoken language interpreting, involves more than simply replacing a word of spoken English with a signed representation of that English word. ASL has its own grammatical rules, sentence structure and cultural nuances. However, Ghanaian interpreters make communication possible between people who are deaf or hard of hearing and people who can hear through Ghanaian sign language (GLS). Also, GSL has its own grammatical rules, sentence structure and cultural nuances. Interpreters work with a diverse population and perform this complex task in a variety of settings, namely "educational, medical field, theatre and legal settings; for conferences and conventions; or at co-operations and institutions and as video relay interpreters" Napier, (2011). Interpreters “must process language quickly and accurately, and they must think about spoken English and sign language simultaneously”. Indeed, interpreters work to provide communication access for all people involved in the interaction. “Interpreting is not merely transposing from one language to another. It is, rather, throwing a semantic bridge between two different cultures, and two different thought worlds” (Namy, 1978, as cited in Dean & Pollard, 2013, p. 6). Interpreting is a complex task perhaps only exceeded in complexity by the task of teaching this process to student interpreters.

Interpreters work between different paradigms of interpreting depending on who their consumers are. For example, interpreters who work with children may choose to operate as helpers, or even parents since children in many cases are not able to make decisions for themselves and may require the assistance of adults. Conversely, interpreters who work with two adult professionals may choose to operate as an ally or by using the bilingual-bicultural model. Interpreters who work in tertiary classrooms also operate in different paradigms (Fobi et al.,2021), and encounter demands that require control options that may be analysed using DC-S (Dean and

Pollard, 2001, Dean and Pollard, 2013, Dean and Pollard, 2011, Dimitrova & Tiselius, 2009, Gile, 2009,). However, interpreters encounter a lot of demand in their interpreting job, whether in the academic classroom or at a social gathering that requires control options to be able to complete the task given to them.

2.3 Burnout and Work Engagement

Although the JD-R model has been applied to higher education institutions (Rothmann & Jordaan 2006; Bakker et al. 2010), knowing such institutions include many schools, departments and programmes (Paradeise & Thoenig 2013, p. 21), it is feasible that across disciplines, academics experience a range of job demands, needing a variety of resource support. Although there may be some common experiences amongst all academics, experiences may also be discipline-specific. This assumption is in parallel with findings from Bakker et al. (2003); demonstrating how employees in different positions at a call Centre regarded their job demands and job resources differently. Further, because the relationship between job demands and resources has contributed to employee wellbeing (burnout/engagement) and organizational performance (Schaufeli and Bakker 2004; Rich et al. 2010, Christian et al. 2011), using this model to understand the experiences of educators in specific disciplines may provide insights as to possible links between educators, programmes and student learning outcomes. McInnis (1999) surveyed academics working in higher education and concluded that due to the number of hours worked, and the fragmentation of tasks, research and teaching quality is threatened. Branka et al. (2012) studied the time management of academics in a higher educational institution in Australia. Their findings show that due to disjointed days, academics often engage in three to six different activities throughout one hour. They compare this to the 'vicious work-time cycle' that Perlow (1999) found in software engineers. Perlow

(1999) reports that when engineers divide their attention across a range of activities, consequently their productivity levels reduce. Lease (1999) also explains, concerning the work of Klenke-Hamel & Mathieu (1990), that academics who experience unmanageable levels of stress are likely to withdraw from student-professor interactions, limit their accessibility to students, and decrease involvement in departmental decision-making and committee commitments.

This demonstrates how high work demand (shown in hours worked) creates challenges for both academics and students alike. Therefore, it is important to provide some additional context on the notion of well-being in terms of burnout and work engagement. Burnout and work engagement are conceptualized as a variable that ranges from low to high degrees of experienced feelings. They are not independent and dichotomous variables, suggesting that variables are either absent or present, but rather they are on opposite sides of a continuum, and someone can fall anywhere along that continuum (Schaufeli et. al. 2002). However, if burnout and work engagement do not work out well interpreters may not be able to give out their best to support students who are deaf in the tertiary settings.

2.3.1 Burnout

Burnout is a state of physical and mental exhaustion triggered by one's work (Freeman, 2010.), and as described by (Bakker et al. 2014), burnout does not have an immediate onset and has been confirmed to be a gradual process where energy and enthusiasm levels are slowly depleted. Although it originally was a phenomenon only applied to people who work with other people, as part of human service domains (Maslach et al.1996), it has since been adapted and applies to any person who may feel high levels of exhaustion, depersonalization, and reduced personal

accomplishment (Maslach et al. 1996). There has been a great deal of research on burnout within the literature, and according to Schaufeli et al. (2002), there are three trends have emerged. First, the aforementioned point that burnout applies more to those working within human service domains. Second, it is commonly researched and discussed in conjunction with work engagement, and third, it has become a research interest globally.

Table 1: Three Dimensions of Burnout

Dimension	Definition
Emotional Exhaustion	When emotional resources are depleted, one feels they are no longer able to give of themselves at a psychological level
Depersonalization	Feelings of cynicism and distance from one's work
Personal Accomplishment	Feelings of dissatisfaction with one's achievements on the job

the mediation role of burnout.

In addition to the definitions above, Demerouti et al. (2003, p. 14) define exhaustion as an "extreme form of fatigue caused by prolonged exposure to specific working conditions including persistent and intensely physical, affective, and cognitive strain". Demerouti et al. (2001) suggest emotional exhaustion resembles stress reactions shown in research related to occupational stress, namely, fatigue, job-related depression, psychometric complaints, and anxiety. The overlap between emotional exhaustion and job stressors has been supported in previous literature by Demerouti et al. (2001).

Depersonalization has been described as the detached and cynical response an employee exhibits amongst consumers and colleagues (Demerouti et al. 2001). It has also been described as disengagement (Maslach et al. 2001) or cynicism (Maslach and

Jackson 1981), as not all professions work with people (Maslach et al. 2001), and yet burnout is not limited to one occupational type (Huebner 1993; Maslach et al. 2001, Maudgalya et al. 2006). Disengagement is when employees distance themselves from work, work objects, or work content signifying a severe emotional, cognitive and behavioural rejection of the job (Maslach et al. 2001).

Finally, reduced personal accomplishment refers to an employee's self-evaluation where the employee believes the work produced is no longer effective and therefore feels unable to meet job responsibilities (Maslach et al. 2001). However, it has been argued that reduced personal accomplishment does not play as prominent a role in burnout as exhaustion and disengagement (Schaufeli & Enzmann 1998). (Leiter et. al 2011) explored and ascertained emotional exhaustion leads to disengagement, whereas reduced personal accomplishment develops independently. Additionally, Bandura (1986) views personal accomplishment as a facet of self-efficacy that is connected to how individuals adjust to demanding situations.

Maslach et al. (2001) describe how consequences of burnout do not simply impact the person experiencing symptoms of burnout, rather they also impact those associated with the person (e.g., clients, colleagues etc.) and may have wider serious impacts on the intuition in which they interact. For example, results from studies on those within human service professions have identified how burnout can lead to a reduction in the quality of provided services, and influence low morale, absenteeism, and job turnover. Additionally, these studies have documented other self-reported personal dysfunctions linked with experiences of burnout including insomnia, physical exhaustion, substance abuse and familial troubles. Although burnout may contribute to depression, it is not in fact depression (Hakanen et al. 2008), as depression is a

clinical syndrome and burnout relates to a crisis one has regarding their relationship with work (Maslach 1996).

2.3.2 Work Engagement

As previously described, work engagement is accepted as the opposite of burnout (Maslach et al. 1996; Schaufeli and Bakker 2003). Several scholars have defined and unpacked the concept of work engagement. Kahn (1990, p. 694) first described personal engagement as "the behaviors by which people bring in or leave their selves during work role performances". He suggests engaged employees demonstrate the level of engagement through their physical involvement, cognitive valance, and emotional connections to their work. Roberts and Davenport (2002) propose that work engagement is a person's level of involvement in his or her job; as those who personally identify with their jobs are also those who are highly engaged in their work. Employee engagement has also been described as the amount of effort and flexibility employees have for their job (Baumruk 2004), as well as both (Richman 2006 and Shaw 2005). Most simply put, Truss et al. (2006) define employee engagement simply as 'passion for work'. Maslach and Leiter (1996) assume those with low levels of emotional exhaustion, cynicism and professional efficacy (feelings of personal accomplishment), are therefore engaged in their work. However, Schaufeli and Bakker (2003) suggest that those experiencing low levels regarding the three dimensions of burnout are not necessarily engaged with their work and describe the concept of work engagement that contextualized this research; they define work engagement as "a positive, fulfilling work-related state of mind characterized by vigour, dedication and absorption" (Schaufeli & Bakker 2004, p. 295). Although most likely burnout and engagement are substantively negatively correlated in

practice, indicating they are opposites, Schaufeli and Bakker (2003) value them as independent states of being.

Like burnout, work engagement is comprised of three dimensions; vigour, dedication and absorption (Schaufeli & Bakker 2003). Schaufeli et al. (2001, p. 74) define work engagement as Engagement is a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption. Rather than a momentary and specific state, engagement refers to a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior. Vigour is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties. Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge. Absorption is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work.

Although absorption has often been included as a contributing factor to measure work engagement, some studies have opted to exclude it as a factor and focused their attention on dedication and vigour. However, Mauno (2007) argues absorption is a dimension worth researching more, as it appears to have a unique value for motivational experiences. It has been reported that those with high levels of absorption are highly intrinsically motivated (Deci & Ryan 2000) and those who demonstrate high levels of dedication are also heavily involved with their jobs and see the psychological importance of the job in their life (Mauno 2007).

Sonnentag (2003) links work engagement to the motivation to participate in personal and professional development opportunities. There are also indications suggesting engagement positively correlates with health. Lastly, work engagement also positively correlates with job performance. Salanova et al. (2005) conducted a study including employees from Spanish restaurants and hotels. Results indicated that the level of work engagement of employees positively impacted the services provided, predicting extra-role behavior and customer satisfaction. These results also link employees' job performance to the performance of the organization as a whole; if customers are satisfied, business is likely to do well.

Just like burnout is not depression (Hakanen et al. 2008); work engagement is not synonymous with workaholism. Schaufeli et al. (2006, 2008) show that workaholism and work management are often conflated concepts. Although both types of employees have a strong work ethic and commitment to their organizations, those who are workaholics have developed so much to the point that they jeopardize their mental health and external social connections; while those employees who are engaged in their work report feeling mentally and socially well. Furthermore, Schaufeli et al. (2002) suggest high levels of absorption make it difficult for employees to detach from their work; Hakanen et al. (2008) describe a similar concept of *flow*. The concept of flow describes a person's state of mind that consumes them to the point they are so engrossed in an activity nothing else seems to matter. Often, those experiencing flow will continue to engage in the activity even at great cost.

These concepts do appear related and some scholars have described their similarities (see: Gonzalez-Roma et al. 2006 and Llorens et al. 2007). However, absorption is specifically related to the work environment and is a continuous state of being,

whereas flow is considered to be an experience that a person can have at any time not solely in the workplace (see: Hallberg and Schaufeli 2006; Schaufeli et al. 2002a and Schaufeli et al. 2006). Sections 2.71 and 2.72 aimed to provide a general understanding of employee burnout and work engagement, for this study further examination of how such factors are affecting educators is needed and relevant literature is reviewed in the subsequent section.

2.4 Demands

Demands are essential aspects of the interpreting process, specifically for interpreters. Demands can be considered as "a factor that rises to a level of significance that will, or should, impact the decision-making involved in your work." (Dean and Pollard, 2013, p4). Demands could be activities (both intrinsic and extrinsic) that interpreters encounter when they interpret deaf students in tertiary classrooms (Dean and Pollard, 2013). In the classroom settings, demands are the various activities and events such as the pace of lecturers' speech, room noise, room lighting and deaf students understanding of concepts which impose limitations on interpreters when they interpret spoken language into sign languages or vice versa (Herring, 2018, Napier, 2001, Napier, 2011). However, it is worth noting that at the tertiary level, each of the actors faces some level of demands that they would need to contend with when they engage in the classroom interpreting process to promote inclusion. This means that to better understand the demands of interpreting that mediates learning and teaching in tertiary classrooms, every actor's role must be examined, and the potential demands they present to interpreters analysed. This study intends to examine how the actors' socio-cultural understanding and roles impact the work of interpreters in tertiary classrooms. Dean and Pollard (2001), Dean and Pollard (2004), Dean and Pollard (2005), Dean and Pollard (2013) and Dean and Pollard (2011) categorized demands

into four categories, namely: environmental, interpersonal, paralinguistic, and intrapersonal.

2.4.1 Environmental Demands

Environmental demands are those that arise because of the context in which the interpreting occurs (Dean and Pollard, 2013). As interpreters interpret, several aspects of their work are contingent upon the setting within which they operate. Dean and Pollard extended their thought of the environment to include four sub-categories: 39 "a) goal of the environment (e.g., learning and teaching, or for medical assessment and prescriptions), b) demands related to the physical surroundings and characteristics of that work environment (e.g., platform interpreting in open space or classroom context), c) the personnel and clientele who are present in that environment (e.g., proficient sign language user or beginner), and d) the specialized terminology that is likely to be used in that environment (e.g. varied disciplines in an educational context)" (Dean and Pollard, 2013, pp. 4-5). Dean and Pollard described that the environment is the first demand that interpreters would have to contend with before the interpersonal and other demands follow. Interpreters' ability to identify environmental demands will position them well for what may come up during their interpreting assignments (Heyerick & Vermeerbergen, 2012, Napier, 2002, Napier, 2005, Napier, 2011, Napier, 2016). Dean and Pollard's position on the environment only gives one perspective on the interpreting process – that is what interpreters need to be aware of concerning the environment. They did not consider how the environment could be made responsive and conducive to reducing the challenges it may pose on the interpreting process.

In tertiary classrooms, all aspects of the environment should be made responsive and diversified to meet the different learning needs of the students (Hyde and Power, 2004) in terms of curriculum planning (Foster et al., 2003), classroom communication, the physical environment and social events with the context (Antia et al., 2002, Hyde et al., 2004, Marschark et al., 2001, Power, 2003, Stinson and Kluwin, 2003). Dean and Pollard did not also consider that whilst there are other actors involved in the process of interpreting particularly in the educational settings, these actors may have to contend with environmental demands that require the concerted efforts of all in influencing the environment to ensure that all is set for the interpreting to mediate the classroom interactions.

In tertiary classrooms, institutions have the mandate of providing an environment that supports the participation of each learner, and also helps the learners to achieve their educational outcomes. Based on Dean and Pollard's (2013) model I will develop further the argument to include the various environmental sub-categories and how they can be regulated in a suitable way to form part of an effective interpreting process that mediates deaf students' and their lecturers' interactions at the tertiary level. The second demand that Dean and Pollard described is interpersonal demand.

2.4.2 Interpersonal Demands

Interpersonal demands include all the significant things that happen between all the people who are present during an interpreting process (lecturers, interpreters, deaf students, and hearing students) that impact the effectiveness of the interpreting (Dean and Pollard, 2001, 2011, 2013). Dean and Pollard indicated that communication objectives were the primary source of interpersonal demands. Communication objectives in tertiary classrooms include the goals that lecturers intend to achieve in

their lessons. An individual's communication objectives are specified by their conditions and those situations are different from the goal of the environment (Dean and Pollard, 2013). For example, the goal of an academic inclusive environment will be to ensure equity and inclusiveness of all students and staff to help students achieve academic success. However, the communication objectives of a course will always be contingent on the specific area under the broad academic environment. It will also be determined by the area of expertise of the academics who lead that course.

The structure (discussion, lecture, presentations, or role-play) of a course will affect the way interpreters render interpretation in that context. How the lecturer relates with the interpreters and hearing students' and deaf students' reactions in the classroom presents some demands for the interpreter to manage. Another aspect of communication objectives that

Dean and Pollard highlighted what they termed as the 'thought words. Dean and Pollard (2013, pp. 6-7) explained one's thought world as "the combination of all the mental influences upon that person's perceptions, cognitions, feelings, and behaviors at a specific moment in time... One's thought world may be influenced by socio-cultural experiences, upbringing, values, and emotions. Concerning communication, one's thought world lies behind what a person is trying to convey when they are saying/signing something their intention as well as their specific word or sign choices." So, for interpreting to be successful in tertiary classrooms, interpreters are always expected not just to possess the ability to understand two different languages (spoken and sign) (Leeson, 2012, Napier 2011), but they have the responsibility to connect all the thought world of the interlocutors of the interpreting process to make it effective (Nicodemus et al., 2014). These kinds of connections can be established

when they know the content of the subject matter they interpret (Bontempo, 2012, Heyerick and Vermeerbergen, 2012, Napier, 2016) and have an understanding of the cultures of the two major communicators (deaf and hearing culture) (Fobi and Oppong, 2019, Witter-Merithew and Nicodemus, 2010). The interpreters thought world and how they can connect with the other actors are most likely to create some demands they would have to manage in the classroom.

Lecturers and deaf students in tertiary classrooms also need to understand that interpreters may have different thought worlds, so working with them in this context requires the collaborative efforts of all to promote learning and teaching. However, Dean and Pollard (2001, 2013) did not consider the thought world of the interpreter and how it affects interpreting. Every member of the interpreting process has a thought world that affects the way they connect in the interpreting process. Actors whose thought worlds conflict with that of the interpreters will most likely cause some interpersonal demands for the interpreters. Therefore, in discussing interpersonal demands, all such factors need to be considered to have a holistic picture of the influences on the interpreting process, and also the interpersonal demands of the interpreters. Dean and Pollard (2013) added that interpersonal demands can include: emotional tone, power dynamics, relationship factors, communication flow (e.g., turn-taking), roles, and cultural differences. All these other factors shape the thought words of the actors and influence their engagement in classroom interpreting. The next demand that Dean and Pollard describe is the paralinguistic demand

2.4.3 Paralinguistic Demands

Dean and Pollard (2013, p, 8) posited those paralinguistic demands "can best be understood not as what is being said (or signed) but how it is being used (or signed)." Paralinguistic demands can further be explained as the attributes that are associated with the language which is being spoken or signed. These demands usually include the volume of speech (too loud or too soft), the pace of the speaker/signer, accents, cognitive limitation (brain disorders), physical positioning, physical limitations (anatomical) and idiosyncratic sign/speech. All these paralinguistic issues influence all the actors interpreting in tertiary classrooms. The way deaf students communicate in sign language to interpreters will most likely be a challenge for hearing interpreters who learn sign language later in life and are not as proficient in the language as deaf people (Bentley-Sassaman & Dawson, 2012, Moody, 2011). Other factors such as the visibility of the handshapes of deaf students could present paralinguistic demands to interpreters. Lectures' accents and speed of delivery could affect the way interpreters hear and understand what is said in the classroom.

2.4.4 Intrapersonal Demands

Whereas Dean and Pollard believe that environmental demands are the first to be confronted, I posit that before any person encounters the environment, they have the attributes they bring to the interactions. Therefore, in terms of hierarchy, I think interpreters' intrapersonal demands should be considered before any other demands. These demands are the interpreters' inherent factors that pose challenges to their successful engagement in the interpreting process. Those factors usually include thoughts (feelings, emotions), physiological distractions, and psychological responses (Biggs, 2001, Biggs, 2003). Dean and Pollard (2013) described these factors to be predictors of the performance of the interpreters in the process. Interpreters'

proficiency in interpreting (Leeson, 2012, Leeson et al., 2008, Powell, 2013), educational background (Bontempo, 2012, Schick et al., 2006), knowledge of course content (Heyerick & Vermeerbergen, 2012, Napier, 2016), emotional stability and ability to deal with a crowd all contribute to the way they can provide best practices in interpreters for their consumers in tertiary classrooms. All these demands irrespective of what shape or form can have a significant impact on the rendition of interpreting services in tertiary classrooms. It is also dependent on how demand is analysed, for example, a paralinguistic demand could as well be an intrapersonal or interpersonal demand. This study will make known some of the 43 demands of interpreting in tertiary classrooms. After describing the various demands of interpreting in the context of the classroom, I will also discuss some control options that Dean and Pollard (2013) suggested could be used to manage the demands.

Controls options Having the resources that are required to contain the demands that will emerge in an interpreting situation means an interpreter is employing control options (Dimitrova & Tiselius, 2009, Gile, 2009, Herring, 2018, Ribas & Vargas-Urpi, 2017). Controls in interpreting do not imply that interpreters control the interpreting process (Dean & Pollard, 2013). Dean and Pollard postulated that controls are responses to a demand that emerges in a given interpreting setting. Having controls as an interpreter means that interpreters can perceive, learn, process, remember and evaluate the situations in interpretations (Bontempo, 2012, Herring, 2018, Ribas & Vargas-Urpi, 2017). Interpreters need to display their cognitive abilities by performing a given task appropriately using flexible signing, understanding of spoken and sign language, accuracy and speed in signing, and the ability to recognize and use the parameters (handshapes, orientation, location, movement) of signing, facial expressions and signing space (Guion and Highhouse,

2004, Herring, 2018, Ribas, 2012). Aside from these qualities, interpreters need also to have content-related knowledge to manage some of the demands that may emerge in an interpreting scene (De Meulder, Napier and Stone, 2018). Bontempo (2012, p. 5) encourages interpreters to acquire a "mixture of values, temperament, coping strategies – traits that are predictable, enduring and that influence behaviour and reactions in a variety of situations.

Contextual knowledge refers to knowledge of how to act in various situations – how to cooperate with people and interact professionally. Contextual skills are the skills involved in managing those interpersonal relationships and behaving effectively in a variety of environments. Personality, contextual knowledge and contextual skills impact contextual performance." Guion and Highhouse, (2004, p. 60) explained contextual performance as "aspects of performance unrelated to specific tasks." Professional interpreters must elevate themselves by possessing both the contextual and task performances in executing their jobs so that most of the demands that may come up in the process of their jobs have a control option employed. The output of interpretation cannot be the sole yardstick for evaluating the quality of performance of interpreters, other factors such as their professional conduct, and general appearance to work all need to be considered in assessing the quality of interpreters (Kalina, 2002).

In tertiary classrooms, interpreters make several decisions to manage the various demands they encounter. Each actor who is engaged in the interpreting process brings their background knowledge, personality traits, skills, attributes (e.g., sense of humour, studiousness, well-read, punctuality, education and physical fitness) and experiences (de Wit, 2011, Heyerick and Vermeerbergen, 2012, Leeson, 2012,

Marschark et al., 2015, Napier and Leeson, 2016). When interpreters connect effectively with these resources, they can become useful control options that will help in their assignments. Dean and Pollard categorized control options into three: pre-assignment, assignment, and post-assignment control options.

2.4.5 Assignment Control Options

Assignment control options are those controls that interpreters employ during interpreting (Dean and Pollard, 2013). These control options include all the decisions interpreters make when they execute their duties (Bentley-Sassaman & Dawson, 2012). The actions interpreters take or do not take during an assignment are all classified to be part of the control options employed during the process. For interpreters to provide appropriate assignment controls in the classroom, they need to first anticipate all the demands before the start of an assignment. This will give them a background of the measures required to provide the best interpreting practices for their consumers in the classroom. It is often easy for interpreters to provide effective assignment controls when they work in teams (Bentley-Sassaman & Dawson, 2012, De Meulder, Napier & Stone, 2018). Working as a team will help the ‘inactive’ interpreter (one not interpreting) furnish the ‘active’ interpreter (one interpreting) with the necessary support during the assignment. Interpreters who work solo, irrespective of their proficiencies, are more likely to be ineffective (Bentley Sassaman & Dawson, 2012) in tertiary classrooms, particularly in a context where the class activities extend to about one hour (Hoza, 2010, Stone, 2007).

2.4.6 Pre-Assignment Control Options

Pre-assignment control options are the controls interpreters bring to the assignment such as their background, personality, attributes, and education (Dean & Pollard 2013). They include any form of preparation an interpreter makes before the assignment. Some pre-assignment control options are the kind of clothes interpreters' wear, interpreters meeting with lecturers and deaf consumers, and familiarising themselves with the content of the lecture before time. Pre-assignment control options equip interpreters with confidence in executing their assignments (Bontempo, 2012, Heyerick & Vermeerbergen, 2012, Leeson, 2012) because it limits the amount of omission that interpreters may have in an assignment (Napier, 2011). Dean and Pollard proposed that interpreters also employ assignment control options.

2.4.7 Post-Assignment Control Options

Dean and Pollard (2013) explained that post-assignment control options are the controls that are employed when an assignment is over. These control options include the discussions interpreters have with their consumers about the assignment, the discussion with team members after an assignment, and the reflections that interpreters have on their tertiary classroom assignments (Maroney et al., 2020, Maroney et al., 2018a, Maroney et al., 2018b, Maroney et al., 2016). When these reflections are done, they develop interpreters thinking on how to approach their next assignments (Bentley-Sassaman and Dawson, 2012, Bentley-Sassaman, 2009) and may turn into pre-assignment controls. Having established from the literature that various intrapersonal, interpersonal, paralinguistic and environmental demands influence interpreting in the classrooms and appropriate controls need to be employed to manage the demands, it gives the understanding of interpreting within the classrooms

2.5 Training and Skills

Interpreting has been seen as a voluntary and charitable activity that hearing people who had some level of proficiency in sign languages offered to the deaf (Napier and Leeson, 2016). Although informal education for interpreters existed in the 1960s (Ball, 2013), the Deaf community relied on their judgment and experiences to rate the competencies of their interpreters since there was no formal assessment of competence for the interpreters (Cokely, 2005). Mindess (2014) explained that interpreters during that time saw themselves as contributing their quota to the Deaf community but did not necessarily see themselves as ‘interpreters. Mindess added that the contributions interpreters made at the time did not qualify them to be recognized as professionals since they were not remunerated for the services they provided to deaf consumers.

In 1972, Napier and Leeson (2016) reported that the Registry of Interpreters for Deaf (RID) was set up in the US to bring professionalism to the work of interpreters. Cokely (2005) explained that the mandate of RID was to test, evaluate and certify qualified interpreters. This practice by RID is now being adopted in many different countries. The fact is that interpreters need to be assessed and certified as practitioners, and there is a need to provide some formal training for the interpreters. Leeson et al. (2013) indicated that there is a training available for interpreters in tertiary institutions in the Western world. Leeson et al. further explained that some countries in that part of the world have set up a minimum academic requirement of a bachelor's degree before one can be allowed to practice as an interpreter. However, little or no such training and recognition for interpreters exist in developing countries, particularly in Sub-Saharan Africa. In Ghana, interpreters have academic qualifications to work in tertiary institutions, however, there is no professional body

that certifies such interpreters for them to be regarded as professional interpreters. Leeson et al., (2013) explained that, in some parts of the world, codification in the expectations of educational programs has been increased for interpreters. Even the level of provision for interpreter training varies in different countries. Whilst some countries have master's programmes training for interpreters (Leeson et al., 2008, Leeson et al., 2011, Napier & Leeson, 2016), other countries do not have any formal training for interpreters and rely solely on the informal training organized by the Deaf communities (Napier, 2002, Napier, 2005, Napier, 2011, Napier & Leeson, 2016). Leeson and Vermeerbergen (2010) further stated that even in countries where established educational channels exist, some interpreters including children of deaf adults (Codas), deaf interpreters, chaplains, teachers of the deaf, and hearing people who have acquired some signing skills, have still not received any formal training to practice. Reasons for this include the fact that most countries are still facing challenges in meeting the requirement for professional interpreters.

Although using people who have a strong academic background brings benefits in terms of wider societal recognition of sign languages and interpreting, it has also functioned as a wedge between the interpreting community and the Deaf communities they serve (Napier & Leeson, 2016). Cokely (2005, p. 16) stated that interpreters have progressed from being 'service agents of the Community to being 'service providers for the Community, leading to a consumer-driven model of interpreting. Napier and Leeson explained that this progression has also meant a move away from the process of selecting and training interpreters within the Deaf community, which has thus lost its gate-keeping role in this respect. One suggestion is that interpreter education programmes work to bridge the ensuing gap by ensuring that student activities in the community are seen by Deaf communities as beneficial to them (Monikowski &

Peterson, 2005) and that programmes are seen as being "of the community" even if individual would-be practitioners are not (Cokely, 2005). Further, in a rising number of countries, licensing bodies and interpreter associations, such as the World Association of Interpreters (WASLI) and the European Forum of Interpreters (EFSLI) are requesting that practitioners engage in continuous professional development, creating a demand for high-quality, post-qualification, and in-service training.

2.6 Support Services

Support services are services such as transportation, child care, or dependent care, necessary to enable an individual to participate in activities authorized under the title of the Workforce Investment Act. Support services may only be provided to individuals who are: Participating in intensive or training services; and are unable to obtain supportive services through other programs providing such services. (Conway, Blair, & Helmer 2012). However, this study was focused on the support services that the interpreters got during their assessment hours. During assessment hour sign language got support services from their lecturers and team interpreters which make their work less difficult and stressful. A common experience among team interpreting often means they have similar feelings, worries, and everyday problems, which they share to help each in the assessment hour. Napier, (2016).

Interpreting is an exhausting job in both the mental and physical senses. Interpreters must exercise intense listening skills, interpret words and entire phrases, and then relay them quickly in an enunciated and comprehensible manner to listeners (Napier & Leeson, 2016). It's a fast-paced job that requires a great deal of attention and energy, and it's difficult for any interpreter, even the best interpreters in the industry, to maintain high-quality interpreting over extended periods. This is one of the central

reasons why simultaneous interpreting is almost always done in teams (Cokely 2005, p. 16). Having another person available to take over the interpreting duties every so often usually every half hour or so allows interpreters to have some respite from the intensity of simultaneous interpreting. Expecting just one person to handle the burden of simultaneous interpreting over a three-hour conference is unreasonable and could result in interpreting mistakes (Mindess, 2014).

Team interpreting refers to interpreting situations where two or more interpreters are working together to create one interpretation, capitalize on each other's strengths, and support each other for consistency and success (Bentley Sassaman and Dawson, 2012). Since teamwork allows interpreters to work in shifts and catch a bit of a break, it also ensures that simultaneous interpreting can keep pace. A fatigued interpreter may start to fall behind, leaving out valuable words or even full sentences. The whole point of simultaneous interpreting is its amazing rapidity; having interpreters work in teams ensures that this is preserved. This is especially true for simultaneous tactile and sign language interpreting, which is more physically demanding due to the hand and arm movement it requires (Dean & Pollard, 2013). When interpreters work in a team, a higher level of accuracy can be maintained because interpreters are less likely to become fatigued or lose focus. An interpreter that is exhausted is not going to be able to concentrate as well and may end up making mistakes as a result. In some cases, interpreters working in teams may also verify one another's work as they go, to ensure that all information is being interpreted correctly (Leeson et al., 2011, Napier and Leeson, 2016). This might be seen in courtroom interpretation, for instance, where a simultaneous interpreting error could ruin an entire trial. While one interpreter keeps up a continuous stream of interpreting, the others can double-check the facts. If the active interpreter seems to be struggling with a concept or a word,

non-active interpreters might help by writing down suggestions or clarifications (Ball, 2013). This avoids disrupting the ongoing interpretation while also reinforcing accuracy.

2.7 Summary of the Literature

This chapter discussed applicable literature on the subject of science, empirical literature and the theoretical context. The following subtopics were addressed in the chapter: Experiences of interpreters, Academic-related Experiences, interpreting in the lecture hall, Interpreting Styles, Consecutive Interpreting, Simultaneous Interpreting, Collaboration, Team Interpreting, social-related Experience, Burnout and Work, Engagement, Burnout, Work Engagement, Demands, Environmental Demands, Interpersonal demands, Paralinguistic demands, Intrapersonal demands, Pre-Assignment Control Options, Assignment control options, Post-Assignment Control Options, Training and Skills, Support Services. There was also a discussion of the theoretical context. Few observational studies have highlighted the experiences of interpreters.

Although literature revealed the role of interpreting in the inclusion of deaf students in tertiary education, classroom communication experience for students who are deaf. none of the above-mentioned research has attempted to look at the experiences of interpreters for DDB students at UEW. Therefore, study on experiences of interpreters for DDB students at the University of Education, Winneba is therefore required.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methods and procedures used to collect and analyse data for the study. The areas covered were: research approach, research design, population, sample size, sampling techniques, instrumentation, transferability, dependability, confirmability, credibility, the procedure for data collection, method for data analysis, and ethical considerations.

3.1 Research Approach

The study employed a qualitative research approach to explore the experiences of interpreters for DDB students at the university of education winneba (UEW) because interpreters were interviewed and were allowed to express their interpreting experiences. A qualitative approach was appropriate for the study because the study examine interpreters' lived experiences concerning interpreters' academic-related experiences, social-related experience and their challenges in the university. Qualitative research involves an interaction between the researcher and the researched in the socio-cultural context of interpreters of the study (Kusi, 2012, Stake, 2010, Patton, 2015). Creswell (2013) defines qualitative research as an enquiry useful for exploring and understanding a central phenomenon. The phenomenon in this study was the experiences of a sign language interpreter. To know more about this phenomenon, the researcher asked the interpreters both broad and specific questions to understand their personal views and opinion. Crewel (2012) emphasized that qualitative data are useful within the research because interpreters will freely express their thoughts, perceptions and views in more detail concerning the research topic. Since the study's primary focus was on the experiences of interpreters for DDB

students, research interpreters expressed their reflections concerning how they viewed the said topic. The current study, therefore, sought to use a qualitative approach to have a detailed account of the experiences of interpreters.

3.2 Research Design

The design for the study was phenomenology because this study explored the lived experiences of interpreters for DDB students at UEW. In this study, the interpreters were allowed to express their interpreting experiences. Creswell (2018) affirmed that phenomenological research is a design of inquiry coming from philosophy and psychology in which the researcher describes the lived experiences of individuals about their experiences as described by interpreters. This description culminates in the essence of the experiences of interpreters who have all experienced the phenomenon.

In the present study, Interpreters were allowed to freely express their academic and social lived experiences of interpreting through semi-structured interviews. In the current study, the researcher allowed interpreters to speak out on only issues on their academic-related and social-related interpreting experiences for DDB students at UEW. Creswell went on to explain that in phenomenological research, the researcher must use a combination of methods such as interviews, and observation. A phenomenological research design was adopted for this study because the researcher wanted to explore the experiences of interpreters for deaf and deafblind students at UEW.

3.3 Population

The population for the study was 20 interpreters for the DDB students, which consisted of one full-time interpreter, six National Service Personnel and 13 interns. comprising six females and 14 males. This comprises all the interpreters in the

University, chosen from the Departments of Special Education. The population was chosen for the study because the interpreters had spent more than one year in the interpreting field and they were in the best position for this study. National service personnel: are persons who are doing a compulsory one-year service to the state of Ghana having graduated from tertiary education. A Fulltime interpreter is *a* person who is employed under a contract of employment to interpret for DDB students. And interns' interpreters are students or trainees who works without pay, to gain work experience or satisfy requirements for a qualification.

3.4 Sample Size

The sample size for the study was 15 interpreters, comprising 10 males and five females aged between 22 and 34 years, one full-time interpreter, six National Service Personnel and eight student interns. Five of the interpreters were females and 10 were males. All the interpreters are from the department of special education. I selected all the interpreters because I considered those who have interpreted for the DDB students for at least a semester and above in an academic setting at university. The Sample of the interpreters is illustrated in Table 3.1.

Table 2 shows the sample of the participants' gender

Table 2: Gender of Interpreters

Gender	Frequency	Percentage (%)
Male	10	66.66
Female	5	33.33
Total	15	100

Source: Field Data, June 2022

Table 2 shows the employment status of the interpreters who were interviewed.

Table 3: Interpreters' Employment status

Class levels	Frequency	Percentage (%)
Employed	1	6.7
National service personnel	6	40
Internship	8	53.3
Total	15	100

Source: Field Data, June 2022

3.5 Sampling Technique

Purposive sampling was used to sample the interpreters for the study. I selected my sample based on those that have been interpreting in an academic setting for a semester and above for DDB students. I purposefully chose the sample because the interpreters have been interpreting in the university of education for one academic semester and above, hence, were in the best position to provide relevant information relating to their experiences. Mugenda and Mugenda (2003), explained that purposive sampling allows the researcher to use cases that have the required information

concerning the objectives of the study. Fraenkel and Wallen (2009) also explained that the purposive sampling technique is a technique in which researcher use their judgement to select a sample that they believe, based on prior information, will provide the data they need.

3.6 Instruments

The instrument used for data collection was a semi-structured interview guide. The one-one interview was used. The semi-structured interview guide was grouped into three parts. The three parts focused on the research questions. Part 1 focused on the academic-related and social-related experience of sign language interpreter for DDB students. Part 2 focused on the job demands and job resources for sign language interpreters for DDB students, and part 3 focused on support services available for sign language interpreters. All three parts had a major question item, which inquired about their respective strands from the research questions. The major question items had probes and prompts. The probes and prompts gave directions to respondents on the themes. See *Appendix A*.

Cohen, Manion, and Morison (2000) regard an interview as an exchange of views between two or more people on a topic of mutual interest and emphasize the social context of research data. It is a research instrument and involves the collection of data through verbal and non-verbal interaction between the interviewer and the interviewee. I employed interviews as an instrument to allow interpreters to express freely their interpreting experience at the University. Fraenkel and Wallen (2009) stated that a qualitative researcher uses three main techniques to collect and analyze data, namely: (1) observing people as they go about their daily activities and recording what they do; (2) conducting in-depth interviews with people about their ideas, opinions and experiences, and (3) analyzing documents

3.6.1 Trustworthiness

This study employed the concept of trustworthiness (Lincoln & Guba, 1989). The areas used were, transferability, dependability, confirmability and credibility.

3.6.2 Transferability

I gave a detailed description of all interpreters and an in-depth explanation of the inclusion and exclusion criteria for selecting interpreters, a description which included their age, academic qualification, their gender, and their employment status. Transferability concerns the aspect of applicability (Lincoln & Guba, 1985). Lincoln and Guba (1985) further explained the provision of a thick description of the interpreters and the research process, to enable the reader to assess whether the findings are transferable to their setting; this is the so-called transferability judgement.

3.6.3 Dependability

I selected a phenomenological design which allowed the interpreters to come out with their lived experiences on the research phenomenon (interpreting experiences). I used literature-based interview questions which aligned with the research questions to collect the data from interpreters. The interview items were presented in a forum which enabled the researcher to reshape all the questions before administering them. Dependability includes the aspect of consistency and the flow of procedures, results and their interpretations (Lincoln & Guba, 1985).

To increase dependability, I trained four research assistants (RA) for two months to assist in the interviews and also assist in transcribing the audio of the interview into words. Lincoln and Guba (1985) opined that the process of allowing for external audits is aimed at fostering the dependability of the data presented during the research process. In the present study, to foster dependability I allowed the two RA to evaluate

the accuracy of the transcriptions and to evaluate whether or not the findings, interpretations and conclusions were supported by the data.

To ensure that the data were dependable, the analysis of interviews were analysed with the help of two RAs who supported the researcher to analyse the data. In the course of the analysis, the two RA and the researcher agreed on the interpretation of what the interpreters said.

I and the two RAs used one week to review interpreters' interviews to foster dependability. Lincoln and Guba (1985) suggested that dependability can be established through the establishment of appropriate enquiry decisions, review of interviewer bias to resist early closure, the establishment of categorical schemes and exploration of all areas, resistance to practical pressures and findings of both positive and negative data triangulation.

3.6.4 Confirmability

Confirmability refers to how neutral the researcher is to avoid bias. To avoid bias in the data, I made sure I did not involve my feelings to the data as a researcher. Conducting qualitative research in an area with which the researcher is familiar raises several issues of confirmability (Creswell, 2017). To foster confirmability and to gain the trust of the interpreters and their willingness to support my role as the researcher, I identified my role before and during the data collection process and explained the purpose of the study to interpreters.

3.6.5 Credibility

The themes that emerged from the data were discussed with a professional in the field of deaf education. A lecturer from the department of special education also reviewed some of the audio-recorded interviews to ensure the accuracy of the translation. This process of peer review included colleagues reviewing some of the video and audio tapes and assessing whether or not the findings were consistent with the data. This process also helped to ensure the soundness of the findings.

3.7 Procedure for Data Collection

I obtained an introductory letter from the Department of Special Education of UEW to introduce me to the Heads of the Departments and the coordinator for the resource Centre for individuals with special needs to inform all interpreters about the study to solicit their cooperation and assistance. ("See Appendix B").

I went to the head of the department's office and discussed the purpose of the study with him, and he agreed and permitted me to conduct the interviews with his interpreters. A resource coordinator from the department led the researcher to visit the interpreters in the resource room to explain the purpose of the study to them. The researcher explained to interpreters that the purpose was for master of philosophy research and the findings would benefit interpreters of the University. After explaining the purpose of the study, interpreters were allowed to ask questions. One of the interpreters asked for the days and times for the interview. I agreed with interpreters on the days and times to conduct the interview. The researcher assured interpreters that the information gathered from them would be confidential.

The content of the consent form was read to interpreters and then given to each participant to append their signature before starting the interview. On the consent

form, it was made clear to interpreters that the interview was not compulsory and then they can decide to stop at any point in time.

The resource Centre for students with special needs RCSSN (sign language office) at the UEW served as the venue for the interview session. The researcher sought permission from the coordinator of the resource Centre one week before the scheduled interview data to use the office. A verbal permission was granted

I agreed with interpreters on our meeting days. Seven working days were used to conduct the interview. Female interpreters were interviewed on the first three days while male interpreters were interviewed on the subsequent days. Each interview was conducted in the evening because interpreters were not having lectures at that time.

The interview was conducted in one of the lecture halls at the faculty of educational studies. Since the semi-structured interview guide was used to interview interpreters the items in the interview were divided into three sections (namely, Section A, Section B, and Section C) and were based on the research questions raised. Section A comprised of questions raised under Research Question one, their academic-related and social-related experiences of interpreters. Section B comprised of questions raised under research Question two which was about job demands and job resources for interpreters. And Section C comprised of questions raised under Research Question three, which was about the support services available for interpreters. An interview guide was developed based on the themes of the research questions posed for the study. Each interview session lasted for about 25 minutes. The interpreters were interviewed using spoken language.

On the day of the interview, all Covid-19 protocols were observed. Interpreters were provided with hand sanitizers, and nose masks and were made to distance themselves from each other. Interpreters were made to sit in the chairs provided for them at the lecture halls arranged with a distance of 1m between each. And during the time of the interview, only fifteen (15) interpreters showed up out of twenty (20) that agreed to participate. The researcher used two research assistants (RAs) to do the audio and video recording for all the interviews. The two RAs were males because they were available and willing to help with the study.

I introduced the RAs to the interpreters and explained the purpose of the RAs to them. The two RAs were doing their internship at the department of special education. On the interview date, the two RAs arrived 30minute earlier to arrange the chairs in a horseshoe manner at the lecture hall (FES202) for the interviews. Night chairs were used for the interviews.

I and each participant sat face to face for a smooth conversation. One of the RAs used his phone to do the video and audio recordings, while one of the RAs was taking notes. I made it clear to interpreters that we were all the same so all responses would be accepted and no response is either correct or wrong. The spoken language was used to interview the interpreters. I established rapport with interpreters to let them feel comfortable before the start of the interview.

3.8 Data Analyses

A thematic approach was used to analyse the data collected. Data for the study was analysed based on each theme drawn from the research questions raised. I transcribed the data and familiarized myself with the data by reading it continuously. I formulated coding categories into manageable units of sentences or phrases, according to the

research questions. I used colour coding to group those saying similar words into different colours. After that, all the information collected from different interpreters through the interview were coded to identifiable themes. Expressions of interpreters were also used where necessary. The transcription and translation of the data were carried out immediately after the data collection. Under research question one, six themes were developed from the data collected which were; general experiences and knowledge of sign language challenge, interpreting in an academic setting, background knowledge, interpreters interpreting style, collaboration, and social-related experiences. And, under research question two, themes were developed for the data collected which were; working hours, sitting position and workload. Under research question three, four themes emerged from interview data, which were in-service training, team support, lecturers' collaboration and benefit.

3.9 Ethical Consideration

Research ethics educate and monitors researchers researching to ensure a high ethical standard. Ethics are very paramount in research because they guard against possible harmful effects of the research. I sought consent from all interpreters before collecting the data Resnik (2010). I fully informed interpreters about the purpose of the research. and sought the permission of interpreters to record their responses during the interview.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF FINDINGS

4.0 Introduction

This chapter presents the results and analyses of the findings from the study. The analysis reflected on the themes that emerged from the interview data collected on the themes of the research questions.

4.1 Analysis of Bio-Data of Interpreters

The study was carried out at the University of Education, Winneba, main campus, with a sample size of 15 interpreters.

Table 4: Gender of Interpreters

Gender	Frequency	Percentage (%)
Male	10	66.66
Female	5	33.33
Total	15	100

Source: Field Data, June 2022

Table 4 shows the gender of the interpreters who were interviewed. From the table, out of the 15 interpreters, 10 of them representing 66.66% were males while 5 representing 33.33% were females. This indicates that there were more male interpreters than female interpreters who participated in the present study.

Table 5: Interpreters' Employment Status

Class levels	Frequency	Percentage (%)
Employee	1	6.7
National service personnel	6	40
Student Interns	8	53.3
Total	15	100

Source: Field Data, June 2022

Table 5 shows the employment status of the interpreters who were interviewed. From the table, out of the 15 interpreters, 1 of them representing 6.7% was employed as a permanent staff while 6 representing 40% were national services personnel and 8 of them representing 53.3% students' interns. This indicates that there were more national service and intern interpreters than employed interpreters who participated in the present study.

4.1.1 RQ.1 What are the experiences of interpreters at UEW?

- a. What are the academic-related experiences of interpreters at UEW?
- b. What Are the Social-related Experiences of Interpreters at UEW?

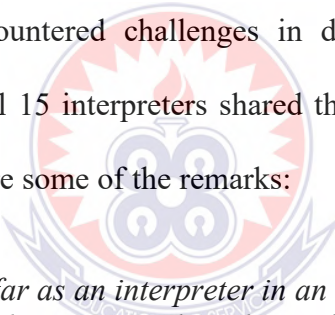
Six themes emerged from the data on research question one. The themes were general experiences and knowledge of sign language, challenges interpreting in an academic setting, background knowledge, interpreters' interpreting style, collaboration, and social-related experiences.

The first theme that emerged from the data which sought to address research question 1 was the experiences of interpreters. Analysis of the data collected indicates that all 15 interpreters had their own positive and, in some cases, negative experiences in

interpreting at UEW. The second theme also sought to address the challenges of interpreting in an academic setting, the third sought to address the background knowledge of the interpreters, the fourth theme sought to address the interpreters' interpreting styles, the fifth theme sought to address the collaboration between the lecturers and the team interpreters, and the last theme sought to address their social-related experiences of the interpreters.

4.1.2 General Experience and Knowledge of Sign Language

It was evident that interpreting within the university setting has helped most of the interpreters to do away with shyness and the feeling of nervousness in interpreting for DDB students and also contributed significantly to their vocabularies in interpreting. However, they also encountered challenges in delivering their services to such categories of students. All 15 interpreters shared their experiences in interpreting in academic settings. Here are some of the remarks:



My experience so far as an interpreter in an academic setting has been great in the sense that, previously I always felt nervous and sometimes shy when called to interpret in front of my colleagues during class activities but when I had the opportunity as an intern interpreter and was given the responsibility to interpret for deaf students in the university, I have been able to overcome these challenges. (int.2).

Personally, interpreting in the academic setting has boosted my knowledge in interpreting because I have learnt a lot from deaf and deafblind students. Some of these students are good in sign language and sometimes they provide me with the signing of certain words after finger spelling those words to them that is if I don't know the specific signs for those words. (int.4)

Interpreting at UEW has contributed to my success in interpreting. It has helped me to improve my signing skills. Despite the stress, it comes along with, it has given me the exposure to standing in front of a lot of people to deliver my services, now I do not feel nervous when I am been asked to interpret in class or the auditorium. (int.9).

Before I started, there was shyness and a bit of fear. At first, I taught interpreting was just listening and conveying messages from a speaker to the receiver and vice versa not knowing that there was more to it than that. I have now realized that one needs to understand the message and convey the message to his or her audience or consumers. (int.5)

Interpreting at UEW has contributed to my success in interpreting. It has helped me to improve my signing skills, especially using tactile sign to interpreting for deafblind student. Despite the stress it comes along with, it has given me the exposure to stand in front of a lot of people to deliver my services, and also able to interpret for deafblind student". (int.8).

Nine other interpreters also commented on how they got to know and learn about sign language. It was clear that the majority of the interpreters came to the university before they got to know about sign language during their taught courses, nevertheless, most of them learnt sign language from their college students who are deaf.

Frankly speaking, I never applied for special education as a program but rather political science but I was admitted to read special education which I never knew anything about it including sign language as one of my courses until I got to the University of Education, Winneba. For the first semester, it was not part of the courses but I was fortunate enough to have some of the deaf students in my class whom I started learning sign language from. (int.1).

I became a sign language interpreter when I got here. And I love interpreting. And I love it when people communicate with the deaf and I had a passion for it. So, in the end, I told myself to become an interpreter to help the deaf at the University here. That is how I became a sign language interpreter. (int.12)

I didn't know anything about sign language until I came to school and class, I was there were some deaf students there so I drew closer to them and they helped me to know more about sign language also, I was taught as a course I did here. (int.15).

However, six of the interpreters had the opportunity to learn sign language before they came to the university. One of the interpreters had parents who were deaf and through that, he was taught how to communicate using sign language. Here are some remarks made by the interpreters.

How I became a sign language interpreter is still a mystery to me because sign language is my first language and I was brought up by parents with deafness. I was already an interpreter before schooling at university. (int.8)

My aunt was a deaf teacher so she thought me how to sign before coming to the university and when I came to the university I was thought also how to sign, but I learned it at home before coming to school. (int.5)

I became a sign language interpreter at my senior high level, the school I went to was an integrated school so when I went there were hearing-impaired students there so I learn sign language and I was able to sign for some of my class-mate". (int.3)

4.1.3 Challenges Interpreting in an Academic Setting

The interpreters shared their ideas about interpreting in the academic setting. Challenges interpreting in an academic setting was one of the themes that emerged from the interview data. It was obvious that interpreting in the academic setting is difficult because one needs to equip himself or herself with a good vocabulary and be conversant with the concepts used by the lecturers in most of the courses they teach. Most of the DDB students themselves lack comprehension of the words being used in lectures. So as an interpreter it is dependent on you to do a lot of readings on the courses assigned to you which will in turn help you break down the vocabulary to the understanding of your consumers. And when the lecturers don't know anything about interpreting it makes the work more difficult especially when you are using tactile signing for a student who is deafblind. All the interpreters shared their encounters in academic settings. The following comments were made by the interpreters:

Interpreting in an academic setting comes along with some pleasure alongside some challenges. Sometimes the lecturers even forget to remember there are individuals with deafness or deaf/blindness in their class, they sometimes stand at the end of the room and be

lecturing and when this happens it becomes difficult for, we the interpreters to hear what they are saying and provide the interpretation to the DDB students. (int.5).

It is very hectic when interpreting for deafblind student at the lecture hall, because the deafblind lady doesn't want any female interpreter to interpret for her and tactile interpreting involve touches and it difficult to touch some part of her body during interpreting. (int8)".

Interpreting in an academic setting, especially in courses you have background knowledge in is quite interesting but the problem is when you find yourself interpreting a course you do not have any knowledge about. Sometimes the vocabularies used by the lecturers in those courses are not clear enough to us the interpreters. (int.13).

Interpreting for a student who is deafblind is more challenging as compared to interpreting for those who are deaf because when the lecturer projects some elements on the board to help the students have a clear understanding of the lesson since she is deafblind, she wouldn't be able to benefit from it so the interpreter as to be deducing meaning from the elements being projected by turning his/her neck before interpreting to the deafblind students. (int.14).

Some lecturers don't consider that there are DDB students in the classroom and they will be lecturing without involving them also when they ask a question, they think I the interpreter am asking the question on behalf of the students. (int.11).

4.1.4 Background Knowledge

The interpreters have been assigned to different departments to interpret for the DDB students. It is clear from the comments that some of the interpreters did not have the background knowledge to interpret in some courses in which they did not have content knowledge. The findings of the study revealed that some interpreters have not been trained in some of the departments but they were tasked to interpret. This made it difficult for the interpreters to understand the content knowledge and also to interpret it. Here are some remarks made by the interpreters:

Yes, I've been to the graphics department I've been to art education I've been to special education, childhood, and then basic education. But the department I have content knowledge on the courses they teach is special education. (int.4)

I don't have any knowledge in mathematics, basic education, and early childhood education but I have been assigned to interpret because I am an interpreter have to interpret. (int.12)

I am privileged to interpret in the various departments, special education, physical education, graphic design, early childhood, basic education, and MPhil class. But I was trained in the special education department. (int.15)

I have been to two departments, that is; basic education and early childhood, I have rich knowledge of the course in the special education department. (int.1)

4.1.5 Interpreters' Interpreting Style

Interpreting style was one of the views that emerged from the data collected under research question one. The two major forms of interpreting styles identified in this study were interpreting simultaneously and interpreting consecutively. It was obvious that some of the interpreters preferred interpreting consecutively in an academic setting. Out of 15 interpreters, four of the interpreters preferred consecutive interpreting because of inadequate language proficiency and insufficient speed adaptability, they have to be listening to the lecturers sometimes before they interpret for the DDB students which somehow makes the students lose some of the vital information given by the lecturers. Here are the remarks made by the interpreters:

Some lecturers speak slowly, others fast. Because I am not experienced in sign language, I do listen to the Lecturer, when he finishes speaking, and then I summarized what I have heard to the DDB students. (int.2)

I prefer consecutive because when the lecturer is speaking, I try to get the understanding afterwards I sign, because I can't follow the lecturer word by word. (int.4)

I always try to get an understanding of what is been said by the lecturer and then interpret it using the local sign language of the deaf community. (int.11)

I don't follow the lecturer word by word because of how they speak and the pace they deliver but I first listen to them then I sign how I understand the content to the DDB students. (int.6)

However, majority of interpreters preferred simultaneous interpreting in an academic setting because it helped interpreters to convey exact information to the DDB students during instructional hours and the DDB students were able to understand the content and able to contribute during discussion. Here are some of the comments made by the interpreters:

I prefer interpreting everything that the lecturers say by signing them word for word because it helps me to follow the lecturer. (int.1).

I like signing exact words because it helps me to understand the lecturer very well and also helps me to interpret for my deaf students". (int.8)

I follow exactly what the lecture is saying to the DDB students because I don't want the students to lose information that will be vital to them. (int15)

The DDB students get a better understanding when I interpret exactly what the lecturer is saying to them and they can contribute to the class.

Again, few of the interpreters prefer using both styles to interpret during the instructional hours to the DDB students because it helped the interpreters to interpret when they find themselves in any setting where they are not familiar with the concept, they first listen to the lecturers and interpret for the DDB students. Here are some of the remarks:

I prefer both because it helps my students to understand the lesson and help them to ask a question and contribute during assignment hours. (int.14)

I prefer both consecutive and simultaneous interpreting because sometimes the vocabulary used at the lecture hall is very difficult to understand and interpret, so when I blend the two it helps me to interpret for my students to understand". (int.12)

I prefer both because it helps me to interpret depending on the course I'm assigned to interpret. Sometimes I need to summarize and break the words down for my students to understand whilst at times I sign word for word. (int3)

4.1.6 Collaboration with the Lecturers

Collaboration was one of the themes that emerged from the interview data. In a way of overcoming challenges and interpreting well for the students who are DDB to understand the content being taught, the interpreters collaborate with the lectures when teaching in a way of promoting the lecturers when the pace of their delivery is faster for the interpreters and also vocabulary used is not familiar with the interpreters. The following are some of the comments made by 10 participants:

I have the right to inform the lecturers to slow the pace so that I can get whatever he/she is saying to the DDB students. (int.10)

If the lecturer uses a word that is difficult for me to sign, I ask the lecturer to break it down for me to understand and interpret it for the deaf, that is what I do. (int. 14)

I prompt the lecturers if I'm not able to get what he/she is teaching or if the pace of their delivery is fast for me, I also prompt them so that my students will also benefit (int.11)

I draw their attention to something I don't understand and when the deaf student does not understand or wants to ask a question, I just prompt the lecturer". (int.6)

I always consult my team interpreter for unfamiliar sign language concepts or vocabulary and also confirm some information I could not hear well from the lecturer. I always prompt the lecturer to slow down when he/she speaks faster". (int.5).

4.1.7 Social-Related Experiences

The social-related experience was one of the themes that emerged from the interview data. Concerning this theme, you could see that the interpreters find it more challenging in interpreting for the students who are (DDB) in the social gathering more than at the academic settings. Most interpreters like interpreting in the academic setting because some of the lecturers gives their lecture slide for us to read on time and also you can prompt them to slow the pace of their delivery, unlike the social gathering that you may not know what the topic is about and ascent of the speaker,

and when you find it difficult to hear what the speaker is saying it will be difficult to prompt him/her.

In the academic setting, the students will be assessed on what they are being taught, so you have to sign well but in the social setting if you don't get the speaker well, you can still sign because they won't be assessed. (int.5)

I will say interpreting for a deafblind student in the social setting is though it's difficult because the student does not want any lady to interpret for her and we don't have enough male interpreters, so if you are assigned to her you will interpret until the meeting ends which makes it difficult. (int.6).

Outside the lecture hall, you might not know the one coming to do the presentation, the accents of the speaker, the pace at which the person delivers the message and also what the person feels or whatever he had already planned is what he is bringing. (int.11).

Interpreting for a deafblind student in a social setting is very difficult because you have to hold the hand and sign for the student and doing that all the weight will be on you in the end you will be very tired. (int.4).

It's somehow hard to prompt the speaker to slow down the pace of delivery when it happens like that you will distract them so you have to force and sign what the person will say. Sometimes I will just omit some words and do what I can hear. (int.14).

The students will not be assessed or write exams on what the speaker present, though it was important to sign for the benefit of the students when you don't hear what the speaker is saying you can omit some words and sign the meaning to the students. (int.13)

Interpreting outside the lecture hall is different because you don't need to ensure the DDB students understand what you sign or not but in the academic setting, you have to let them understand because they will be assessed on it (int.2)

4.2.0 RQ2. What are the interpreting demand and interpreting resources for interpreters?

Research question (2) sought to explore the experiences of interpreters for DDB students on their interpreting demands and interpreting resources in interpreting.

Three themes emerged from interview data on this research question two, which were working hours, sitting position and workload.

4.2.1 Working Hours in a Day

Working hours in a day was one of the themes that emerged from the interview data. The interpreters shared their concerns about their working hours. All 15 interpreters describe their working hours which were not favorable to them. The interpreters were of the view that interpreting for more than two hours in an assessment hour without any team member to support them makes the work very tiring and very difficult for them to interpret, and because of this, conveying good information to students who are (DDB) becomes difficult. Interpreters expressed that they encounter such difficulties as a result of inadequate interpreters available at the university.

Concerning this theme, the following comments were made by the interpreters:

Sometimes the working hours are short and sometimes they are long. It depends on the schedules for the day. Sometimes you can interpret for two hours and sometimes you can interpret for more than nine hours per day so it depends on the schedules for the day". (int.6)

The working hours that we interpret per day it's too much for one interpreter if we have a team to support it will somehow be ok. Imagine interpreting for a deafblind student for two hours without a team member to support you which is very difficult. (int.10)

It is always hectic when interpreting because you can interpret for more than two hours continues without any support from a team member because you don't have anyone to support. (int5)

Professionally an interpreter is not supposed to interpret for more than 45mins continuously however in the case of UEW because they don't have enough interpreters, we usually interpret within 2-3 hours continuously per course without team support. (int.11)

Interpreting for more than an hour for a student who is deafblind is stressful because you have to hold the hand of the student in your palm and also the chair, we sit on makes the work difficult to do. (int. 3).

4.2.2 The Sitting Position of Interpreters

Comments made by the interpreters revealed that the interpreters struggle for a seat to sit on at the lecture hall which makes the work difficult for them. The interpreters indicate that chairs provided at the lecture halls are not good to be used by the interpreters, sometimes the interpreters need to look for chairs and also provide some for the deafblind students. Interpreters indicate that sometimes they have to stand and interpret and also standing for long hours makes the work stressful, which doesn't help the interpreters to do their best and also the students who are (DDB) might not get the full benefit.

They don't provide us with the necessary logistics, especially the chair that we will sit on and things that we might need to help the deaf students, you have to move and search for a chair to sit on from different lecture halls the time you will come you are already tried to do your work. (int.2)

Sometimes you have to stand for about two to three hours to interpret for students who are deaf if you don't get a seat to sit on because of how they have made the chair at the lecture halls you can't move it so you have to go and look for a chair that you be sitting on". (int.15)

Sometimes you won't get a chair to sit on it so you have to look for a chair to sit on and another for your deafblind student which makes the work difficult because before you will start the class you are already tired. (int.14)

It's just all about sacrificing because sometimes you have to look for a chair that you the interpreter will sit on it and if you don't get some meaning you have to stand for about 2 hours and more". (int.13)

4.2.3 Workload

The workload of interpreters was one of the themes that emerged from the interview data. Concerning this theme, the interpreters express their experiences with the workload on them as interpreters in the university. Comments from interpreters revealed that the workload is too much and they have to be sacrificing themselves to help the DDB students to benefit during assessment hours. It's obvious that the

interpreters working environment of the interpretation are not within one department, it requires one to move from one department to another department or campus to campus, sometime they have to walk from one campus to another campus which makes their work stressful for them. And they don't provide them with means of transportation.

I will say that the work is so stressful because sometimes you can interpret for more than three different courses in a day which make the work becomes so stressful and then it makes the work tedious as well. (int.3)

Mostly I have three different courses to interpret for a day and sometimes four courses. The work sometimes becomes very stressful and difficult when you interpret alone and it's not within one faculty and department, you have to move from one faculty and different departments. (int.4)

The working environment of the interpretation is not within one department, it requires one to move from one department to another department and one campus to another campus. Sometimes, walking from one department to another department is somehow far from each other" (int.2)

I interpret for a deafblind student for two consecutive lectures and immediately I have another class with deaf students in a different department and is not within the same faculty I have to walk to different faculty before I reach there you be tired already (int.6)

It's quite tiring and stressful because sometimes, the workload is more and you find it difficult going up and down. Some of times schedules follow each other so it's kind of stressful. (int.9)

4.3 RQ3 Support Service Available For Interpreters

Research question (3) sought to explore the experiences of interpreters for DDB students on their support services. Four themes emerged from interview data on this research question, which are in-service training, team support, lecturers' collaboration and benefit.

4.3.1 In-Service Training

In-services training was one of the themes that emerged from the interview data. All 15 interpreters indicate that because of the covid-19 the annual in-service training the department had for the interpreters was held on. The mentor had a short training to enlighten their understanding of the demands of the job.

When we started work, we had a meeting, the first one was encouragement, the second, we learned how to sign simple concepts, the third was, conduct approaches which will help us to do it when we met a large number of people, how to listen and communicates. (int.1)

Our mentors at the resource Centre enlightened us and they gave us a whole lot of insight, they shared their experiences with us, which has helped us but there wasn't any in-service training for us before we started our interpreting work". (int.4)

During the beginning of my internship, there was a series of training to equip us for the work ahead which is sign language interpretation, but our mentors made us aware that they should have organized in-service training for us but because of covid-19 they couldn't". (int.15)

They did only one in-service training for us before we started the work, but they told us that because of the covid-19 that why were not able to organize some in-service for us before we start our service". (int.12).

4.3.2 Team Support

Team support was one of the themes that emerged from the interview data. The views of the interpreters revealed that team interpreting helps in the interpreting work because if the interpreter finds it difficult to sign a word the team interpreter will be feeding his/ her team with the word that is so difficult for the team member to interpret. This support can take the form of 'feeding' signs, spoken words/phrases or mimic information to the lead interpreter (showing signs, whispering words, fingerspelling proper names, abbreviations or technical terms or giving mimic information) to help the team to continue interpretation. Here are some remarks made by the interpreters:

My team interpreter supports me always and helps me sometimes while I'm interpreting some words, I don't have a sign for it he will just chip in the words or just sign it for me too so we flew hand-to-hand. (int.8)

And my team interpreter has been very supportive but we don't go to class together sometimes, but whenever we go together and I don't get the words the lecturer says my team member will be there to support me sometimes my team will write the words for the deaf students to know what the lecturer has said". (int.9)

Each class has two interpreters which demonstrates team interpreting. I always move with my team members to the class I am assigned to interpret, and whenever we are confused about a word my team will quickly write the word on a marker board for the deaf to see it has been supportive in our interpreting". (int.15)

Team interpreting has been one of the best adaptive strategies that greatly motivated me to succeed on the job as an interpreter, as it granted me the opportunity to rest intermittently to gain strength. (int.14)

4.3.3 Lecturers' Support

Lecturer support was one of the supports that helped the interpreters to do their work in academic settings. All the interpreters were of the view that the support the lecturers have been giving them has helped them in many ways, for the benefit of the DDB students the lecturers involve the interpreters in their preparations for the class and also during the class hour. Here are some comments made by the interpreters.

Some of the lecturers will ask if the paces of their delivery are ok for me or if they should slow down, since I'm there to support them teach they always make sure the students benefit. (int.2)

My boss has been supportive of us the interpreters he will encourage us that this job is not an easy one but we just have to be strong, for the love of the DDB students. (int.7)

To help the student who is DDB the lecturers will give you their PowerPoint to read and prepare yourself so that you can interpret well for the DDB students. (int.9)

Some of the lecturers are very patient with us as we go to their class to interpret. They move at a pace which is okay for us the interpreters and they also recognize and involve the deaf students in their lesson. (int.10)

Some lecturers pause their teaching to allow the interpreter to carefully explain concepts to the understanding of the DDB students. (int.13)

4.3.4 Benefit

The benefit was one of the themes that emerged from the interview data. The comments made by the interpreters revealed that the support given to them has helped them in diverse areas of their job and the delivery of their work and it has facilitated their interpreting skills.

It is not easy to stand in front of a large crowd to interpret, so it has boosted my confidence in standing in front of a large crowd. Also, it has created opportunities in meeting new people, because there are areas if is not for interpreting, I would never be there". (int.4)

I was inexperienced but now through the support, I can interpret without feeling shy. And also, it has helped me to sign well to communicate good information back to the DDB students". (int.6)

The course outline and the slides the lecturers give me have helped me to prepare before the day of the lectures. It also helped me to get in-depth knowledge about what is going to be discussed. (int.7)

It has helped me not just in an academic setting but it has helped me to sign with confidence and it has exposed me to a lot of people and opportunities. (int.10)

Sometimes if I have the course outline and know that, this is what the lecturer is teaching. With the course outline, I have; I can follow and get the message delivered to the deaf students". (int.15)

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.0 Introduction

This chapter presents a discussion of the findings. The discussion highlighted the major findings of the research and inferences made from them given findings from related previous studies. The discussion was guided by the research questions that were raised to guide the study.

5.1 Research Question1: What are the Experiences of Interpreters at UEW?

- a) What are the Academic Experiences of Interpreters at UEW?
- b) What are the Social Experiences of Sign Language Interpreters at UEW?

Concerning the experiences of sign language interpreters, the findings of the study revealed that constant practice helps interpreters in university settings to improve their skills of interpreting for DDB students. The findings agree with the study of Salter et al. (2017) which stated that interpreting in interactive classrooms should aim to set up conditions that will facilitate effective interpretations that support improved learning outcomes for deaf students and their interpreters. In Ghana sign language is not among the official languages that are being taught in schools, hence there are variations in the language. Many interpreters in this context are likely to buy time in the field of practice to improve their skills. Also, many sign language interpreters may not be used to the terminologies that are used in some fields of study which may require frequent practice for them to convey the exact information to the students. The need to create a learning environment for sign language interpreters to practice fast is very crucial since DBB students are likely to miss most of the lecture information.

The findings of the study indicated that interpreting in the academic setting without having background knowledge of the discipline is challenging. Familiarity with the discipline of sign language interpreters is very critical for effective communication for DDB students. The findings of the study agree with the study of Heyerick and Vermeerbergen (2012) which stated that it is crucial that interpreters not only familiarize themselves with the vocabulary of the content they interpret but also need to learn how to communicate those concepts to their consumers to understand. In the context where an interpreter needs to be in the classroom with a teacher or lecturer because of inclusion, the interpreters need to equip themselves with terminologies that will help them to interpret well for the DDB students. But it is unfortunate that as the vocabulary of academic institutions keeps expanding rapidly, most interpreters struggle to keep up, and the way languages are encoded also differs and which leads to lexical gaps of different kinds for which interpreters need to catch up. Also, Sign language interpreters need to have some knowledge of the context they work in and adopt the best strategies to help in bridging the language and communication gaps to be counter-productive in the field they work in. For instance, when a sign language interpreter chooses to omit certain information based on not knowing the specific sign, they might deny the DDB students from learning the new terminology the teacher or the lecturer introduces in their class which will affect the performance of the DDB students.

Regarding interpreters' background knowledge, the findings of the study revealed that sign language interpreters could not interpret some courses. One of the reasons for the findings was that the sign language interpreters were not familiar with the content of programs such as; mathematics, early childhood, basic education, graphic design, and others. The findings agree with the study by Lang (2002) which revealed that the

content knowledge necessary for interpreting in today's science, technology, and mathematics classrooms is often beyond the educational background of some interpreters. Sign language interpreters are expected to be highly proficient in both English and other local language and also to be impartial in their delivery of services, and should be able to turn from one source of language into their target language without any additions, omissions, or other misleading factors that alter the meaning of the message from the speaker. In promoting quality education for students in the classroom DDB students need an interpreter who is full of knowledge in the field to interpret the content. An interpreter who does not have any idea about the content or the terminologies used in the field may find it very difficult in that area which may affect the performance of DDB students in the classroom. Sign language interpreters must have content knowledge of the course they are assigned to interpret to enable them to convey the exact information to the DDB students.

Concerning interpreters' interpreting styles, the findings of the study revealed that the majority of sign language interpreters preferred simultaneous interpreting, which is a process where the interpreter concomitantly interprets whilst the speaker speaks. In educational settings, the use of simultaneous interpreting is helpful because it allows the interpreter to follow the lecturer and minimizes the risk of missing key information during the process. It helps the interpreter to develop the habit of asking for repetition from the instructor which could lead to boredom on the part of the DDB students. The findings agree with the study of Seeber, (2013) which reviewed that the interpreter must do the following while the speaker is talking: listen to what the speaker is saying; translate it in his mind; render the translation in his microphone, and (and this is the most difficult part) at the same time listen to what is being said while he is speaking himself. This requires a kind of mental miracle, and that is why it

is an unusually demanding and complex activity to carry out, one that requires an unusual level of concentration, which tires out the interpreter rather soon which affects his concentration, which, in turn, affects his performance.

The findings of the study also revealed that some interpreters prefer interpreting consecutively which is different from simultaneous interpreting; a process which allows the interpreters to wait and listen to the speaker before they interpret. It sounds awkward and very bizarre to see interpreters using this approach in educational settings. However, the nature of some courses such as art education, physical education and among others in tertiary education demands this approach. For instance, in art education, many lecturers give instructions to students on how to draw a certain object. Sign language interpreters and DDB students mostly prefer to do the interpretation after the instructions from the lecturer. The possibility of the interpreter missing some key points in an attempt to recall the instructions is very high. This could affect the quality of the outcome of DDB's project work. Consecutive interpreting is mostly preferred by students in social settings to academic settings (Napier & Parker, 2004).

The findings of the study also showed that some groups of interpreters preferred both styles; signing simultaneously and consecutively. The interpreters prefer both interpreting styles because it helped the interpreters to interpret when they find themselves in any setting where they are not familiar with the concept, especially in a practical context they will first listen to the lecturers and interpret for the students who are DDB. The finding is consistent with a study by Napier (2002) which states that university-level interpreters routinely code-switch to provide DDB students with information necessary for their academic success. Interpreters should use their

discretion to select the best interpreting style since there is the likelihood that the interpreter may not be in a position to satisfy all the DDB students in the lecture hall.

The findings of the study revealed that interpreters prompt lecturers when they are not getting what they are saying or moving at a pace that is difficult for them to catch up with them. The ability of interpreters to anticipate challenges that are likely to occur during interpreting and develop strategies to deal with them helps interpreters to maximize the output and the quality of the interpreting services provided for DBB students (De Meulder, Napier, & Stone, 2018).

The findings of the study revealed that most of the interpreters prefer interpreting at the lecture hall to interpreting at a social gathering because at the lecture hall the interpreters could predict what the lecturers will be teaching because some of the lecturers give them some course outlines and some handout to prepare before they come to class. The dynamics in social settings are always different which makes it difficult for interpreters to prepare in advance for DBB students. Sign language interpreters are likely to miscue some information during interpreting at social gatherings due to inadequate preparations. Collaborations among lecturers, DBB student's other key activists in social gatherings can help improve the interpreting services provided for DBB students. The findings are consistent with the study of Janzen and Shaffer, (2008) which revealed that classroom interactions are meant to be between the student and teachers, when interpreters become part of the process, it creates an intersubjective relationship between the actors of the classroom who may have distinct socio-cultural backgrounds and experiences.

5.2 Research Question 2. What are the Interpreting Demand and Interpreting Resources for Interpreters?

The findings of the study revealed that the interpreters' assignment from one department or faculties to another was stressful due to the distance involved. The University of Education, Winneba (UEW) has three different campuses where different faculties and departments are located. Sign language interpreters at UEW are required to trek by foot from one geographical area to another to provide interpreting services for DBB. The walking distance from one campus to another is between 45 to 60 minutes. Interpreters are likely to burn out even before they enter the lecture hall for interpreting, hence DBB students are likely to receive below-par interpreting service which can affect their academic performances. The study agrees with the study of Demerouti et al. (2003) which stated that emotional exhaustion resembles stress reactions shown in research related to occupational stress, namely, fatigue, job-related depression, psychometric complaints, and anxiety. Prolonged exposure to specific working conditions can cause fatigue. The workload and the stress in the interpreting work might prevent the interpreters from giving out their best work to support their students in the classroom.

The findings of the study clearly show that most of the interpreters interpret for longer hours in the classroom which makes the work very tiring and very difficult for them to interpret. At UEW, sign language interpreters are required to interpret for at least two credit hours for a course. However, for practical courses such as home economics, art education, graphic design and physical education, interpreters are likely to interpret for more than two credit hours. The work involved in processing information from spoken language to sign language is very cumbersome which makes the interpreter exhausted after only 30 minutes. The possibility of an interpreter losing

focus after the first 30 minutes is very high, hence can affect the reliability and validity of the information given to DBB students. This call for team interpreting to support each other in lecture halls and social settings has been reported in some empirical studies. The findings of the study agree with Hakanen et al. (2008) who say that if working hours prolong for the interpreters it can affect their performance of the work.

5.3 Research Question 3: What are the Support Services Available for Interpreters?

The findings of the study revealed the lack of in-service training for interpreters to prepare and equip them for the interpreting work due to the covid-19. The provision of in-service training for DBB students was very vibrant at UEW before the covid-19, thus making interpreters confident and skillful. Sign language interpreters are likely to mismatch or forget some learnt skills for interpreting due to a lack of in-service training provided for them. Collaborations among the Ghana National Association of the Deaf (GNAD), UEW and other key activists in the interpreting profession can help improve the quality of interpreting services provided for DBB students. The findings of the study agree with the study of Leeson et al. (2013), which indicated that there is a training available for interpreters in tertiary institutions in the Western world. Leeson et al. further explained that some countries in that part of the world have set up a minimum academic requirement of a bachelor's degree before one can be allowed to practice as an interpreter.

The findings of the study revealed that team interpreting helps in the interpreting work because if the interpreter finds it difficult to sign a word the team interpreter will be feeding his/ her team with the word that is so difficult for the team member to

interpret. Sign language interpreters at UEW are expected to work in pairs in order to avoid any additions, omissions, or other misleading factors that alter the meaning of the message from the speaker. The tendency of an interpreter to omit important information after a given period during interpreting is high in the inclusive classroom which might affect the performance of the students, this calls for the interpreters to work as a team in order to support themselves during assessment hours. The nature of the work for interpreters involved both thinking and processing information within a short time while the lecturer is also delivering their message, and in the context where the class activities extend to about an hour or more, the interpreter gets burnout after interpreting for 30minutes in which they need to switch for a team interpreter to help in the interpreting. And this helps the interpreter to rest intermittently to gain strength to continue and also assist their team interpreter to gain confidence and reduce stress to affect productivity positively and it is often easy for interpreters to provide effective assignment controls when they work in teams. The findings of the study agree with the study conducted by Napier and Stone, (2018) who opined that working as a team will help the 'inactive' interpreter (one not interpreting) furnish the 'active' interpreter (one interpreting) with the necessary support during the assignment in tertiary classrooms, particularly in a context where the class activities extend to about one hour or more.

The findings of the study revealed that the interpreters said the lecturers have been supportive in a way of providing words of encouragement, slowing down the pace for them (interpreter) to interpret for DDB students, and also providing them with course outlines and their slides for them to read on time to support the work. In promoting inclusiveness in our schools there is the need for collaboration between the stakeholders involved. There is also the need for the sign language interpreters to

collaborate with teachers to have access to their lesson notes and other relevant material which will aid their services for DDB students in the classroom. At UEW the lecturers give their lesson notes to the interpreters to prepare aforetime so that they will be able to match up with the new terminologies and concepts that are likely to be used during their delivery in order to help the DDB students to be in equal pal with their hearing colleagues. The findings of the study agree with Napier (2016) who stated that during assessment hour sign language interpreters got support services from their lecturers and their team interpreters which make their work less difficult and stressful. Common support the lecturers often give to their interpreters is providing them with lecture notes, and any material that will help them to prepare adequately for their work.



CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter presents the summary, conclusion and recommendations for the research.

6.1 Summary

The purpose of this study was to explore the experiences of interpreters for DDB students at the University of Education Winneba. Fifteen interpreters comprising ten male interpreters and five female interpreters were purposively selected from a population of 20 twenty interpreters at the University of Education Winneba. Data were gathered through a semi-structured interview guide. Data were coded and analysed using a thematic approach. The following were the key findings of the study.

6.2 Academic-Related Experiences of Sign Language Interpreters

Findings from the study on research question one (1); The findings of the study revealed that some interpreters prefer interpreting consecutively which is different from simultaneous interpreting; a process which allows the interpreters to wait and listen to the speaker before they interpret. The reason for the finding was that the nature of some courses such as art education, physical education and among others in tertiary education demands this approach. For instance, in art education, many lecturers give instructions to students on how to draw a certain object so the interpreter wait to get the understanding of the instruction and then signs it to the students.

Also, it was revealed that some of the interpreters prefer interpreting simultaneously because it enables them to interpret well for deaf students. Again, the study revealed that some groups of interpreters preferred both styles; signing simultaneously and consecutive (summarized).

Again, the findings of the study revealed that interpreters could not interpret some courses. One of the reasons for the findings was that interpreters were not familiar with the content of programs such as; Mathematics, early childhood, basic education, graphic design, and others.

Furthermore, the findings of the study revealed that most of the interpreters prefer interpreting at the lecture hall to interpreting at a social gathering because at the lecture hall the interpreters could predict what the lecturers will be teaching because some of the lecturers give them some course outlines and some handout to prepare before they come to class.

6.2.1 The Interpreting Demand and Interpreting Resources for Sign Language Interpreters

The analysis of the interview data on research question two (2) indicated that the study revealed that the interpreters' assignment from one department or faculties to another was stressful due to the distance involved. The University of Education, Winneba (UEW) has three different campuses where different faculties and departments are located. Sign language interpreters at UEW are required to trek by foot from one geographical area to another to provide interpreting services for DBB

6.1.2 The Support Services Available for Sign Language Interpreters

The findings of the study revealed the lack of in-service training for interpreters to prepare and equip them for the interpreting work due to the covid-19. The provision of in-service training for DBB students was very vibrant at UEW before the covid-19, thus making interpreters confident and skillful.

Also, the finding of the study revealed that team interpreting helps in the interpreting work because if the interpreter finds it difficult to sign a word the team interpreter will be feeding his/ her team with the word that is so difficult for the team member to interpret. Interpreters at UEW are expected to work in pairs in order to avoid any additions, omissions, or other misleading factors that alter the meaning of the message from the speaker.

6.3 Conclusion

The study concludes that the majority of the interpreters preferred simultaneous interpreting, which is a process where the interpreter concomitantly interprets whilst the speaker speaks. In educational settings, the use of simultaneous interpreting is helpful because it allows the interpreter to follow the lecturer and minimizes the risk of missing key information during the process. However, some groups of interpreters preferred both styles; signing exact words (English) and broken. This is because it helped them to deliver their best in the assessment hour. For example, when they are interpreting and deaf students don't understand what they are signing they can easily switch to the other sign that can best help them in their assessment hour.

Again, the interpreters said the lecturers have been supportive in a way of providing words of encouragement, slowing down the pace for them (interpreter) to interpret for DDB students, and also providing them with course outlines and slides for them to

read on time to support the work. Interpreters' background knowledge of the content having knowledge of and understanding of the contents that interpreters are required to interpret in the classroom gives them the control and the flexibility to facilitate communication effectively among lecturers and DDB students.

Again, the interpreters interpret for longer hours in the classroom which makes the work very tiring and very difficult for them to interpret. This is because the interpreters interpret more than two (2) hours in an instructional hour without a break or having a team interpreter to support them which makes the work very tiring and very difficult for them to interpret.

Additionally, team interpreting helps in the interpreting work because if the interpreter finds it difficult to sign a word the team interpreter will be feeding his/ her team with the word that is so difficult for the team member to interpret.

6.4 Recommendation

Based on the findings of the study the following recommendations were made:

1. The department should give new interpreters more opportunities to practice more in order to enhance their skills in interpreting.
2. The University of Education, Winneba and the department of special education should collaborate to provide means of transport services to support the interpreters in moving from one campus to another to deliver their services.
3. The University of Education Winneba should employ enough interpreters to support the work so that the workload will be lesser for the interpreters.

4. The University of Education Winneba should do in-service training for the lecturers at UEW to have in-depth knowledge about interpreting so that they can support the interpreters during teaching and learning.

6.5 Suggestion

1. Need for the study to be conducted using a different research approach, for example (mix-method or quantitative) in a different geographical area.
2. The study should be conducted on experiences of lectures teaching students who are deaf.



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APPENDICES

APPENDIX A

SEMI-STRUCTURED INTERVIEW GUIDE FOR INTERPRETERS AT UNIVERSITY OF EDUCATION, WINNEBA ON THEIR EXPERIENCES IN INTERPRETING FOR DEAF AND DEAFBLIND (DDB) STUDENTS

Time:

Venue:

Date:

Duration:

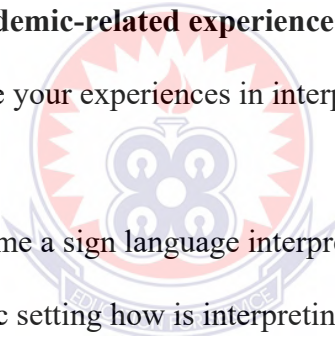
This interview is aimed at collecting information from interpreters on their experiences in interpreting for deaf and deafblind (DDB) students at University of Education Winneba. The items were developed on the themes in the research questions.

RQ.1. What are the experiences of interpreters at UEW?

a. What are the academic-related experiences of interpreters at UEW?

1. Can you share with me your experiences in interpreting at UEW?

Prompt

- 
- i. How did you become a sign language interpreter?
 - ii. So, in the academic setting how is interpreting like?
 - iii. Can you tell me some of the departments you have been interpreting and the experiences you have gained from those departments?
 - i. How are you able to interpret in all the departments? (Mention some of the departments do you have background knowledge)
 - iv. How do the lecturers in those departments relate with you as an interpreter?

2. How do you interpret everything that the lecturer says during lecture hours?

Prompt

- i. Do you mean you interpret word by word or what approach do you use?
- ii. So why do you use this approach?
- iii. Do you have or know other approaches that you are not using?

iv. While interpreting how do you collaborate with team interpreter, lecturers and deaf students? (Lecturer speaking at a faster rate, lecturer's ascent, not understand what is been taught, inability to hear etc)

v. How do you know that the students understand what you sign to them?

b. What Are the Social-related Experiences of Interpreters at UEW?

1. Can you share with me your experience in interpreting outside lecture halls?

(Graduation, matriculation, group discussion etc)

2. What makes interpreting outside the lecture hall different?

3. How are you able to deal with issues of;

i. Presence of unfamiliar people

ii. Presence of superiors/authorities

iii. Presence of your boss/leaders

RQ2. What are the interpreting demands and interpreting resources for interpreters at UEW?

1. What are the demands on the job as an interpreter?

Prompt

a. The physical

b. Long working hours

c. Workload

d. working environment



RQ3. What are the support services available for interpreters at UEW?

1. Can you share with me the support you have received for the interpreting work?
 - i. Inservice training
 - ii. Team interpreting
 - iii. Lecturer support
2. How do these support helps you?



APPENDIX B



UNIVERSITY OF EDUCATION, WINNEBA
FACULTY OF EDUCATIONAL STUDIES
DEPARTMENT OF SPECIAL EDUCATION

18 May, 2022

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TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION: MR. EMMANUEL ADU-GYAMFI

I write to introduce to you, Mr. Emmanuel Adu-Gyamfi an M.Phil. Student of the Department of Special Education with index number 202146175.

He is currently working on his thesis on the topic: "Experience of Interpreters for Student who are Deaf and Deafblind at the University of Education, Winneba". He needs to conduct interview in your institution.

I would be grateful if you could give him the needed assistance.

Thank you for the consideration and assistance.

Yours faithfully,

MRS. FLORENCE AKIJA MENSAH

(Ag. Head of Department)