

Academic Experiences of Students Who are Deaf at the University of Education, Winneba, Ghana

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Abstract

Guided by Tinto's (1975) model of student retention or departure, this phenomenological study explored academic experiences of students who are deaf at the University of Education, Winneba (UEW), Ghana. Fourteen deaf students were purposively sampled from a population of 36 students. Data were gathered through a semi-structured interview. Data were coded and analyzed using thematic approach. Academically, participants indicated that they were usually assessed on content areas they are taught. They also added that assessment became challenging when Sign Language interpreters were not present at the examination halls. The study recommended that tertiary educational institutions that practice inclusion for deaf employ more Sign Language interpreters, and note-takers to help deaf students have equal access to the curricular and that this study be replicated elsewhere that would include more public tertiary educational institutions with larger number of participants.

Keywords: *d/Deaf students, academic experiences, tertiary institution*

Introduction

In Ghana, majority of students who are Deaf and belong to the Deaf cultural community pursue their Secondary school education in a segregated public Secondary/Technical School for the Deaf. At the Secondary/Technical School for the Deaf, the official mode of communication and medium of instruction is signing in the form of Ghanaian Sign Language (GSL). Quite a substantial number of deaf students who successfully graduate from the Secondary/Technical School for the Deaf continue to further their tertiary education at the University of Education, Winneba (UEW). The University of Education, Winneba is a reputable public tertiary institution of Ghana that practices inclusion with support services in the forms of Sign Language interpreting, note-taking, tutoring, and information and communication technology (ICT) in order to make the curriculum equally accessible to students who are Deaf.

Often, the extent that individual Deaf students successfully or otherwise go through their academic programs of study at the tertiary level is determined by the perceptions of teaching and non-teaching staff and sometimes parents. The experiences of the students who are the

consumers are often overlooked. It is always imperative that voices of consumers of academic programs, are heard by providers and other stakeholders in order to improve upon the support services provided to consumers (The UN Convention on the Rights of the Child, 2006). In Ghana, the Persons with Disability Act, (2006) stresses the right of persons with disability to have access to education facilities and equipment in educational institutions. Individual students' lived academic experiences may sometimes vary from one student to the other and may also be different from that assumed by teaching and non-teaching staff of the institution and parents (Jarvis, Sinka, & Iantaffi, 2002). This study therefore explored the lived academic experiences of individual Deaf students in a public tertiary institution in order to provide useful empirical information that could lead to improved academic achievements among such students.

At UEW, both hearing and Deaf students live together in the same halls of residence, attend lectures together, go on field/educational trips together, and go through the same assessment procedures daily, monthly and at the end of each semester. In this study, the problem relates to the lived academic experiences that individual students who are Deaf go through at the tertiary level in Ghana. Academic experiences of Deaf students at the tertiary level in Ghana has so far not been researched into and documented. The purpose of the present qualitative phenomenological study was for individual participants who are Deaf to describe their lived experiences in an inclusive public tertiary educational institution with regards to: (a) access to information, (b) experiences with regards to how they understand lectures and (c) experiences with tests/examination/assessments. A semi-structured interview guide was used to collect data for analysis.

In this study, the term "Deaf" was used to refer to individual students who, in addition to not perceiving auditory sounds naturally via their auditory mechanisms, function by choice as members of the community of a minority group that follow their cultural norms, values, and tradition. The term "academic experiences" are the learning/teaching processes that students go through in a tertiary institution as they access information, understand lectures, and are assessed.

The present study was guided by Tinto's (1975) theory of retention and departure which states that an individual student's decision to persist or depart from an institution is dependent on their pre-university characteristics, their level of commitment and intention towards their academic goal, and their ability to integrate academically into the institutional culture. It was assumed that at the tertiary level, if students who are profoundly deaf and belong to the Deaf cultural community are provided with support services in their learning/teaching process in an inclusive tertiary institution to pursue their individual academic programs successfully, then the lived academic experiences of such students may vary. If individual deaf students have full access to their academic programs of study, then they would be retained to continue with their various academic programs till they complete successfully. On the other hand, lack or incomplete access to the various support services may result in withdrawal or abandonment of their academic programs. In line with Tinto's learning theory of retention or departure, the present study interviewed individual Deaf students to tell the researchers about their academic experiences in an inclusive public tertiary educational institution.

Evidence in the literature suggests, that much is not known about the academic experiences of students who are deaf in tertiary institutions in Ghana. Few studies that have been conducted on

the experiences of students who are deaf were conducted at the Basic level (Mantey, 2011; Oppong, & Fobi, 2016; Oppong, Fobi, & Fobi, 2016). Whereas some studies give accounts of negative academic experiences of deaf students who learn together with their hearing peers (Bell, 2013; Magongwa, 2008; Mantey, 2011), results of other studies revealed that deaf students' academic experiences are not dependent on whether or not they are educated in a segregated or inclusive educational setting (Batten, Oakes, & Alexander, 2014; Schick, Skalicky, Edwards, Kushalnagar, Topolski, & Patrick, 2013; Nikolarazi & Hadjidakou, 2006). Three research questions guided the present study: (1) What are the experiences of deaf students with regards to access to information? (2) What are deaf students experiences regarding understanding of lectures at the tertiary level? (3) What are deaf students' experiences on assessment in a tertiary institution?

Experiences of Deaf Students with Regards to Access to Information

A university context is often challenging for all categories of students. Problems of adjusting to academic life and the obligations imposed could often lead to failure and abandonment. Sampaio and Santos (2002) indicated that for students who are deaf to assimilate new information and knowledge, they have to overcome the shortcomings of their pre-tertiary experiences, such as language deficiencies, inadequate study conditions, a lack of coping skills, problems with reading comprehension and difficulty in producing text. University life requires free flowing and meaningful communication with colleagues, teachers and the environment. Effective communication is fundamental in the early years of higher education for improving the chances of academic success (Diniz, & Almeida, 2005; Ferreira, Almeida, & Soares, 2001). Students who are deaf, like any other students, must deal with expectations, standards and ways of functioning that are different from their previous special segregated school experience. The ability of students to adapt to new way of learning in an inclusive educational institution, is often contingent upon their individual pre-tertiary educational experiences, inherent characteristics such as hearing loss, gender, and emotional conditions among others and the type of educational institution (in this study, tertiary inclusive educational institution) in which the students are educated.

Sameshima (1999) investigated the realities of tertiary experience of New Zealand Deaf, and hard of hearing students by interviewing twenty-eight Deaf university students and fifteen coordinators of support services for Deaf students in universities and polytechnics. Sameshima's study found that majority of Deaf and hard of hearing students had low quality of education prior to entry into university, Sign Language interpreters and note-takers were insufficiently trained, there was lack of awareness about Deaf students by institutions of higher education, and disability office coordinators' lack of signing skills and knowledge about Deaf students' needs. The study also found that Deaf and hard of hearing students could not interact meaningfully among themselves as a result of communication problems. In addition, she found that seventy-five percent of the participants reported some degree of difficulty in reading and writing English Language.

Magongwa (2008) adopted a qualitative approach to explore the experiences of Deaf teachers who had attended a tertiary institution in South Africa. In-depth interviews and documentary information were used to collect data from twelve current and past Deaf and hard of hearing students. Current theory, practice and legislation designed to guide the creation of an inclusive

education society were examined in order to explore the implications they have for Deaf students in terms of inclusion and access to education. The findings revealed high level of academic competitiveness among the Deaf and hard of hearing students but low social participation. Their academic success was driven by factors such as commitment to Deaf education, the availability of Sign Language interpreting services, having Deaf peers, and their pre-university experiences.

In a qualitative case study, Mantey (2011) explored the experiences of Upper Primary pupils with post-lingual hearing impairment in a public Basic Practice School in Ghana. Data were collected through interview and observation. A sample of 5 pupils with post-lingual deafness were involved. Findings from the study revealed that participants did not have access to facilities that enhanced their academic success in the inclusive school. Again, there were no positive interactions between the pupils and their hearing peers as a result of communication gap. The study further revealed that teachers interacted and demonstrated positive attitude towards the pupils with post-lingual hearing impairment. The study recommended that teachers should create opportunities in the classroom that will encourage frequent peer interaction and general social skills development.

Experiences on Understanding Lectures

Students with deafness enrolled in general educational settings frequently require classroom support services if they are to realize their academic potential. Academic support that could enhance deaf students' understanding of lectures in a tertiary institution include: Sign Language interpreting services, note taking services, and accessibility to internet facilities (Roe, 2008). O'Brien (1998) argued that deaf students must have complete access to all academic facilities to enhance their learning outcomes.

Marschark, Sapere, Convertino, and Seewagen (2005) recognized that even with interpreting and note-taking services, students who are deaf at the tertiary level receive less information from lectures and tutorials than their hearing peers. Marschark et al. (2005) conducted a study on deaf students' experiences on Sign Language interpreting at Rochester Institute of Technology (RIT) in the United States of America and found that deaf participants did not acquire as much information from lectures as their hearing peers even with experienced interpreters who were familiar to the students. In Australia, Napier and Barker (2004) conducted a study involving four deaf university students in a panel discussion about their perceptions of Sign Language interpreting at lectures. Participants reported that they never accessed 100% of a university lecture.

Oppong, et al. (2016) explored perceptions of deaf students about the quality of Sign Language interpreting services rendered them in a public tertiary institution in Ghana. A descriptive survey design was adopted to elicit from respondents their views about the quality of Sign Language interpreting services rendered them. A 15-item questionnaire that employed a four-point Likert scale was used to gather data for the study. Out of a target population of 34 respondents 23 were randomly sampled for the study. Among other findings, it was revealed that the quality of Sign Language interpreting services was a major issue of concern to students who are Deaf and who adopted Sign Language interpreting services in accessing information at lectures. The study recommended that the institution took steps to make Sign Language interpreting a general program of study in order to train qualified interpreters for deaf students.

Experiences on Assessment

Literature has it that assessment for deaf students and their hearing colleagues should be assessed on the same content areas (Marschark, Convertino, & LaRock, 2006), since deaf students learn the same things as their hearing colleagues. However, due to the communication challenges that deaf students face, some adaptations can be made in order to meet their learning needs.

Magongwa (2008) argued that when deaf students are assessed differently from their hearing counterparts, the possibility of compromising the standards could lead to discrimination in the qualifications of the two categories of individuals.

Bell (2013) adopted a case study design to explore teaching and learning support for students with hearing impairment at a university in the Western Cape of South Africa. The study focused specifically on educational barriers, coping strategies, assistive technologies, curriculum accessibility as well as support services. Thirteen undergraduate and graduate deaf students were purposively sampled for the study. Data were collected through a semi-structured interview guide with participating students, university lecturers and a staff member from their disability unit. Data were analysed using ATLAS.ti to code responses using grounded theory methods. Results of the study revealed that: (a) all of the participants belonged to the hearing rather than Deaf identity cultural paradigm, (b) limited curriculum transformation had taken place, (c) existing support services were largely inadequate, (d) a large number of barriers related to teaching and assessment were experienced, and (e) a variety of academic and personal coping strategies were used by the students to support their needs.

Method

The present study employed a phenomenological case study design because participants were made to describe their lived academic experiences in a public inclusive tertiary institution in Ghana. Phenomenological design permitted the researchers to discover participants' feelings about their current lived experiences and to understand their personal meaning. Fourteen profoundly deaf students were purposively sampled from a population of 36 deaf students.

Participants were made up of 8 males and 6 females aged between 22 and 28 years with an average age of 25. Four of the participants were in level 400, five in level 300 and five in level 200. Level 100 deaf students were not included in the study because the study considered only deaf students who had spent more than one year learning experience in the university. All participants had their Senior High School education in a Secondary/Technical School for the Deaf in Ghana. None of the participants had additional disabilities such as blindness, intellectual disability, or physical disability.

A semi-structured interview guide was used to gather data from both individual and small groups for the study. Individual interviews gave the opportunity for each participant's voice to be heard – allowing for discussion of sensitive issues. Group (3 to 4 in a group) interview allowed for participants in small groups to have confidence to often set the agenda for the discussion. The group interviews also allowed for more participants to freely and willingly actively participate in the discussion since they were more comfortable being with their colleagues, though a few participants might have felt timid to express their feelings in the presence of their colleagues. To

address this problem, each participant in the group was made to introduce themselves in a friendly interactive manner. The researchers introduced themselves first. The interview guide was grouped into three parts namely: (1) experiences on access to information, (2) experiences on understanding lectures, and (3) experiences on assessment. Each major question item had probes and prompts that gave directions to respondents on themes.

A male deaf individual from the Ghana National Association of the Deaf (GNAD) helped the researchers to review the video-taped interview. Two skilled Sign Language interpreters who had successfully gone through tertiary education also reviewed the video-recorded interviews to ensure the accuracy of translations. The video-recorded interviews and transcriptions were further reviewed by the researchers to check on the accuracy of the recordings and transcriptions.

Procedure for Data Collection

Permission was sought from heads of the various Departments whose students participated in the study. The purpose of the study was explained to potential participants. To overcome the problem of researchers' bias in administration of the interview, two trained Sign Language interpreters were made to conduct the interview within one week at the participants' convenient time in the presence of the researchers to check whether or not the interpreters interpreted question items as they were stated in the interview guide. Each interview session was videoed by a photographer with a Samsung Galaxy Note 3 phone. Participants were given the opportunity to express their feelings without any pressure in a quiet lecture hall where there were minimal obstructions. Each interview lasted between 30 minutes and one hour. Having the interview conducted with a Sign Language interpreter who was familiar with the respondents facilitated communication during the interview and that no information was lost because the participants were more familiar with their interpreters. The confidentiality and rights of respondents at every stage of this study were treated with utmost care. Each Sign Language interpreter was tasked to transcribe the video-taped Ghanaian Sign Language (GSL) interview data into written GSL in Microsoft Word. Data were translated verbatim from written GSL to scripts in grammatically correct English Language.

After the transcriptions on the same day, the two trained interpreters and the researchers met to cross check each of the transcriptions to make sure they depicted what was said in the interview.

Data Analysis

The researchers and the two trained Sign Language interpreters read the interviews from the videotapes and transcribed them in grammatically correct English Language. The researchers developed codes with the emerging themes from the transcriptions. Expressions of the participants were used for the analysis.

Presentation and Analysis of Results

The present study explored the academic experiences of Deaf students in a public tertiary institution in Ghana. Three sub-themes were raised to elicit data to support this objective. The sub-themes included experiences of participants with regards to access to information, deaf students' experiences on how they understood lectures, and experiences on assessment.

Experiences on Access to Information

To establish whether or not respondents had access to information in the university, they were given the opportunity to freely express their views. Respondents expressed diverse views. Some indicated that in order for them to have access to information at the lecture halls, in the absence of their Sign Language interpreters, they employed the services of their colleague students who could sign. Others explained that since their main source of information at the lecture hall was through their interpreters, if the interpreters were absent, they abandoned the lecture since they did not see the need to be at a lecture where they would not benefit. In their own expressions participants noted:

We would sometimes call our course mates who can interpret when a professional interpreter is not available. (Expression of Pre-lingual student 1).

In the absence of my Sign Language interpreter, I access lecture via speech reading to obtain some clues as to what the lecturer is talking about. This method, however, is not accurate. I also depend on power point projections when there are no Signs Language interpreters. (Expression of Post-lingual student 2).

In the absence of interpreter, I sit and wait to collect notes from somebody to copy because my mates refuse to sign for me. (Expression of Post-lingual student 5).

Some of the students also reported that some lecturers made lecture notes available to copy whereas other students said that lecturers did not give them their lecture notes.

Yes, lecturers give us notes to photocopy. (Expression of Pre-lingual student 1).

We are given photocopies of lecture notes, however, they usually reach us late. (Expression of Post-lingual student 3).

No, lecturers never give us notes to photocopy. (Expression of Post-lingual student 6).

Providing services that are effective can promote the academic success of deaf students (minority group) who are found in the midst of a hearing populace (majority group). It was therefore prudent to inquire from the deaf consumers the effectiveness or otherwise of the services rendered to them in the university. The respondents gave their accounts as follows:

The services are effective in that they enable us to be included. They help to promote our understanding of what is taught at lectures. They also enhance retention. (Expression of Post-lingual student 2).

The services are not perfect in interpreting what goes on at lectures. They interpret slowly. I would like the interpreters to interpret clearly. At the Secondary School, my teachers signed and I understood them, but here in the university, I find it difficult to understand interpreters (Expression of Post-lingual student 3).

Sometimes interpreters don't give clear explanations at lectures. (Expression of Post-lingual student 4).

The services are not always effective. The reason is that, if the interpreter is good, we enjoy the class but if the interpreter is not good the class becomes boring. (Expression of Post-lingual student 11).

The interpreting service help us but not as effective as hearing people get information from lecture, but it helps us to improve on our academic work. My understanding of academic information at the Secondary School was better than in the university. At the Secondary school, all our teachers signed to us in class and we understood them. (Expression of Post-lingual student 5).

Responses from the majority of participants indicated that even though the presence of an interpreter at lecture was beneficial to the deaf student, yet, not every interpreter could provide services that were effective to the student. Again, it was revealed that although Sign Language and note-taking services were provided to the deaf students, yet it was not provided on regular basis. Some of the respondents intimated:

In this university I have interpreting services, resource services, and note-taking services. The support services are not provided on regular basis. (Expression of Post-lingual student 5).

Yes interpreters are always punctual but note-takers are not punctual. (Expression of Post-lingual student 8).

No I don't always have note-takers. Interpreters sometimes don't come. (Expression of Post-lingual student 12).

From the minority point of view, Sign Language interpreters available at the university were not proficient so they preferred technology to translate lecture notes for them. Other forms of support services such as projections, tutoring, counselling, resource center, and photocopies were also mentioned occasionally. They stated:

I have technology to translate big words lecturers use at lectures. Most often I don't have interpreters and note-takers. I had interpreter at level 100, but was not skillful so that interpreter only wrote notes for me. Interpreters absent themselves very often. Sometimes, the interpreter may be good but I have problem when my interpreter only finger spells all the time, I don't understand. (Expression of Post-lingual student 7).

The support services available to deaf students at UEW include Sign Language interpreters, note takers, projections, and photocopies of lecture notes. (Expression of Post-lingual student 2).

The services I have seen at the University of Education, Winneba are tutoring service, counselling service, disability service, students funding, health care, resource center service, advisor. (Expression of Post-lingual student 9).

From the responses of the respondents, it was obvious that the University of Education, Winneba has made available services such as Sign Language interpreting, note taking, tutoring, counselling, and information technology services. These services help deaf students to learn in the same environment with their hearing colleagues with minimal hindrances. Respondents gave different accounts concerning their experiences during lectures. They noted:

Yes sometimes I encounter some challenges at lecture hall when the Sign Language interpreter is not available. It makes me feel lonely in class and do not know what is going on. (Expression of Post-lingual student 4).

When there is a change of venue, sometimes I don't hear about it but sometimes the class rep informs me. Sometimes, I feel included as a student during lectures but I also become afraid to ask question in class because some lecturers show the attitude that deaf students questions may not be important. In this university, the interpreters are not skillful so when I sign to them sometimes they don't understand. (Expression of student 6).

My challenge is that, technology words are big so interpreters don't understand therefore interpreting becomes confusing. (Expression of Post-lingual student 7).

When interpreter is absent, class becomes boring. Again, students' attitudes towards the deaf are very poor so if the university can give education on disability it will be good. Also, the university environment is not good for disable people, example, the resource center is too small to keep us and the Blind for our private studies, cars move anyhow, anywhere and don't even care about deaf people so moving on campus is difficult. (Expression of Post-lingual student 10).

Some lecture rooms become dark around 5:30pm so seeing the hand of the interpreter is difficult but if the room is bright I can see. Also the seating arrangement is not the best. Deaf people class room must be round but here is different. (Expression of Post-lingual student 12).

Despite the concerns raised by respondents, they elaborated a number of benefits they derived from the services that made them have access to academic information. Responses from participants were:

These services are beneficial because they motivate me to participate during lectures, and to learn hard on my own. In the absence of these support services, I can feel how important they are in our education in the university. (Expression of Post-lingual student 2).

These services, especially note takers are beneficial to me. It always appear in quizzes and exams as well as I use to learn after class. (Expression of Post-lingual student 4).

I get benefits from interpreters but for note-takers sometimes. (Expression of Post-lingual student 5).

The support services given to me are beneficial to me because without them, our class becomes boring; so we enjoy. (Expression of Post-lingual student 13).

The support services are beneficial to me because interpreters help me to hear whatever goes on at lectures and outside lectures. (Expression of student 14).

However, from the minority perspective, the services available at the university did not benefit them in any way since according to them the Sign Language interpreters were not proficient enough to render them services that could make them enjoy lectures. One respondent remarked:

I don't benefit from interpreters because they are not skillful and many of the signs they use are not familiar to me so I don't enjoy. (Expression of Post-lingual student 7).

The responses indicated that the deaf students appreciated the efforts of the services available at the university. They indicated that Sign Language interpreters are of use to them even though few of the respondents did not agree. Concerning change in venue and times for lectures, participants gave different opinions. They indicated that often they did not get information about change in venue and time. They also indicated that sometimes lectures were fixed for odd times that made it difficult for them to see their interpreters clearly. They indicated:

When there is a change of venue, sometimes I don't hear but sometimes the class rep also informs me. Social gathering is a problem for me. Because am deaf I always socialize with my deaf colleagues which prevents me from getting information outside the school. (Expression of Post-lingual student 6).

Sometimes, our class rep thinks deaf people will get the information which is not so but rather deaf people get the information when the thing has already happened and this has always been my challenge. (Expression of Post-lingual student 8).

Experiences on Understanding Lectures

Another key issue that was explored in this study was the experiences of deaf students in understanding lectures. Respondents gave different accounts concerning how they understood lecturers. Some participants indicated that if lecturers used Sign Language, then understanding the lecture was not difficult for them. Others stressed that since majority of the lecturers could not sign, they did not understand them even though Sign Language interpreters were present. Participants' accounts were recorded as:

*Sometimes, lecturers communicate in a language that I understand.
(Expression of Pre-lingual student 1).*

Yes, I understand lecturers who know and use my Sign Language at lectures. (Expression of Post-lingual student 4).

No, lecturers don't communicate in Sign Language so I don't understand them. (Expression of Post-lingual student 5).

It is difficult to understand lecturers because some lecturers talk fast and if the interpreter is slow it becomes difficult for me to understand. (Expression of Post-lingual student 12).

On the issue of the preference for either simultaneous or consecutive interpreting, respondents gave different accounts. Some respondents stated that they preferred one of the two interpreting types. They stated:

I like simultaneous interpretation because of the accuracy, that is, with simultaneous interpretation, there is little deviation from what the lecturer is teaching. (Expression of Post-lingual student 3).

I would like my Sign Language interpreter to use consecutive but not simultaneous. (Expression of Post-lingual student 5).

*I prefer consecutive interpreting to simultaneous interpreting.
(Expression of Post-lingual student 6).*

I prefer consecutive interpreting. (Expression of Post-lingual student 7).

If I say hear before sign, interpreter may sign wrong thing if he is not skillful and also if sign as the lecturer talks at the same time, the interpreter may sign wrong thing. (Expression of Post-lingual student 13).

However, one respondent indicated that they preferred both the consecutive and simultaneous interpreting. The respondent said that depending upon the context and how it was used, both the consecutive and simultaneous interpreting mode could be useful. They intimated:

I want the interpreters to use both the consecutive and simultaneous methods in interpreting for me because I can combine both of them at lectures. (Expression of Pre-lingual student 1).

Experiences on Assessment

In as much as it is recognized that assessment is key in education, it is important to note that assessment should give a fair ground to all categories of students irrespective of their disabilities. This strand inquired from participants their experiences on assessments for students in the university. Participants indicated that they were often given prior notice before their assessment dates. Some students, however preferred that their assessment be separated from their hearing colleagues. Others thought it fair for all of them to be assessed on the same subject content taught since they were all taught the same content. Three of the respondents suggested that they should be assessed based on how they learn and how they believe their learning was different from their hearing colleagues. However, some respondents did not agree to that assertion. In their responses, they intimated:

Yes, we are given prior notice before quizzes or exams. No, my assessment is not different from that of my hearing colleagues because the curriculum that we use is all the same. I would like to be assessed on how I learn and how it differs from that of my hearing colleagues. (Expression of Pre-lingual student 1).

We are given prior notices before quizzes and exams. Also, there are Sign Language interpreters available to assist deaf students during quizzes and exams. The assessment of deaf students is not different from that of hearing students. However, in the case of deaf students, more attention is given to content rather than grammar since deaf students generally have problem with English Language, especially grammar. If I had the choice, I would like to be assessed through objective questions, fill in the blank spaces and questions requiring short answers rather than essay questions which require extensive use of grammar. (Expression of Post-lingual student 3).

If I get the opportunity, I want additional time and there should always be interpreter at every exam hall. (Expression of Post-lingual student 13).

Analysis of the transcript from respondents revealed that some of them deafness did not have any communication challenge concerning their assessment. They said that they were assessed on what they were taught. They indicated:

*“Yes, we are given additional time to complete quizzes and exams.”
(Expression of Pre-lingual student 1)*

“I have no problem with how we are assessed. It is a thing worthy of commendation that more time is given me to complete my work during both quizzes and exams. The attitude of lecturers toward deaf students are commendable. They show concern and care. They motivate both disabled

and non-disabled students to study hard.” (Expression of Post-lingual student 5)

Other respondents did not support the idea that assessment at the university has been fair to them. The respondents reported:

*“No, we are not given additional time to complete our quizzes and exams.”
(Expression of Post-lingual of student 2)*

*“No additional time is given to me during my quizzes and exams.”
(Expressions of student 1 and student 2)*

*“No additional time is given to deaf in terms of assessment, we complained
but they refused.” (Expression of Post-lingual student 13)*

From the analysis, it is indicative that although assessment is a major challenge that needs redress in order to promote deaf students learning, yet not all participants agreed to that since they indicated that the university provided fair grounds on assessment to them.

Discussion of Findings

The research question inquired from participants their academic experiences in the university. Results of the study revealed that in order to have access to information at the lecture halls in the absence of their Sign Language interpreters, deaf students employed the services of their colleague students who could sign. Other students did not see the need to employ the services of their colleagues in the absence of an interpreter. Participants further indicated that they were sometimes given prior notice before their assessment dates and were assessed on subject content areas they had been taught. A few participants indicated that if lecturers used language they understood then, they understood the lecture. Others stressed that since the lecturers could not sign, they did not understand them even though Sign Language interpreters were present.

On the issue of the preference for either simultaneous or consecutive interpreting, different participants gave different views. Some of them stated that they preferred one of the two interpreting types. These findings are supported by Commey and Gogoe (2000) who stressed that when students who are deaf do not have note-takers they may miss much of the things taught during lessons while they try to take notes and watch Sign Language interpreters and projectors. Komesaroff (2005) found that often, deaf students have challenges understanding lectures because many interpreters lack the skills necessary to interpret at the university level. Findings of the presents study also support Gearheart and Weishahn (1980) and Traynor and Harrington (2003) who admitted that the provision of instruction through the use of technology and computers, televisions and projectors often helped deaf and hard of hearing students to understand lectures better.

Results of the present study revealed that there were two main types of support available to deaf students. These were: Sign Language interpreting and note taking services. The analysis also revealed that other forms of support services such as projections, tutoring, counselling, resource

center, and photocopies were also provided to support the learning needs of the students. These support services were provided to ensure that deaf students are well integrated in a university where majority of the students are hearing. Again, it was revealed that although Sign Language and note taking services were provided to the students, yet they were not provided on regular bases. The irregularity of the services provided could possibly lead to the students not getting the required information needed to sustain their stay at the university.

Despite the gloomy picture painted by a few of the respondents in the present study, quite a majority of the respondents highlighted the benefits they derived from such support services. Findings of this study were supported by Marschark et al. (2006), Mitchell and Karchmer, (2006), Marschark et al. (2003), and Traxler (2000) who argued that the provision of support services in the forms of Sign Language interpreting and note-taking will go a long way to make the curricular equally accessible to majority of student who are Deaf. Findings of the present study was also supported by Roe (2008) who stressed that support services required for students who are deaf to survive in a university must include Sign Language interpreting, note taking, tutoring, school library, and computer laboratory services.

Findings of this study are in congruence with Hyde, Punch, Power, Hartley, Brennan, & Neale (2008) who found that when students with deafness get all the required support services needed in a university, then they are likely to compete fairly with other students and graduate successfully. Marschark et al. (2005) stressed that students with deafness did not acquire as much information from lectures as their hearing counterparts even with experienced interpreters who were familiar with the students.

Findings of this study were supported by Tinto's (1975) model of students retention and departure which indicated that an individual student's decision to persist or depart from an educational institution is dependent on their pre-university characteristics, their level of commitment and intention towards their academic goal, and their ability to integrate academically and socially, both formally and informally, into the institutional culture. For students with deafness to integrate academically and be retained to successfully complete their programs of study, they require support services that meet their learning needs.

Conclusion

Findings of the presents study indicated that although support services provided for students who are deaf at the University of Education, Winneba, are not adequate enough. There is the need to provide more interpreters and note takers who are skillful to provide regular services to the students. Since the present study was delimited to one public tertiary educational institution in Ghana and that participants included a small number of students, findings of this study are not meant for generalization.

Recommendations

It is recommended that this study be replicated elsewhere to include more public tertiary institutions with larger numbers of participants.

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