

**LITERACY SKILLS OF VISUALLY
CHALLENGED ESL LEARNERS IN
‘INCLUSIVE’ EDUCATION SYSTEMS: A
PHENOMENOLOGICAL STUDY OF NUML**

**BY
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**NATIONAL UNIVERSITY OF MODERN LANGUAGES,
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ABSTRACT

Title: Literacy Skills of Visually Challenged ESL Learners in ‘Inclusive’ Education Systems: A Phenomenological Study of NUML

This research aims at exploring the lived experiences of visually challenged ESL learners in an inclusive education system. The study investigates the challenges experienced by the learners, reasons behind the problems and modifications required to solve the problems. The qualitative study employs hermeneutic phenomenology utilizing in-depth interviews and classroom observations as research methods. The sample selected for the interviews comprises 10 participants drawn from English Department NUML underpinning purposive sampling technique. The inclusion criterion, set for the participants’ selection, targets the ESL learners experiencing visual impairment who face challenges in reading and writing tasks. 6 classes undertaken for observation are strategically selected adhering to the protocols of purposive sampling technique to collect pertinent data. The research has dual theoretical framework incorporating the framework of Social Model of Disability proposed by Oliver (2013) to examine societal factors creating disability and Socio-Educational Model presented by Gardner (2010) to assess the students’ instrumental motivation for achieving academic success, allowing the study to analyze both external and internal determinants shaping the academic experiences that impact their literacy skills. The framework used for analyzing the data is of Braun and Clark (2006) that is carried out by drawing out themes and subthemes from the data. The findings suggest that the students experience difficulties in practicing their literacy skills due to pedagogical shortcomings, inaccessible study materials, and examination barriers. The practices, dominant in the system, are majority oriented that marginalize the students with different needs. The students despite these barriers continue their studies using their individualized coping mechanisms to deal with the barriers existing in the environment, highlighting their motivation to progress in their academic career. To make the institutions truly inclusive, teachers’ training programs, accessible study materials, flexible examination system, skilled-based sessions for the visually challenged students, and awareness programs for the sighted students are required. Students’ medical (type of blindness) and academic (mainstream or special education) histories should guide modifications in methods, resources, and exam protocols.

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LIST OF ABBREVIATIONS

ESL:	English as a Second Language
EFL:	English as a Foreign Language
SLA:	Second Language Acquisition
BS English:	Bachelor of Science in English
HOD:	Head of Department
HEC:	Higher Education Commission
NUML:	National University of Modern Languages
NUST:	National University of Sciences & Technology
UMT:	University of Management & Technology
IIU:	Islamic International University
PFFB:	Pakistan Foundation Fighting Blindness
UPIAS:	Union of the Physically Impaired Against Segregation
SMD:	Social Model of Disability
JAWS:	Job Access with Speech
NVDA:	Non Visual Desktop Access
OCR:	Optical Character Recognition
TTS:	Text to Speech

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DEDICATION

This work is dedicated to my family, including my parents and brothers, who have always been my strength.

CHAPTER 1

INTRODUCTION

The right to quality education remains out of reach for many visually impaired learners, especially in contexts where systemic and social barriers persist. In societies where inclusive practices are still emerging, the academic journey of such students often becomes a test of resilience rather than a path to empowerment. This reality is specifically noticeable in Pakistan, where the education of visually impaired individuals is hindered by various challenges, including lack of resources, socio-cultural attitudes, and accessibility concerns (Khalid et al., 2023). In Pakistan, visually challenged learners face these hurdles in receiving a high-quality education. Education, however, is critical in empowering individuals (Shields & Mohan, 2008), and it is especially important for students with visual challenges who confront unique hurdles in their academic path (Attachoo & Sitthitikul, 2020). The education system chosen, whether inclusive or traditional, can have a considerable impact on the development of reading and writing abilities of visually challenged learners of ESL. Therefore, the purpose of this study is to investigate the function of inclusive education in developing the literacy skills of visually impaired ESL university students in Pakistan.

Pakistan, in recent decades, has also undertaken measures for promoting inclusive education (Graham, 2020; Gul, 2020), and it aims at providing accommodations to include students with different needs in mainstream systems (Anjum et al., 2021). The national policy for persons with disabilities passed in 2002 prohibits discrimination (Government of Pakistan, 2006). Additionally, the act passed in 2012 also upholds inclusive rights (Anjum et al., 2021), according to which inclusive education systems should ensure the provision of a disability-friendly environment, adaptive methodological aids, and appropriate study materials (Khalid et al., 2023). These developments reflect an important shift in educational priorities. However, in practice, these policies often remain under-implemented, especially in higher education institutions.

Moreover, every student, whether normal or special, has an equal right to receive higher education (Higher Education Commission (HEC), 2021), and HEC also promotes this notion of equality with which the National University of Modern Languages (NUML, 2021) aligns as well. However, students at the university level face multiple challenges

since institutions fail to implement the policies of inclusive education effectively (Fuller et al., 2004). Based on my observations, there is also a noticeable gap between inclusive intentions and actual support systems in place. Advocates of inclusive education argue that inclusion can be practiced by using adaptive curricula and instructional devices, as these ensure the promotion of a culture that celebrates both differences and similarities (Papadopoulos et al., 2009). While these ideals are commendable, they are rarely reflected in the everyday learning experiences of students with impairments. As inclusion refers to the notion of becoming a part of a structure (Ashraf et al., 2017), inclusive education refers to the concept of including students with different needs in regular schools by recognizing the rights of special individuals and by making them a part of the mainstream education system (Jardinez & Natividad, 2024). In this context, inclusiveness means more than just physical presence; it requires acceptance, equity, and active support. When differences are acknowledged and addressed meaningfully, inclusive education becomes a lived reality rather than a policy goal.

In this regard, Papadopoulos et al. (2009) contend that while preparing and delivering the lecture, teachers should consider different types of learners who exist in a classroom. In these types of learners, there are also students with different needs particularly students with visual impairment that cannot read or write using the standard materials without certain accommodations. Instead of treating a class as a unit, teachers should consider the different learners' characteristics because these characteristics act as determining factors in the learning process. Most of the teachers, however, do not realize the importance of such differences, and they address their students having uniformed learners' characteristics.

Additionally, in the famous book, *The Frames of Minds*, Gardner (1993) explains the theory of multiple intelligences that learners have different types of intelligences, and in every learner, one type is dominant than the rest. So, all learners cannot be taught in one fashion. Therefore, teachers should vary their methodology to teach all the learners efficiently. Considering Gardner's views, in an inclusive education system, the teachers should also try to approach their students individually since there are different types of learners having different needs. In this light, the students depending upon the degree of their impairment also have different needs which can be addressed by adaptation of teaching and learning methods considering the type of impairment.

More precisely, teachers should adapt their methodology considering the fact that

visually challenged students have different literacy needs and skills. Literacy is actually the ability to understand the relationship between sounds and written words such that one may read, say, and understand them (UNESCO, 2004; Liege, 2015). Papadopoulos et al. (2009) assert that visually impaired students cannot practice their literacy skills in inclusive classrooms because the practices and activities are of Opthalmocentric nature. Since they cannot see, they cannot read or write the text which puts them at margin, due to which their language skills remain underdeveloped.

To clarify, language skills are not restricted to oral skills, yet they also include literacy skills that help the students to gain functional and academic competence. In the context of ESL where curriculum and medium of instruction are in English, literacy skills and language skills are interdependent since literacy skills provide access to interact with the target language, whereas a competent engagement with language resources develops meaningful literacy. This interdependence becomes more important for the students of ESL because only the acquisition of language and literacy can lead them to academic success.

Although learning a language is vital for every human being, it is more essential for the people who cannot see because they live in a world of words. However, visually challenged students, in inclusive classrooms, face difficulties in practicing their language skills specifically literacy skills which include reading and writing that are receptive and productive respectively (Papadopoulos et al., 2009). The process of learning English of visually challenged students can be influenced by both internal and external factors. Internal factors include the personality traits of the person, whereas classroom environment, extra aids and teaching methods come under the umbrella of external factors.

Papadopoulos et al. (2009) further record that the lack of a reading experience, due to unavailability of braille materials, leads to a lack of knowledge regarding their fields of study. For example, due to the absence of braille books, the students do not read the books but listen to them using human assistance which impacts their language learning process as they cannot get engaged with the text at different levels. This is the reason that the students face problems in punctuation, grammar and vocabulary (Lailiyah et al., 2020).

Similarly, the students also face serious problems in developing and practicing their writing skill as they cannot write on a typical paper. For example, they have to use

Braille or assistance from a writer. Since the teachers in the inclusive classrooms cannot read braille script, they have to take help from a scribe that makes them dependent on others (Papadopoulos et al., 2009). So, what emerges here is not a question of functional limitation but a matter of institutional restriction or social exclusion.

These instances bring into attention a deeper distinction between impairment and disability. Disability and impairment are usually used interchangeably; however, disability and impairment are two different concepts (Anastasio & Kauffman, 2013). Impairment is defined as a “loss of a limb or a part of it, organism or mechanism of the body”, whereas disability is caused because of a contemporary social organization that takes no account of the needs of special people and excludes them from full participation in the mainstream activities (Anastasio & Kauffman, 2013). Similarly, the students experiencing any type of visual impairment have different ways to obtain information, and these ways are usually not considered in inclusive education systems because the practices done in the institutions are vision oriented that exclude the visually challenged students from full participation in academic activities. So, by excluding the needs of special students that are also a part of the organization, the institution disables them. In this way, the institution is not only itself disabled but it also disables the individuals.

Having discussed the critical difference between impairment and disability, it is also pivotal to understand the role of human actors, specifically teachers and administrators, in constructing or dismantling this particular divide in the classrooms that are a key site in a language learning process. Nasution (2019) maintains that teachers are the source of strength in the learning process because teachers' expertise plays a vital role in the learning process of visually impaired students. For example, the students should be enabled to develop skills that can help them in reading, writing, and accessing information. However, there is not a proper roadmap for teachers and students to follow to make the class an integrated classroom. For the purpose, collaboration between English language teachers and special education trainers can provide a solution to the language learning problems of the visually challenged students. Moreover, it is highly essential to incorporate the use of technology that can facilitate both teachers and students in developing the skills of visually impaired students (Cárdenas & Inga, 2021). These efforts depend on institutional support including funding, teachers' training program, and other facilities. Therefore, the collaboration between teachers and

administrators can translate inclusive policies, which are rhetorical commitments and remain only at the level of discourse, into classroom realities.

1.1 Statement of the Problem

Equality is a prerequisite of an inclusive classroom; however, in the inclusive classroom, the presence of learners with diverse abilities is usually ignored. Inclusive education provides equal opportunities to all types of learners and evaluates them on the same ground, yet the classrooms are usually majority-oriented, due to which the special needs of visually challenged students are not addressed. Consequently, it negatively influences their learning process as they cannot practice their literacy skills due to inaccessible study materials and exclusive methodological practices. In a language class, the literacy skills become more significant, but due to their exclusion from the reading and writing activities, their literacy skills remain underdeveloped and deteriorate over time. Being ESL learners in Pakistani context, the visually challenged students also face multiple challenges in practicing their literacy skills at university level, owing to which they face serious challenges in their academic journey that can have serious implications for their career opportunities. Therefore, the present study focuses on exploring the problems, the underlying causes, and the way forward to improve English literacy skills of visually challenged ESL learners in an inclusive system at the University level. Although the previous studies have been done to investigate general problems of visually challenged ESL learners, the current study narrows down its scope to the literacy skills of Pakistani visually challenged ESL learners. By highlighting localized educational challenges and situating the inquiry within an overlooked Pakistani context, the study advances existing literature.

1.2 Research Objectives

Following are the objectives of this study:

1. To explore the lived experiences of visually challenged ESL learners in learning literacy skills in inclusive classrooms.
2. To investigate the reasons due to which visually challenged ESL learners face problems in practicing their literacy skills in inclusive classrooms.
3. To find out the ways that can be used to improve the literacy skills of visually challenged ESL learners.

1.3 Research Questions

The research questions of this study are as follows:

1. What are the lived experiences of visually challenged ESL learners in learning literacy skills in inclusive classrooms?
2. Why do the visually challenged ESL learners face problems in practicing their literacy skills in inclusive classrooms?
3. How can the literacy skills of visually challenged ESL learners be improved?

1.4 Significance of the Study

The study is significant as it provides in-depth information of the lived experiences of visually challenged ESL learners in developing and practicing their literacy skills in an inclusive education system. Firstly, it is beneficial for visually challenged ESL learners as it provides a voice to their issues, their problems may be taken into consideration. Other students like them may also be benefited from the study, as this research describes different techniques which the different participants use to practice their skills. Secondly, it is useful for the teachers because it makes them aware of the problems of their students so that they may be able to devise appropriate strategies to include these unprivileged students in the learning process. In this way, the study may make learning of English literacy skills easier for the visually challenged students, and the development of literacy skills may also enable them to get better opportunities in their lives. Moreover, it also guides the sighted students on how to deal with their fellows facing visual impairment and struggling with their literacy skills. Other than this, the study provides a dimension to the educationalists and guides the administrators and the policy makers to make the institutions truly inclusive by making policies that may facilitate the students. In particular, it provides a guideline to all the universities of Pakistan in general and to National University of Modern Languages in particular for reforming their policies to facilitate the visually challenged students that are part of these institutions. Further, it also plays its role in reshaping and redefining the concept of equality. So, the study is not beneficial for a particular group of people, but it is significant for the whole community as it focuses on bringing harmony and equality in the society.

1.5 Delimitation

The study was delimited to a sample of participants with a visual impairment that makes them unable to read and write using a standard paper. The sample for the study was also specifically delimited to the students holding or pursuing BS degree either in English linguistics or literature at NUML. The selection of BS students was intentional as they have linguistic background aligned with the scope of this study. They have extensive engagement with the language at a social and academic level that makes them a better sample for the study compared to the other students. Moreover, the selection of students from the same department was ensured to maintain consistency and comparability across the data. This decision was deliberate since the students from the same department have comparable classroom experiences, similar exposure to language learning instructions, and shared academic environment.

Instead of focusing on language learning in general, it aims at exploring the literacy skills of visually challenged ESL learners in inclusive setups where the medium of instruction is English, and the sustained engagement of the participants with the language is either through literature or linguistics. More precisely, BS English and ESL are distinct but there are connections between the two. A BS in English provides a strong foundation in language and literature for teaching ESL. Also, BS English program includes courses related to ESL. The students enrolled in the degree programs also learn English as their second language which gives this study the context of ESL.

CHAPTER 2

LITERATURE REVIEW

This section addresses key topics related to the challenges faced by visually impaired students in inclusive classrooms, including barriers to learning and social integration. It further investigates the challenges teachers encounter when teaching such students. This chapter also examines the role of assistive technology in supporting the visually challenged students in their academic journey and highlights the students' own coping mechanisms to deal with the encountered academic challenges. So, this chapter presents a review of the previous research, focusing on individual studies to emphasize their unique insights and perspectives, and the detailed analysis of recent literature highlights common challenges and recurring themes in the field.

2.1 Challenges Faced by the Visually Impaired Learners

Shaheed and Nazmeen (2023) conducted a case study at district Rawalpindi to explore the challenges faced by visually challenged students in higher educational institutions. In this qualitative research, the data were collected through in-depth interviews from ten participants including 50% males and 50% females from different universities comprising University of Wah, National University of Modern Languages, International Islamic University, Quaid-e-Azam University and Fatima Jinnah University. The results of the study showed that the students with visual impairment faced challenges in the attainment of higher education such as absence of specific accommodations that include unavailability of writers, computers with required software-like JAWS and audio assistance in libraries. Additionally, they were found to have been experiencing transport issues, communal stigma, peer acceptance and approachability to different civic facilities.

Furthermore, Anjum et al. (2021) conducted research in Pakistan to analyze the problems that visually impaired people face at university level. This study was qualitative in nature, and to conduct the study, three departments were selected from Bahauddin Zakariya University. All the students, selected as a sample for this research, had eyesight problems, and the tool that was used to collect data was semi-structured interviews. The data later were analyzed using thematic analysis, and the findings showed that there was a general lack of confidence in the abilities of visually special people as they were not expected to attain high academic achievements; however, their

fellows had a positive attitude towards them. The study found out that the additional support in academia was the basic requirement of the students with visual disability. The students reported that they were not given a writer from the university, and they had to find on their own. To add, they were not even given extra time, and HEC rights for special students were not followed by the examination staff either as the invigilator would misbehave and interrupt the examination. So, it was the need of the students to give them extra time and to give training to the teachers. The findings further showed that blind students should be given a separate room to attempt their paper as they were made to attempt their paper in the corridor.

Fatima et al. (2014) also conducted a study to explore the difficulties faced by visually challenged students in different distant learning programs of Allama Iqbal University. For the study, a questionnaire (Cronbach alpha: 0.897questionnaire), that was self-developed and validated, was employed to collect the data from 40 participants comprising 32 males and 08 females, and this sample was selected through snowball sampling technique. The questionnaire had three criteria (yes, no, to some extent) which the participants were required to respond on, and the data were then analyzed using SPSS. The results of the study revealed that the students with visual impairment had difficulties in transportation and in academic practices. The study also found out that the reading materials were not modified considering their different needs; for example, the study materials were not available in braille, soft or audio form. Moreover, the teachers did not use microphones to record the workshops, but the subjects reported that their teachers allowed them to record their lectures, and they had a good interaction with their teachers.

The students also faced problems in note taking during the lectures, and they found it difficult to get the notes recorded, nor was there any assistant appointed by the university to help them with note taking. The students further reported that the university did not have facility of audio library, braille embossers or computers with JAWS installed in the library that posed challenges for visually challenged students. Although the students found their peers collaborative, they still experienced difficulty in seeking other's assistance for the completion of their course assignments. Moreover, the students had difficulty in taking exams like the majority of the students reported that they were allowed to have a writer in their exam, but a small number of students were allowed to attempt exam in braille, whereas only one student was allowed to use

computer in his exam, while no student was allowed to take exam using audio recording method.

Morelle (2016) also explored the difficulties and challenges faced by visually challenged learners in mainstream education systems. The study focused on the way visually impaired learners are included in mainstream schools from the perspective of curriculum, adaptation technique, and support provided by the teachers to the special students. To collect the data, the researcher used two instruments: semi-structured interviews and observations, and a qualitative approach was selected underlined by the interpretive method.

To serve as a sample for the study, participants were purposefully selected from two schools, and from each school, two teachers teaching visually challenged students were selected. Additionally, both parents of learners with visual impairment and four visually challenged students were chosen from each school. One specialist designated to teach special students from each school and one principal from each school were also selected. In total, there were thirty-two participants involved in the research, and the data were taken in the form of audio recordings to transcribe the data easily and efficiently. The data gathered suggested that the students with visual challenges were physically included, yet they were not truly integrated in inclusive classrooms. The teachers were found to be untrained as well as not supportive, and the parents were also not inclined towards the schooling of their visually challenged children. More precisely, the methods and the curriculum were not adaptive; the classrooms and school grounds were not accessible for them. So, resources were required to change the methodology and the attitudes of the teachers.

In a study by Hidalgo and Pineda (2017), the issue of visual impairment and EFL learning was researched at a high school level in Costa Rica. The researchers used observations to collect data as it provided the natural setting and the environment in which problems come to the surface automatically, so the researcher could find solutions to the problems. In this study, two students from two different schools were taken, and they were observed to facilitate them. As per findings of the study, a booklet was designed to guide teachers and parents to facilitate their children. Likewise, El-Nabih (2014), in a study conducted in Palestine, investigated the students having visual impairment and majoring in English as a foreign language (EFL). In the research, a qualitative approach was followed, and for this qualitative study, five participants who

were majoring in English language were chosen. First, the study focused on identifying the participants' reason for selecting this program, and the second concern of the study was the problems faced by visually challenged students during the program. The third concern of the study was to highlight the ways they found to cope with these problems, whereas the fourth focal point was to give recommendations based on the results which could be considered for better inclusion of the visually impaired in higher education in the context of Palestine.

The results suggested that the policies should be reviewed, the teachers should be trained, and universities should send letters in emails or in Braille scripts. The findings of the study also showed that students needed provision of extra time and an expert writer in exams. Moreover, the students were found to be struggling with two subjects, namely: Phonetics and Phonology and Syntax. Therefore, for such subjects, the study recommended the provision of large prints and Braille materials which suggests such modules require transformation, and visual concepts should be explained prior to the class, so the special students would also be able to match the pace of their other fellows.

Tran and Pho (2020) also conducted research in Vietnam dealing with how visually impaired people acquired a second language. The study explored the problems that they faced in learning the second language, and the ways they used to overcome their challenges. The study was conducted using in-depth interviews of two participants who were blind and had successfully acquired the second language. So, the results of the study were that the teachers should provide instructional material and audio tapes as the students' learning is based on auditory input. In terms of vocabulary, teachers should contextualize the words to show their usage, their meaning, and their pronunciation. For visually challenged students, teachers should use a top-down approach rather than going for a bottom-up approach. The research also pointed out that visually challenged people with the same degree of vision loss can have different requirements as it depends on the various factors shaping their individual personality, such as family support and intellectual abilities. The study further highlighted that progressive tests should be chosen to assess them rather than achievement tests. Pronunciation should also be corrected if comprehension is affected, and teachers should focus on the usefulness of vocabulary rather than the frequency of vocabulary.

Papadopoulos et al. (2008) reported that in literacy skills, vision plays a vital

role, so the people facing visual challenges cannot develop competency for orthographic knowledge. To examine this, they conducted this study that focused on spelling errors made by such students. For the research, both categories, blind and low-visioned students, were taken as the participants, and their spelling errors were compared with those of their sighted peers. The other factors involved in influencing the spellings of the participants, such as age, educational background and medium used for reading were also assessed. The results of their study indicated that visual impairment influences the spellings negatively. The increase in the level of education results in the decline in the number of errors, and the students using Braille made fewer mistakes than the students not using Braille.

A related study to the current study was also conducted by Khan (2023) that aimed at exploring the similar subject matter as it investigated the problems faced by visually challenged English language learners, the underlying reasons of the problems, and the potential solution to those problems. This study was also carried out employing interpretive phenomenological research design; however, the data were collected solely through interviews, whereas my research work incorporated triangulation method focusing on interviews and classroom observations.

In terms of sampling, Khan (2023) selected 15 participants including 5 teachers and 10 students from two different universities namely NUML and Islamic International University, while my research study took a smaller and targeted sample comprising 10 students, and this sample was exclusively from NUML. For the present study, data were also collected from alumni in terms of development and practice of literacy skills of visually challenged learners at NUML. Further distinction lies in the scope of both the studies. While the other study deals with the general problems of these English language learners at a macro level, the current study adopts a micro level approach as it narrows down its scope by dealing with only the literacy skills of the students.

Khalid et al (2023), also conducted research in Pakistan by selecting a sample of 15 participants whose interviews revealed that the students had problems like unavailability of large print books and lack of assistive technology which posed challenges in learning activities and examination preparation. The participants further reported that the inappropriate teaching methodology also posed challenges in their academic journey as it did not cater to the needs of the special students, due to which

the students with low vision had to experience multiple difficulties in their exam preparation compared to their counter parts. The study also highlighted that the students faced difficulty like negative attitude, inflexible policies, inaccessible transportation, infrastructure and signage.

Another study was conducted by Praveen et al. (2024) to explore the barriers and challenges encountered by visually challenged students during examination. The study aimed at identifying the examination barrier and presenting proposed solution that can help the visually challenged students to navigate the university's examination smoothly. The research was carried out involving 10 participants who were selected from the department of special education and were enrolled in different programs at the University of Education, Lahore. This qualitative research employed focused group discussion to gather their experiences and aspirations regarding examination accessibility.

The results of the study highlighted significant issues like difficulties with the accessibility of complex diagrams, delays in obtaining braille versions and inappropriate formatted digital texts that are incompatible with screen readers. The findings showed that the screen readers and braille do facilitate the students; however, they still face issues that highlights the need for better and regularly updated technical support, since this disruptive nature of technical issues during examination severely impacts the performance of the students. In addition, the students further had issues in the provision of limited time with an added pressure of slow speed of assistive technology and technical issues. So, participants highlighted the provision of extra time along with the necessity of more trained and available scribes because of scheduling challenges.

Moreover, the students reported the need for a separate and quiet place while attempting papers as well as training of the faculty specifically invigilators to ensure equitable examination as some teachers were found to be cooperative, but some were not properly informed about the protocols until the last moment to conduct the exams of special students. To resolve such issues, the study, therefore, highlighted the need for effective communication between the disability support services and faculty.

Kharade and Peese (2012) explored the experiences, perceptions and challenges of visually challenged online learners in their research, and for the purpose, an explanatory case study was carried out involving 10 participants who were visually

impaired and had different educational backgrounds. So, from the participants, the data were collected through telephonic interviews and emails, and the researcher specifically focused upon the difference between accessibility of websites and their usability by analyzing the experiences of visually challenged students in accessing and using them. The study concluded that the students had some issues regarding their inclusion and participation in an online classroom, and they were also facing multiple difficulties in the examination because the Learning Management System that some of the participants were using was posing different challenges. So, the study highlighted that the websites should be accessible to a large audience, and their domains of usability should also be considered with regard to the different users. Therefore, the researchers concluded that the web developers, online course content developers as well as the authorities should be considerate towards these issues.

2.2 Inclusive Education for Visually Impaired Learners

The implementation of inclusive education and the challenges experienced by visually impaired learners were explored in a study conducted by Okoye and Adirika (2019) in Nigeria. The research was conducted at an undergraduate level, and two federal and state owned schools were chosen for the purpose using random sampling technique. The data were collected using a questionnaire containing twenty items, and in the research, descriptive survey research design was employed. Then, the test statistics were used to analyze the data. The results indicated that the students having visual impairment, enrolled in the inclusive education system in Nigeria, faced multiple challenges like inadequate curricular materials, improper methodology and untrained teachers. The study, therefore, concluded that the activation and involvement of the stakeholders and the government was required to facilitate the visually challenged students' learning in inclusive education to ensure inclusivity.

In research conducted in Pakistan to examine the implementation of inclusive education in the capital of the country, Ehsan (2018) revealed that Pakistan lacked the knowledge on inclusive education. The teachers' attitude and study resources, which ensure the implementation of inclusive education, were exclusive. To investigate the agenda, a qualitative research design was followed to get the viewpoints of students and teachers. The study showed that in Pakistan, the rooms of the buildings should be made accessible for such students. The teachers needed to be trained, and such students should be facilitated. This study helped to understand the notion of inclusive education

so that it could also be used practically.

Hanif et al. (2022) conducted a content analysis in Pakistan to review different studies regarding inclusive education in Pakistan. To fulfill the purpose, the researchers carried out content analysis of sixteen previous studies. The research was qualitative in nature, and it was done to conclude the results of previous research conducted between 2010 to 2021. The findings were categorized in six themes such as inclusive education in Pakistan, impediments, issues, facts, practices, challenges, strengths, and motivations. The inclusive education in the study was exposed to be an emerging trend that is gaining momentum gradually, and Pakistan was found to be striving for the implementation and sustainability of inclusive education as teachers and parents had a positive attitude towards it, yet there was a major chunk of the population found that was unable to accept inclusive education in its full spirit. The study noted that the positive attitude of teachers and the students in the class helped to develop the personality of people having disabilities to move with other people in the society by providing a channel to their emotional and social life.

The research further found out that the scarcity of resources, lack of awareness, inappropriate teaching methodology, financial problems, and infrastructure were the serious challenges in the way of inclusive education. There were other challenges as well which were within the boundaries of classroom that include communication problems between the teacher and the student. The areas like adequate assessment procedure, adequate curriculum, technical support, and suitable methodological practices required consideration.

Martínez-Hernández and Bellés-Fortuño (2021) posited that including students having disabilities in the mainstream education system requires certain accommodations in content and assessment, considering the different needs of the students. The research was done to accommodate different English language tests for the assessment of visually challenged students. The students were asked to use a Text to Speech tool, and they were monitored throughout the semester to figure out which accommodation strategies would suit their needs. It was observed that the read aloud strategy works almost satisfactorily for such students. The students selected as a sample were all partially blind, and they were all using a Text to Speech (TTS) software, namely *JAWS*. The study concluded that the existing assessment strategies need to be modified. The study examined four language skills and suggested accommodations for

those tests. For instance, the results showed that the students should be given fifty percent extra time after the actual time for attempting a test. Instead of a printed paper, students should be provided with a Microsoft Word file having specific modifications in the writing style. For instance, in questions such as “Fill in the blanks”, a dash should not be given to the students because the software reads it as dot that creates frustration for the students. In listening tests, along with extra time, it should also be considered that the audio should be played with pauses because the students require time to process the information. Normal students can read the text while listening to the audio, whereas the students with visual impairment cannot listen to two audios simultaneously. Hence, the assessment criteria should be reset for the visually impaired students as per their needs.

According to Kocyigit and Artar (2015), a class should not only be viewed as a whole, but it should also be seen as a group consisting of individuals having different habits and abilities. As there are many types of learners, teachers should devise their methodology considering all types of learners. Among learners, there are visually challenged students as well. So, in their study, Kocyigit and Artar gathered the data using unstructured in-depth interviews of the visually challenged learners and their teachers, and the research was conducted at the Prep School of two Foundation Universities in Izmir, Turkey. In the study, the needs and issues of visually challenged students were discussed focusing on the teaching methodology, and course materials. To obtain the answers, verbatim content analysis was followed using “Weft QDA.” The results indicated that visually impaired learners had different learning habits, and the study suggested that instead of trial-and-error method, the teachers should be trained through in-service training. Moreover, for a holistic policy, different stakeholders like curriculum designers, administration and policy makers should be involved.

2.3 Teaching Visually Impaired Learners: Challenges for Teachers

A study was conducted by Acula et al. (2024) to investigate the experiences of teachers in handling visually challenged learners in inclusive education, aiming at introducing a proposed program. For data collection, semi-structured interviews and focused group discussions were used, and thematic analysis was carried out for analyzing the collected data. The research found that the teachers faced challenges in handling the learners with visual impairment. These challenges were lack of instructional resources, limited teaching strategies, inappropriate activities, insufficient

knowledge of teaching science and mathematics to the special students and dealing with unmotivated individuals. The teachers acknowledged that there was a need for improved resources and training programs to teach every student present in the class.

Teachers also reported inaccessible curriculum that posed challenge for them to teach the visually challenged students, and they further stated that they lacked resources to adapt the curriculum that could suit the needs of the students. The teachers also explained that the students with visual impairment could not read slides in the class as they could not see what was on the screen. The teachers, on the other hand, also found some uninterested visually challenged students that were more difficult for them to handle as they would interrupt the class or would fall asleep. More specifically, they highlighted that the lack of training to teach in inclusive education further exacerbates the problem. On the contrary, some teachers even having the required training also found themselves at the stage that required more training and resources as they did not have the proper tools that they could use to teach their students. Finally, the teachers suggested that there were three best ways to teach such students in their experience that were individualized teaching, peer tutoring, and direct education.

Another research was conducted to examine the barriers encountered by the visually impaired students and teachers in an inclusive setting in Sefula in Zambia (Zangi & Annie, 2021). This qualitative study collected the data from 12 participants that included 6 visually challenged students, 4 subject teachers and 2 administrators through purposive sampling technique. The participants were found to be welcoming for inclusive education, and their endeavors were to implement the inclusive education to the best of their abilities, but there were some laxities that the participants were experiencing. The study revealed that the participants had problems like inadequate infrastructure, improper teaching methodology, lack of teaching resources, specialized teachers to include learners with visual impairment and limited time allocated to teaching and learning in class.

2.4 Strategies for Teaching Visually Impaired Learners

Nasution (2019) contended that every teacher, according to his or her personality, has a different method to teach in the class. The method used for visually impaired students is different from the one used for sighted students. Therefore, teachers should use different strategies while teaching when they have a visually challenged student in their class. Applying appropriate strategy facilitates English learning process of the

visually impaired students. The study, based on a case study of a teacher, provided different techniques and strategies which the teacher used while teaching visually impaired students. The research followed a qualitative approach in which the data were gathered in the form of documents, interviews and observation. In her English class, guided reading, cooperative learning and interactive reading aloud were included, and the teacher adopted a student oriented and student-centered approach. The study emphasized that under the policy of equality, visually impaired students are also allowed to get education from inclusive education institutions which also suggests that they must fulfill compulsory requirements. People suffer because there exists a mismatch between the practicality and the objectives of the policies. So, many issues remain unsolved regarding disabled people and their access to education at an inclusive setup.

Alkhawaldeh and Khasawneh (2021) conducted research to find out the effectiveness of flipped classroom strategy using smart phones in English language learning for visually challenged learners. To fulfill this purpose, the researchers used a quasi-experimental approach. The participants included eighteen visually challenged students at the Senses Centre in the city of Irbid. The participants were divided into two groups. First group was the experimental group that included nine students, whereas the second group was the control group consisted of the remaining nine students. For the experimental group, flipped classroom strategy was used by using smartphones and technology; however, for the control group, a traditional method was used. The study found Significant differences in both groups.

The results were in the favor of flipped classrooms, and it was recommended that the teachers should be given training to incorporate modern methods of teaching in their teaching methodology as it would help them to adapt the style of teaching that includes visually challenged students. Moreover, they would be able to design exercises with the help of flipped classroom strategy. Such a training would ensure the application and incorporation of these programs at all levels of academia.

In research conducted in Brazil, Retorta and Cristovão (2017) contended to figure out the role of smartphones in teaching English to the visually impaired learners. Classroom Ethnopedology was selected as the research design, and the didactic materials posted on applications and questionnaires were used along with classroom observations to obtain the data for the research. For analysis, descriptive and

interpretive methods were used as the purpose was to observe the linguistic and behavioral patterns with regards to information and communication technology using smartphones for learning English language.

The results of the study showed that at the outset of the course, the students had almost no knowledge regarding the use of smartphones. After learning formal language and skills to use smart phones, they became able to listen to podcasts and written scripts in both English language and in their native language. Conversely, before the course, they could not even use WhatsApp and Facebook. However, with the help of mobile assistive technology, they communicated with people from different parts of Brazil as well as different parts of the world which ultimately boosted their cultural capital.

2.5 Techniques Used by Visually Impaired Learners

The study conducted by Attachoo and Sitthitikul (2020) explored the essence of English language from the viewpoint of the visually challenged students. To know about the lived experiences of such students, a phenomenological research design was followed, and observations and interviews were used as methods for data collection. From three groups, the focal group comprising nine students was chosen through purposive sampling. The other participants consisted of schoolteachers, university teachers, and support staff. The data were then analyzed and presented in the form of themes, and there were many positive and negative experiences of the students that were recorded. Multiple techniques were used by the students to learn English language as it was considered essential to provide students better opportunities. Susanto and Nanda (2018) recorded an ethnographic case study conducted in Indonesia to observe the learning and teaching process of English language. For data collection, interviews were used to get information from the teachers and students. Classroom observations were also used as a tool, and the study followed the social constructionist model of disability. The study revealed that some students preferred the use of assistive technology to learn English language.

Technology, as noted by Jaleel and Anis (2018) has brought many advancements in the field of education and for the special students with disabilities. One of the advancements is screen readers which the visually impaired students use to read texts. So, they carried out research to observe the preferences of visually challenged students in terms of using Braille or using screen readers. 70 participants were chosen using a purposive sampling technique. The students had experience reading using both Braille

and screen readers. It was a descriptive study in nature, and a 5.8 rating scale was developed based on 20 questions. The validity and reliability were assessed by experts through a pilot study, and the analysis of the data was carried out using descriptive and inferential analysis techniques. The results indicated that the students' preferences were shaped by educational setting, grade level and the task undertaken.

The findings suggested that most of the students were of the view that Braille provided foundation for the education of blind students. The students were also found excited to learn Braille as Braille was considered easier in order to do mathematics than any software. They reported that they could attempt their exam easily using Braille rather than using any other software. However, when it comes to accessing information, their preference shifted towards screen readers. The research further explored that the students in inclusive education preferred screen readers, whereas students in segregated schools preferred Braille. Another substantial finding of the study was that as the students move towards higher education, the use of Braille becomes less. In other words, the increase in the level of education corresponds with the decrease in the use of Braille and increase in the use of screen readers.

In conclusion, the review of the existing literature highlights the fact that the challenges faced by visually impaired ESL learners are either overly broad or narrowly focused. While some studies have explored the specific difficulties encountered by visually impaired students within inclusive education systems at the school and university level, others have emphasized the significance of assistive technology in supporting these learners. Although some studies have also examined the challenges of visually impaired English language learners, these studies fail to comprehensively address the issues faced by visually impaired students in developing literacy skills within an inclusive higher education setting. So, the existing literature primarily discusses the general challenges of ESL learners and does not specifically investigate the unique issues faced by visually impaired ESL learners in terms of their literacy skills. Therefore, a notable gap exists in the Pakistani context as no prior study has specifically addressed the intersection of ESL learning, inclusive education, and literacy skills development at the higher education level in Pakistan. So, this study aims to bridge this gap, contributing to both the international and Pakistani contexts by focusing on the overlooked area of literacy skills of visually impaired ESL learners in an inclusive university setting.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter focuses on the selected theoretical framework and research methods to carry out the study. To conduct this research, a purely qualitative method was followed, and hermeneutic phenomenological research design was employed. Data collection was done using in-depth interviews and classroom observations, and data analysis was then carried out using thematic analysis.

3.1 Research Design

The researcher employed hermeneutic phenomenological research design which relates to qualitative studies. So, the research followed a purely qualitative approach. For collecting data, such an approach provides the researcher with the natural setting where the issues appear automatically (Creswell, 2014). It also allows the researcher to experience up-closed information from the lens of the participants who lived through the predicaments without moving them into an artificial situation (Hatch, 2002). A qualitative study enables the researcher to reach the participants directly and to gather the data through research instruments: observation sheets and interview guides (Saldaña, 2016; Patton, 2012). These instruments enable the researcher to become the key instrument himself (Creswell, 2014). By providing room for interpretation, it enables the researcher to reflect on data using context and experiences (Marshall & Rossman, 2011). Therefore, this study followed a qualitative approach to explore the lived experiences of the ESL learners regarding their literacy skills in an inclusive education system.

3.1.1 Hermeneutic Phenomenology

Hermeneutic Phenomenology is concerned with the human experience as it is lived. The focus is on illuminating details and seemingly trivial aspects within experience that may be taken for granted in our lives, with a goal of creating meaning and achieving a sense of understanding (Wilson & Hutchinson, 1991). Heidegger (1927/1962) claims that nothing can be encountered without reference to a person's background knowledge and understanding. Interpretation is seen as critical to this process of understanding. Claiming that to be human was to interpret, Heidegger (1927/1962) stressed that every encounter involves an interpretation influenced by an individual's background or historicity. Annells (1996) viewed hermeneutics as an

interpretive process that seeks to bring understanding and disclosure of phenomena through language. Moreover, hermeneutics is the study of human cultural activity as texts with a view towards interpretation to find intended or expressed meanings (Kvale, 1996). This interpretive process operates through a hermeneutic circle that moves from the parts of experience to the whole and back again, deepening both the engagement with the text and understanding of it (Annells, 1996; Polkinghorne, 1983). Hermeneutic research is interpretive and concentrated on historical meanings of experience and their developmental and cumulative effects on individual and social levels. Hence, in this research, the lived experiences of visually challenged students were examined by exploring their perspectives and thoughts to understand how these students, within an inclusive education system, develop and practice their literacy skills particularly in English language learning. This approach was used to investigate the way they navigate inclusive education to practice their literacy skills, understood as a distinct phenomenon.

3.2 Method of Data Collection

This study employed triangulation method to gather the data because the application of triangulation enhances reliability of the results. Triangulation is used to mitigate bias (Hatch, 2002). Triangulation refers to a qualitative strategy to ensure validity through the convergence of information from different sources (Carter et al., 2014). According to Amerson (2011), threats to establish validity are demonstrated by a researcher's subjective views and his reliance on single data collection instrument. So, Amerson states that validity can be ensured by integrating different methods of data collection sources to preserve the chain of evidence and to allow the key informants to review the data. Using multiple data sources mitigates the biases of a researcher and contributes to the reliability of the results (Stavros & Westberg, 2009). In a qualitative research, triangulation provides depth and richness to the data. According to Denzin (1989), triangulation is the involvement of employing multiple external methods of data collection regarding the same issue that is sometimes enhanced by multiple methods of external data analysis. So, this study used methodological triangulation to gather the data that enhanced reliability and validity of the study.

3.2.1 Interviews

To collect the data, in-depth interviews were used along with classroom

observations. Semi-structured interviews were used to obtain data from ten participants. This selection was guided by the set criteria for the sample selection that aligned with the study's objectives. One of the inclusion criteria required participants to have eyesight problem, due to which they were unable to read and write on a typical paper-based format. The inclusion criteria also required participants to hold a BS degree in English (Literature or Linguistics) or be enrolled in BS English degree program at NUML, Islamabad. Therefore, ten participants were found to meet the set criteria and were chosen to serve as a sample for the study. Samples in qualitative research tend to be small to support the depth of case-oriented analysis that is fundamental to this mode of inquiry (Sandelowski, 1996). Based on the nature of this phenomenological and qualitative research, a small sample was selected to ensure a detailed understanding of the subject matter since qualitative study prioritizes depth over breadth. Therefore, a sample of ten participants was selected for balanced and manageable analysis of their shared experiences. The participants were interviewed on a phone call, and their interviews were recorded with their consent.

Subsequently, the interviews were transcribed using Clean Verbatim technique. A clean verbatim transcription strips out nonessential speech patterns (e.g., false starts, stutters, filler words) to improve readability while preserving the speaker's meaning (McLellan et al., 2003). Clean verbatim transcription, according to Halcomb and Davidson (2006), is central to the validity, reliability and veracity of qualitative data collection. This technique was chosen to avoid distractions like audio clutters and unnecessary hesitation which is common in natural speech at the time of interview, so the researcher could focus on the shared experiences of different participants and extract key themes and meaningful patterns from their responses. The transcriptions were then sent back to the respective participants to ensure verification of their ideas, and they were welcomed to give feedback regarding the correctness of their thoughts and ideas. Moreover, the interview questions were divided into four parts. The first part was related to their demographic information and medical history, while the second part focused on their lived experiences regarding literacy skills in inclusive classrooms. In the third part, the problems that they faced in developing and practicing their literacy skills were investigated, and the reasons for the problems were identified. In the fourth part, suggestions were asked that could be used to improve the literacy skills of the visually impaired students.

3.2.2 Classroom Observations

In the second phase of data collection, classroom observations were used. For this purpose, the researcher attended the classes as a non-participant observer. The teacher's consent was taken before attending the class. The purpose of the study was to identify the problems faced by visually challenged ESL learners in inclusive classrooms in developing their literacy skills. To capture and preserve the authenticity of classroom dynamics, non-participant observation was preferred. In non-participant, the observer only sits and observes the participants, but does not participate in any activity, however, the identity of the observer is known to the participants being observed (Fraenkel et al., 2012). So, the non-participant observation was suitable for the situation because when the participants are aware of being observed, they may not react in the usual way leading to Hawthorne effect (Creswell, 2014). As a non-participant observer, my presence remained passive, and I refrained from engaging in any activity going on in the class. This position reduced the chances of Hawthorne Effect, since my passive presence did not disrupt the natural flow of the classroom interaction.

Moreover, the number of classroom observations depended on the number of the participants from English Department enrolled at the time at NUML, Islamabad. Six classroom observations were taken, and to record the data, note taking technique was used. This technique was used to record and document the key observations underpinning behaviors, interactions, and practices done in the classrooms relevant to the subject matter under study; however, video recordings or any other method was not preferred to avoid disruption in the natural flow of the class and to respect privacy. The notes were then revised and organized shortly after the class to preserve accuracy.

3.3 Instrument

To collect the data, the study primarily employed two instruments: a semi-structured interview protocol and an observation sheet. Considering the nature of phenomenological research, this study first used semi-structured questions for conducting interviews to gather comprehensive data. The data collected in a qualitative study should be enriched with in-depth description to generate narrative answers (Hatch, 2002). So, semi-structured in-depth interview questions were employed to explore the lived experiences of the participants. The interview process should be conducted under a reliable as well as relaxing environment (Moustakas, 1994).

According to Creswell (2009), in-depth interviews are the best source to get enriched information. He further suggests using in-depth interviewing questions as an instrument can explore depth of the thoughts of the participants in a phenomenological study, which attempts to explicate their lived experiences. Therefore, it was the most suitable instrument to be used in this research.

The other instrument used in the study was the classroom observation sheet designed to capture the reflections which emerged in the real classroom settings. This instrument of observation is used to reveal different layers of information through interactions between the participants in real settings (Marshall & Rossman, 2011). By using classroom observation sheets, the researcher was able to notice unconscious and conscious behaviors of the participants in actual situations that can either be used as supporting data or can be used as cross-checking data with the data gathered using interviews. The researcher became a non-participant observer, so, the identity of the researcher was known to the people being observed, but there was not any active participation on the part of the researcher.

3.4 Sample

The sample for the study was selected using purposive sampling technique. This is a major technique used in qualitative research (Creswell, 2014). In purposive sampling, the set criteria suggest that only the participants that correspond with the subject matter of the research are selected (Padilla-Diaz, 2015). Thus, purposive sampling is generally used in a hermeneutic phenomenological study for selecting the participants having shared and similar characteristics as well as similar lived experiences to disclose a phenomenon. Therefore, in this study, 10 participants were selected using purposive sampling technique to get in-depth insight of their lived experiences. For observation, 6 classes were observed. The subjects were chosen through purposive sampling technique, and the classes only having the visually impaired student were observed.

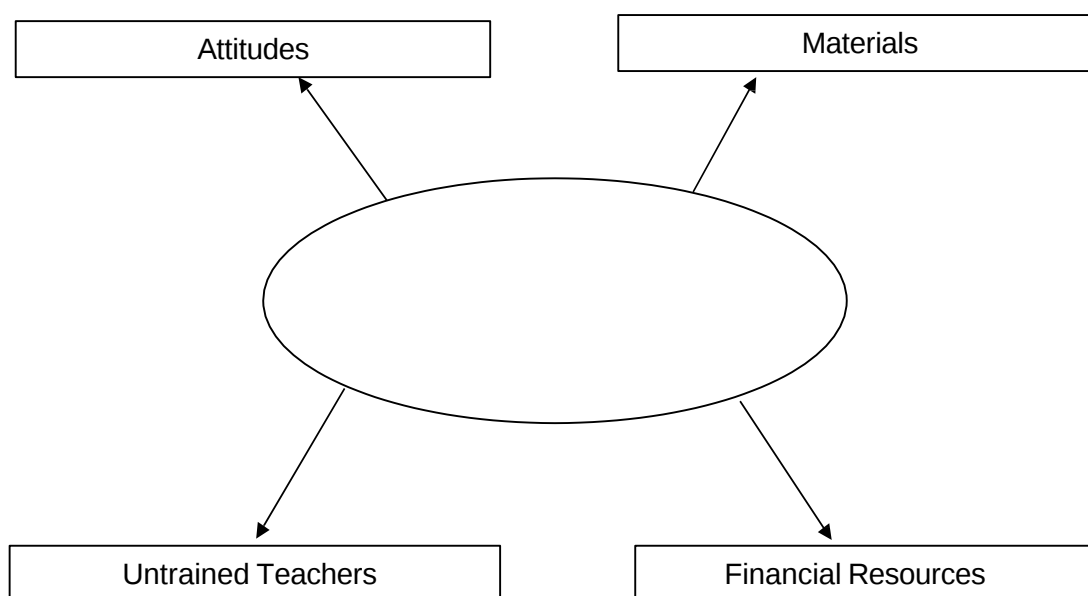
3.5 Theoretical Framework

A distinct framework was developed by integrating two frameworks that include Social Model of Disability (SMD) and Socio-Educational Model for this study so as to answer the research questions. Both Social Model of Disability presented by Mike Oliver (2013) and Socio-Educational Model for Second Language Acquisition

(SLA) by Gardner (2010) provide theoretical basis to the current research.

The first framework, SMD, was presented by Mike Oliver (2013). He was a disabled academic, and he coined the term ‘Social Model of Disability’ in 1983. Earlier, it was used just for people with physical impairment. Later, all types of people having different types of impairments, which also include people having learning difficulties, were included (Oliver, 2013). Based on this model, a framework was presented that can be applied in academia. The framework deals with the barriers faced by visually challenged learners. It divides the barriers into four categories: first, attitudes: second, materials: third, untrained teachers: fourth, financial issues (Nthama & Annie, 2019)

Figure 1.1



This framework posits that these four factors influence the learning positively or negatively. The negative attitude of the teachers and the learners creates hindrances and negatively impacts the learners with visual impairment. Materials refer to the Braille, embossed texts, or electric notes. Absence of such materials becomes a hurdle in their learning process. Untrained teachers who lack the expertise to support such students also negatively impact their learning. Further, financial resources refer to the financial reserves that can be used to assist such students. Lack of funds results in a crisis for visually challenged learners. This framework was used to explore the disabling barriers encountered by visually challenged ESL learners in practicing their literacy skills in inclusive classrooms. Since it deals with a mainstream education system, learning difficulties and the suffering of the minority that is visually challenged

students in this case, the framework becomes highly relevant to the research.

Turning to its background, the SMD emerged as the result of disability movements. The politics of disability aimed at going beyond disabled people to challenge oppression in all forms. Disability is defined by the disabled people as social oppression of people having impairments. It is a human creation perpetuated and sustained by cultural values. The dominant social perception of disability was that it is a matter of personal tragedy. This movement also resulted in the development of the SMD that played a significant role in changing the conceptualization of disability by changing its location from individuals to society as it focused on disabling environment rather than individuals' impairments. As an outcome of this, the disabled people achieved emancipation, and their energies got a new direction and were turned outwards to forcefully push the disabling barriers to change the rigid social structures (Campbel & Oliver, 1996).

Campbel and Oliver further state that this social model worked as a vehicle to make the movement run at a faster pace. This movement motivated disabled people and made them to come out of their homes not to protest but to actively participate in their everyday life. This shifts the criticism from individual pathology to social structures highlighting how disability is socially constructed. This reconceptualization of disability cultivates a complex form of self-consciousness, having an intricate pattern of different stages which an individual undergoes. The journey of self-consciousness begins with denial in which a person with impairment tries to hide his impairment due to internalized stigma which forces them to assimilate themselves in the non-disabled structure. Then, they begin to recognize their impairment but consider that impairment as an individual deficit. Subsequently, their understanding of their own identity deepens, and they accept themselves the way they are. They accept the impairment as a part of their identity and disability as an infliction by the society. Then, different individuals fight back differently; some by withdrawing from all activities while some by fully engaging in the activities. The individuals share their experiences with one another that leads to solidarity among themselves. They come to know about the shared problems and challenges that they encounter due to the disabling society. This consciousness leads to collective consciousness through political activism that aims at complete inclusion of the individuals with impairments into the mainstream life.

This study does not primarily deal with the psychological stages that the

individual undergoes. The psychological processes are integral to disability studies, and I acknowledge that these psychological barriers also impact the way individuals respond to these environmental barriers. However, these psychological dilemmas are not at the core of the SMD that throws light on the dominant structures that construct a disabled identity. The purpose of the study is to explore the societal barriers, not to trace the individual psychological experiences and the emotional responses of the students. Moreover, rather than focusing on such isolated individual experiences and emotional responses, these psychological problems are better understood as outcomes of systemic social oppression. These psychological challenges are the outcomes and not the cause of the social challenges. Therefore, the study investigates the environmental barriers aiming at the root cause of marginalization and not at the psychological or emotional byproducts.

In other words, the SMD posits that the barriers that exist are not due to the impairment. They are not because of the unsound medical condition of the student. In fact, the students face challenges because of the unsound social environment. According to this model, their impairment does not make them disabled, but the society is responsible for making them so. In the light of this model, impairment is defined as a functional limitation due to mental, physical or sensory conditions that are distinct from regular norms within an individual. Conversely, disability is a restriction caused by an institution, organization or society which excludes individuals based on their impairments from performing and participating in the social activities with their counterparts. Therefore, society imposes disability by not providing opportunities and facilities to the visually challenged learners, impairing them from participating in the social activities up to their full potential. In this way, a society transforms their impairment into their disability.

The other framework, Socio Educational Model of Gardner (2010), also supports this research. In his model, he proposes that motivation is a key factor in second language acquisition. Motivation in his view is the combination of desires, efforts, and goals. Learning English as a second language is directly influenced by the level and type of motivation, and attitude an individual has towards the language. He explains two components of motivation. Integrative motivation is a desire of the learner to associate himself with the target group, whereas instrumental motivation motivates him to learn the language for instrumental purposes. The study investigates the intensity

of instrumental motivation in the efforts of the students to attain academic achievements. This research utilizes the aspect of instrumental motivation since it adds depth and complements The SMD that attributes the barriers only to the societal factors. Therefore, the instrumental motivation to get good grades that are essential in terms of their career opportunities is also explored, and it is also examined how disabling barriers existing in the environment impact their motivation and refrain the students from attaining the desired goals.

3.6 Data Analysis Procedure

The study focused on the challenges encountered in practicing literacy skills by visually challenged learners in inclusive setups, the reasons behind the problems and the potential solutions to these problems. This qualitative study followed interpretive phenomenology employing two data collection methods. The data were collected using semi-structured in-depth interviews and classroom observations. Interviews were conducted from a sample of 10 participants selected through purposive sampling technique.

The classroom observations were also used to increase reliability and validity of the results. So, six classroom observations were conducted to collect the data. The data were analyzed using thematic analysis presented by Braun and Clarke in 2006. In a qualitative study, thematic analysis is used to systematically analyze and organize complex data sets. In this method of analysis, themes and sub themes are identified after reading and rereading the transcribed data (Brooks et al., 2004). Reliable and insightful findings can be produced by thematic analysis, and the analysis becomes theoretically flexible in identifying, describing and interpreting themes underlying the data (Chamberlain, 2015). Thematic analysis can be used in any qualitative research which tends to deal with complex data, and it searches for commonalities in the data that correspond to the research questions, so it highlights the themes based on the shared experiences that answer the research questions of the study (Dawadi, 2020).

This thematic analysis was guided by the SMD and the Socio-Educational Model. The initial codes were generated by focusing on the structural and institutional deficits that create disabling environment for the ESL learners in practicing their literacy skills in inclusive classrooms. The themes were also identified based on the pattern found in the data. During this procedure, the researcher focused on how these ESL learners explain their reading and writing experiences like how they access their

reading materials, and how they practice their writing skills. The SMD helped explain their challenges as disabling conditions resulting from institutional barriers rather than individual deficits. The instrumental motivation was incorporated to explore how these external barriers hinder the abilities of the students to achieve academic success. Therefore, the SMD highlights the barriers that they encounter while practicing their literacy skills, the instrumental motivation, on the other hand, focuses on the students' motivation to gain English literacy for academic and professional success that is disrupted by these structural barriers.

CHAPTER 4

DATA ANALYSIS

A detailed analysis of the data driven from both interviews and observation sheets is presented in this data analysis section. The data are structured in a way that it provides a comprehensive examination and in-depth understanding of the subject matter. The chapter is primarily divided into two sections. The first section deals with the analysis of the interviews, whereas the second section delves into the analysis of the observation sheets. The data are also structured and organized into themes and subthemes to explore the patterns that emerged from lived experiences of the participants.

Specifically, in the context of this study, it is essential to clarify what literacy skills refer to. Literacy is the ability to understand the relationship between sounds and written words such that one may read, say, and understand them (UNESCO, 2004; Vlieghe, 2015). Hence, literacy skills mean the ability to read and write. The practices of these abilities in an academic institution are designed around the needs of sighted students, since these skills require a person to read using his sight and write on a regular paper with a pen. When these practices are followed in inclusive setups, they set the visually challenged students at a disadvantageous position as they cannot read and write using such conventional means.

More precisely, the dominant literacy structures aligned with the sighted norms expect conformity to such practices that require visual ability from the students having visual impairments. Consequently, the students with visual impairments face systemic barriers that restrict them to practice their reading and writing skills, and Barnes (2002) signifies that these social and cultural barriers exclude and disadvantage individuals that are labeled as disabled. As a result of these disabling barriers that are inaccessible curriculum, improper methodology, and inflexible examination system, their literacy skills remain underdeveloped. So, this study reflects these barriers and explores how they impede and obstruct the development, enhancement and practice of literacy in inclusive yet unaccommodating education systems.

The emergence of these themes was grounded in the participants' responses when asked about the reading practices done in inclusive setups, they shared their experiences that were explicitly highlighting un-adapted curriculum. The responses

also demonstrated that the role of improper methodological practices also confined them to a position that do not allow them to fully participate in literacy related activities. Significantly, examination is a crucial stage to demonstrate one's literacy competence that determines academic achievements. Examination barrier may appear as a general problem; however, it is an area where writing skills are practiced the most at a university level because unlike schools, the students are not reinforced to write through regular classwork or homework.

Rather, the students demonstrate their writing skills in formal examinations that become sometimes a primary setting and most often an only setting specifically in case of visually challenged students. When asked about their writing skills and the related problems, they discussed the problems encountered due to the rigid examination system. Since writing in examinations is compulsory unlike classroom activities where they can choose not to write, they formally and explicitly practice their writing skills during examination. Therefore, the theme of examination barrier presents an account of the challenges that they faced while practicing their writing skills.

4.1 Analysis of the Interviews

This section provides a comprehensible analysis of the data collected through interviews, and it aims at uncovering and interpreting the lived experiences that were provided by the visually challenged ESL learners. The insights gained from the interviews are essential, as they address the research questions. In particular, the interviews were semi-structured focusing on various aspects of participants' educational experiences. To give a comprehensive and systematic understanding of the subject matter, the data are organized in the form of themes and subthemes. By analyzing the data of the interviews, the patterns related to the lived experiences of the learners are highlighted that play a significant role in influencing the academic journey of the participants.

Specifically, this section aims at exploring the lived experiences of visually challenged ESL learners regarding their literacy skills practices and finding the barriers that they encounter which hinder their academic progress. Further, the section also highlights the proposed solutions that can decrease the problems. There are recurring difficulties reported by the participants which they experienced in their academic journey, so similar patterns are identified and grouped into themes and subthemes. For example, the themes such as inadequate study materials, un-adaptable examination

system and methodological shortcomings pose serious challenges to the learners. Thus, the section deals with the examination of these themes and subthemes, aiming at uncovering the specific problems that are faced by the learners in an inclusive classroom setting.

4.1.1 Inaccessible Study Materials

The inaccessible study materials affect students' engagement with the content and negatively influence their academic performance (Nthama & Annie, 2019). The students experience difficulty to read them, so they have to rely on their fellows or human assistance that makes them dependent on others. For example, the absence of provision of soft books, and audiobooks impedes them from engaging with the educational content independently. Additionally, the books provided for the students are not sometimes compatible with screen readers. Even if some books are converted to suit the needs of the students, their quality is compromised. So, it is not the impairment but the insufficient and inaccessible materials that create barriers for the students having visual impairments when analyzed from the lens of SMD. These barriers are institutional failures that cannot include the students, practically affecting their academic performance.

4.1.1.1 The Exclusion of Braille

In an inclusive education system, Braille becomes obsolete as the teachers do not have Braille literacy. Braille is the primary source for the visually impaired students that attend a special school for practicing their literacy skills. The students even with late blindness cases need to learn Braille first in order to be a part of an exclusive education system. For instance, participant 8 describes that he had to spend a year to learn Braille before joining the exclusive education system. However, this Braille literacy becomes futile in an inclusive education system because Braille books are not provided in such institutions, nor can anyone read the Braille script. Therefore, the students have to rely solely on auditory materials that have serious effects on their academic career.

4.1.1.2 Use of Human Assistance for Reading

In the classroom, the students most often use human assistance to access reading materials because they find it difficult to use any software or application due to different factors. First, the teachers do not share the reading material beforehand which causes the students' dependency on others. Second, the teachers bring in hard copies which the

students have to read with the help of their fellows that becomes a source of discomfort for the students. Third, the students have to rely on their fellows due to the limited time given to read. Additionally, the process of scanning the copy, that includes taking pictures first and then listening to it, at the time becomes inconvenient for the students. Furthermore, the Students become accustomed to using computers for reading, which function at a rapid pace and follow a distinct style, resulting in discomfort when assisted by human readers.

When humans read for the students, the varying style of reading, intonation, expression, and speed negatively impact their comprehension, due to which they have to request for repetitions sometimes. However, the time assigned for a reading task is limited in which the students have to read speedily to complete the task, yet that time is not enough for the students with visual impairments, owing to which the students cannot meet the expectation of the teacher to read the text completely. In this regard, participant 4 states that he would usually ask for more time from the teacher to complete the text, but it would always highlight his disability in the class and would give him a sense of “guilt” that the student helping him would not be able to complete his task because of him.

So, this particular problem being unaddressed becomes a barrier in the way of the students, and this barrier demotivates the students. The thwarted potential of the visually challenged students reflects the thwarted potential of the institution as a whole which suggests that the institution is not only disabled itself but also disabling. As pointed by Bolt (2005), “Indeed, a disabling society is itself disabled, for the thwarted potential of people with impairments constitutes the thwarted potential of that society as a whole.” The institution, however, can make the students capable of reading the material themselves by providing appropriate materials beforehand to the students, and by encouraging the students to use technology in the class with the help of earphones, so there is no disturbance in the class.

4.1.1.3 Discouragement to Record Lectures

The teachers prohibit the students to record the lecture that places the students at a disadvantage compared to their sighted students who can take notes in the class and revise the lecture. This unavailability renders them to miss out on important piece of information that can aid their understanding. Consequently, the students are unable to revise the lectures of their teacher. In particular, most of the teachers do not allow the

students to record the lecture since they do not feel comfortable. For example, participant 4 states, “Some teachers are really uncomfortable with it, and they strictly forbid it...”

Participant 5 also shares a similar experience, and says:

In my initial classes, I discussed this problem with my teachers that like all the other students, I also need notes. I cannot take notes, so I need a favor from you that if you put that MP3 on the dice or in the pocket. They had so many issues in that as well. They said that we discuss so many other things in the class, so this is not possible. I requested them, but they refused out rightly...

More precisely, the prohibition to record the lecture is like the prohibition to take notes during the class as the recordings like the notes serve as a major source to understand a text. Its prohibition turns into a barrier for the students because the students get deprived of the materials required to understand the concept efficiently. Participant 7 also experienced the same resistance from the teachers, yet he used to record the lecture, considering it his “right.” However, this resistance from the teachers makes the students disabled as they cannot revise the lecture. According to the SMD, disability is caused by social restrictions that limit individuals to participate in activities (Anastasiou & Kauffman, 2013). Resultantly, this specific practice reinforces inequality rather than equality. In the light of their experiences, the students suggest that the teacher should not discourage the students from recording the lectures since it is essential for them.

On the other hand, the students found their fellows helpful and motivating. The students who did not record the lecture either by their own choice or prohibited by the teacher started taking help from their fellows. Their fellows would send them notes in the form of pictures or voice notes when requested. Most of the participants, however, also believe that recorded lectures are helpful to some extent, but they are not much effective because this is a difficult mental drill to repeat all the lectures to make the notes. So, most of the students used to record the lectures only in their initial classes when they did not have bonding with their fellows.

4.1.1.4 Difficulty to Take Class Notes

The students having visual impairment face problems in note taking in the class. Since they rely on auditory input, they often require human assistance, such as that provided by their teacher or classmates. The fellows send them pictures of their own

notes; however, handwritten notes are inaccessible for the students because the applications that they use cannot read the handwritten notes as the quality of reading depends on the legibility of the writing. For example, participant 2 while describing the functionality of Insta Reader states, “it won't support it so well... it will read, and you'll be able to understand the subject matter or what the text is about but not the whole information completely.” Participant 5 also experienced the same issue, and she used to borrow the notes from her class fellow and used to give it to her friend outside her class to record them.

Thus, the unavailability of class notes deprives the visually impaired students of the precious and valuable insights of their teachers that are essential to be noted down. For this reason, the students need audio notes or typed notes to prepare for their exam. Firstly, the students require dictation to note it down on their computer. Secondly, the tool or the software that they use also gives auditory output that becomes challenging for them to manage in the class. Further, their typing speed also plays a part in the process. Participant 1 being late blind lacked the necessary training that made him unable to take notes on the computer: “My teacher dictated three lines. However, I was just able to note down one line.” In another case, the skills of participant 6 were polished, and he used computer for note taking; however, he reports that he was only able to take notes when his teacher would dictate.

The students' desire and efforts to take notes in class show their motivation and their recognition of the importance of notes for their academic success. Despite being intrinsically motivated; they face extrinsic factors which impact their performance. From the perspective of SMD, due to the lack of proper training of the students to use different software and Braille to take notes in the class, they become disabled to take notes. Moreover, the teachers lacking proper training to guide and assist the special students further exacerbate the problem. As a consequence, the visually impaired students suffer since they lack the study materials which eventually negatively affect their academic performance because the accessibility of materials used in the class also play a key role in determining the success of visually challenged students (Khan, 2023).

4.1.1.5 Scarcity of Accessible Audiobooks

Audiobooks are an important way to make education accessible for the visually challenged students. As the students rely on auditory input, audiobooks serve as a major source to provide educational material to them. For example, participant 6 reports that

during his intermediate and bachelors, he used audiocassettes. Participant 4 also states that he used audiobooks in his intermediate, but it was a transition that ended in his BS.

It happens because when students join university, they are not provided with audiobooks. So, the students when not supported by their institution, contact different other sources like NGOs such as Pakistan Foundation Fighting Blindness (PFFB) that may have the required book. However, if they do not have, the students are left with no other option because the institution does not provide adequate support that is necessary to include special students. In particular, participant 5 mentions that she contacted PFFB, but she did not get audiobooks: “They did not have the audiobooks of most of the novels and dramas that I had in my syllabus.” So, this lack of institutional support makes the students suffer from not having the study material that is essential for a student to perform well, and this barrier results in reduction of their motivation that makes it challenging to engage and participate in the academic activities to their full potential.

Therefore, participants are of the view that the university should have a library of audiobooks. The university should arrange the books that are included in the syllabus in audio form, so the students would have access to the material needed to perform well. For instance, participant 9 suggests that the university can provide subscription of Audible to the students. Despite the fact that audiobooks have their own challenges like absence of orthographic information as highlighted by participant 6, they still serve as a useful learning material for the students having visual impairment.

4.1.1.6 Limited Provision of Soft Books

The institution does not provide the visually challenged students with soft books from which they can read their material. As a result, they have to rely on human assistance to get this task done. Since they cannot read their study material themselves and as per their choice, this setback makes them unequal to their sighted fellows who can read and revise whenever they want. Khan (2023) also confirms that sightless students are discriminated on the basis of the provision of study materials because the sighted students have ready study materials, whereas visually challenged students have to struggle to manage them.

Unfortunately, the teachers being ignorant to the fact that a hardcopy is of no use for a visually challenged student do not provide notes that are in the soft form which causes a barrier to access the material. To illustrate, participant 6 explains, “We would

only get notes in the hard copy, and we had to get it photocopied then. What could a visually impaired person do with that, and what if you have a test of it the next day?"

Participant 8 also highlights:

Most of the teachers used to give notes in hard copy... We would read them with the help of our friends. When we would do group study, our friends would open their notes, and would read. Our notes always stayed in the cupboard because obviously those were not of any use to us. So, we used to get help from our friends.

So, these experiences of the students demonstrate that the teachers do not possess knowledge about the needs of the special students that is mandatory for a teacher who teaches in an inclusive setup which in turn becomes a hurdle for the special student. Consider the case of Participant 3 who reports, "No teacher provided us any book." Even the teachers when informed by the participants do not take it seriously as participant 1 mentions that there are some teachers whom he requested to send him soft notes, but he did not get the notes as "they forget."

Therefore, the participants request that the teachers should share the soft copy of the book, so the visually challenged student can also read the book independently like other students. In this regard, participant 7 states:

It is the responsibility of the teacher if they are teaching in the inclusive classroom. They should provide the content to the special persons as well because they have an equal right to education. When you are not giving the proper teaching material, the accessible content, you are not actually providing them with their equal right to education. You are putting them at the margin.

To add, participant 6 explicitly mentions that it was "very difficult" for him to search a book online since he had no prior exposure to computer, due to which he had to struggle in the first three semesters. This particular instance demonstrates that the visually challenged learners face difficulty in searching a book online particularly, when they have limited computer skills, their dependence on others potentially increases which in turn affects their motivation by reducing their sense of agency.

In contrast, participant nine highlights that the practices followed substantially differ after COVID 19 pandemic. Prior to pandemic, the teachers would not send soft books to the students; however, in post covid the students do receive soft books from their teachers. This instance demonstrates that even if the teachers send the books to the

students, this practice is not done to deliberately support the visually challenged students or to align with the principles of inclusive education. Rather, it appears to have been a general adaptation to remote learning protocols, yet this specific example highlights that the teachers are indeed capable of adapting their methodological practices to the needs of the special students. Therefore, the teachers should consciously conform to the principles of inclusive education to adequately teach the visually challenged students.

Further, in this regard, librarians can also be engaged to access the materials as participant 7 shares his experience that he consulted the librarians to obtain the book that he was unable to find:

I always had very good terms with the librarians. For example, when I face any problem with the searching of the books, I ask from them, in every institution wherever I go. I tell them please arrange this book for me, and they used to search it sitting all day on their tables, and at the end, they used to tell me that okay I got this book or I didn't get.

He further suggests that the university should allocate a specific budget for the books of the students having impairments. He explains that he is a lecturer at a university, and the teachers give recommendations every year that which books should be kept in the library, so the teachers can give recommendation to the university to arrange books for the visually challenged students:

They get the budget for the books. There should be special separate budget allocated for the special persons, for the books which can be for the special person. In every institution, libraries have big budget for books, so they can allocate some portion of the budget for the special person. For example, if a special person is consulting them for some book, they can arrange it for him.

Participant 6 also recommends:

Like UMT, NUML should also provide access to related materials. NUML should arrange one to two systems having all the requirements for each department that is not of course at a larger scale but at a small scale... they can allocate a certain amount from their budget to help the students having visual disability.

He goes on to explain that in the systems, a screen reader should be installed, and access should be given to the relevant materials as it is given in UMT, so the students should

be able to get benefit from it like other students.

Hence, the students should be provided with soft books as they are one of the primary sources for getting education. For maintaining the instrumental motivation in visually challenged students, it is necessary that the books should be available which can be made possible through the collaboration among teachers, students, and librarians. To facilitate the students, the university can allocate a specific budget to arrange the books for the students, and the visually challenged learners should also be educated about how they have to solve their problems like they should be made aware of how they have to strengthen their networking skills and their computer skills because the students possessing any of these skills are less likely to suffer.

4.1.1.7 The Books Incompatible with Screen Readers

Screen readers are the software used by visually impaired students. Such software allows the users to access material by reading the material aloud because it converts the onscreen text into speech or Braille output (Asakawa & Leporini, 2009). For example, the most common tools for the purpose are Job Access with Speech (JAWS) and Non-Visual Desktop Access (NVDA) which are used in computers and laptops. The participants use Voiceover in an iPhone, whereas Talkback in Android. These tools help students to access websites, applications, and books without using visual cues. All the participants use JAWS or NVDA in computers for reading the screen and reading books. However, participant 4 and 7 use screen readers only for reading the screen, but for reading books, they prefer another software called Kurzweil. Moreover, in their mobile phones, different participants use different applications for reading. Participant 7 uses Go Reading, whereas participant 9 uses Apple Books, while participants 1 and 2 use Insta Reader.

However, there are still certain formats that are not accessible for them like the books that are in image form which are not editable. The students get some books that do not work well with the software. To illustrate, participant 1 reports, “Some teachers share pictures. So sometimes, we don't have such application that can read the pictures.”

Participant 4 also states, “Sometimes, when documents are scanned, they are not you know readable with JAWS, so for those documents, I have experienced difficulty.”

Similarly, participant 6 says, “Yes, the books that are in image form are difficult to read. JAWS does not read it. Those books need to be converted into a word document.”

So, such study materials become inaccessible for the students due to the

inaccessible format, which is not compatible with the software, create barriers in the way of the students. This practice also reinforces the social and educational structures that fail to include special students for equal participation in the activities, which ultimately disables them as Anastasiou and Kauffman (2013) states that the society disables the people by “excluding them from full participation” in activities. It is not the impairment but the institution that fails to provide the students with accessible resources to get equal opportunity like those of their sighted fellows. So, the society and the institution failing to provide accessible materials to the students disrupt their engagement with goal oriented and self-directed learning that is essential for instrumental motivation since the dependence that is created by the barrier, conflicts with instrumental motivation of the learners that makes the learners achieve goals autonomously.

To add, this Barrier exists in the environment because the teachers and the sighted students lack the knowledge about such materials inaccessible with screen readers. Therefore, the teachers working in an inclusive education system should be informed about how the screen reader works to promote inclusivity and to provide equal opportunities to all the students. In this regard, participant 4 states that he had a book of an Egyptian writer in his syllabus that was available online, yet it was a scanned copy which was not “a very good scan.” So, the participant shares his experience of resolving the matter:

So, what I requested to my class fellows to do was to create an audiobook of that copy. So, every class fellow, they took a chapter voluntarily, and then they made a recording. They each sent me those recordings, and then, I compiled it into a book. So, this was how I read that book. I still have it as a tribute.

In the light of his experience, the participant explains that the teacher should be trained to provide inclusive environment to the students, and the teacher can also guide other students how to help the visually challenged students. Participant 4 further explains that he requested his teacher to request the students to record the book for him:

I actually asked her to enforce this idea. I individually asked every student if they are comfortable with this, and then to put a final touch to this plan of mine, I asked teacher to request other students if they could help me with this. So, they did Alhamdulillah!

spellings, wrong formatting....” Geetha et al., (2022) explain, “Text preparation and segmentation techniques can influence OCR accuracy. Because of the image's varying size, style, orientation, and intricate backdrop, so retrieving text from it might be challenging at times.” As a result, the substandard converted books negatively affect the comprehension of the students which places them at a disadvantage since they cannot access the material like other students. Therefore, these poorly scanned books stand as a hurdle in the academic journey of the students.

4.1.1.7.1.1 *Insta Reader*. Insta Reader is a software that helps users easily access and read printed or digital text through text-to-speech (TTS) technology. It works by scanning or importing text and converting it into audio, allowing users to listen to the content instead of reading it. This software is particularly useful for differently abled individuals especially the ones with visual impairments. It also allows the non-sighted individuals to access images by listening to the text present within.

Participants 1, 2 and 6 recommend that the students can use an application that is Insta Reader for reading the pictures. A document in the form of pictures, and screen shots can be read using the application. This application is for free, and it is user friendly. One can upload the file on it. After processing, it starts reading the file. Then, it also gives options for saving it in audio form or in written form. For example, participant 6 says, “You can also read the document line by line, word by word as well as character wise.” One can take a picture of the hard copy and upload that on the application, and the application will start reading. However, it does get difficult to read lengthy documents as it takes too much time in processing it. It cannot read handwritings either.

4.1.1.7.1.2 *Kurzweil*. Kurzweil assistive technology is a tool designed to support individuals with learning disabilities and visual impairments that affect reading and comprehension. Kurzweil 3000 has been demonstrated to be an effective assistive technology to support reading and writing among adolescents and adults (Chiang & Jacobs, 2009; Chiang & Liu, 2011). Kurzweil 3000 software is tailored for visually impaired users, combining OCR (Optical Character Recognition) and text-to-speech (TTS) capabilities to convert printed or digital text into spoken words. This tool empowers users by enhancing accessibility to educational materials, boosting literacy

skills, and promoting independence in academic and professional environments. To illustrate, participant 4 states:

It is an entire education system... You have the option of taking notes in text form as well as in audio formats. Then, it has a library of its own which is not accessible for us. It is only accessible to American nationals.

If the user wants to know the meaning of any word, he can get to know by pressing a key, and it gives the user a list of meanings and the way those specific words can be used. Additionally, it can read all type of documents like pdfs and word files. An issue reported by participant 7 is that it does not create heading levels, so it gets difficult to navigate the file. Participant 4 suggests that the university should provide access to this software after purchasing it because this software is not affordable for individuals. Further, in this latest version, there is Dragon as well which is a dictation software that is very helpful for the students with dual impairments and for the students whose typing skills are substandard. Participant 7 also explains that it has OCR technology as well that can convert pictures into readable formats.

4.1.1.8 Limited Material for Preparation for Examinations

All these problems lead to limited materials for the preparation of exams. Due to the lack of accessible learning resources, visually challenged students struggle to prepare for examination (Zangi & Annie, 2021). To resolve the matter, the students take help from sources like YouTube that does not meet the standard text because in English, there are dramas and novels from which the students are required to take quotations to support their arguments in the paper, and the platforms like YouTube and movies provide supplementary material sources that can enhance understanding of the students. However, making them the primary source is not a beneficial practice because undermining the requirement to have high-quality accessible materials, the focus of the students shifts from meaningful learning to convenience. For example, participant 1 describes:

Sometimes the document that we find, it is not according to correct explanation, or it does not meet the standard. So, after reading it all, we realize that it does not explain the text properly. So, then you have to go to YouTube and other platforms to search the data or you have to ask a friend and different people for explanation. Every person tells you something. Then, by collecting points from different sources, taking points from one, from second and from third, you come

up with your own explanation. That's how I clear my all points.

Participants 1 and 8 also mention that they memorize some quotations that they try to fix in every question. Participant 1 further states that his teacher gave him remarks on his paper that he “should read the text.” He also points out that using the substandard material poorly affects their vocabulary as the videos on YouTube are in Urdu. Participant 8 used movies as well instead of reading the original text, and also agrees that there is “exaggeration” in the movies which makes them different from the original text. So, using substandard materials does affect their performance in the exams because the reliance on substandard materials set limitations on the quality of comprehension which the student should have to achieve academic success. In this way, the institution fails to accommodate their needs and to provide them with high-quality materials that are essential for in-depth understanding of the subject matter, ultimately placing them at a disadvantaged position in the exam.

However, the persistence of the students despite these hurdles reflects their motivation to continue their studies as persistence often shows the intensity of motivation that the learner has towards language learning (Okuniewski, 2013). Nevertheless, the participants' aim to achieve good scores in examinations is affected by the non-conducive learning environment that has to be conducive to foster motivation because absence of such an environment can make even highly motivated individuals suffer. Through the lens of SMD, it is the dominant structures that create hindrances for the impaired people. “Disability is not a product of bodily pathology but of specific social and economic structures. These structures are responsible for the exclusion of the disabled people from full participation in mainstream social activities” (Oliver, 1996). He further states that the disability is not due to the “individual imitations of whatever kind” but due to the society that remains unable to provide appropriate services as per the needs.

So, the inappropriate and inaccessible materials cause barriers in the academic progress of the students (Nthama & Annie, 2019). If the students are not provided with equal access to materials, their academic performance declines; therefore, the institutions should provide visually challenged learners with accessible study materials. As Shakespear, (2010) argues, the barriers that impaired people encounter are the outcome of “social oppression” and not of “individual deficits” which makes it a responsibility of the society to remove the barriers and to “enable the disabled people

to participate.”

4.1.2 Examination Barriers

This section highlights the difficulties that are faced by the visually challenged learners during examination. The participants are classified based on the type of assistance that they use to attempt their paper. The first group is the one that uses human assistance like writers for attempting their exams, while the other group prefers to use technology such as computers. Both groups encounter varying challenges. For example, the first group experiences challenges like no provision of writers by the university, incompetent writers, unprofessional attitude of the writers and no extra time given for completing the exam. On the other hand, the second group has to deal with technology that poses a different set of problems ranging from power shortage, losing the paper and to handling the software. By analyzing these subthemes, this section throws light on the obstacles and shortcomings that the students experience which in turn hinder their ability to perform well.

4.1.2.1 Challenges due to the Reliance on Human Assistance

This section explores the hurdles faced by the students using human assistance for attempting their paper. In particular, different circumstances that are unique to different students lead to the decision of using human assistance for paper attempting. For instance, some students are congenitally blind, while others are late blind and may lack the necessary knowledge or skills to use technology in exams as they may not have had the opportunity to develop the necessary skills. Moreover, the students who attend a special school learn Braille, whereas the students who had been a part of the mainstream education system are Braille illiterate. The students who are even proficient in Braille cannot practice the skill since the teacher does not have Braille literacy. Additionally, the level of blindness whether it is partial or complete also becomes one of the factors to make this decision. However, this decision has its own consequences ranging from finding a writer, poor writing skills of the writer, to unprofessional behavior of the writers. Moreover, having no extra time exacerbates the situation. Therefore, this section presents an in-depth analysis of all these problems faced by the students who use human assistance.

4.1.2.1.1 *Absence of University-Provided Amanuensis*

The university does not provide writers to the visually challenged learners which becomes one of the major problems for the students. As participant 1 mentions:

When you go to different organizations, they give you the writer for exam, but I was shocked to know that NUML, which is a reputable institute, does not have any facility like that... They were not providing me the writer despite the fact that I had my disability card with me. NUML is a big university; still, it does not have any facility like this for special students.

This laxity becomes the root cause for other challenges that the students encounter like finding the writer themselves as participant 6 reports that he arranged his writer himself: “I went there having my writer with myself.” Since the university does not provide scribes to the students, it ultimately impacts their preparation for the exam. For example, participant 1 categorically mentions, “When the other students are preparing for exams, we are finding a person to write for us in the exam instead of focusing on our preparation. It affects our performance badly.” Since the society locates disability in the impaired people, it shifts away the responsibility from itself to the people (Lavit, 2017). Likewise, the university shifts the responsibility to the students to find their own writers as the students are considered disabled. Consequently, no provision of writers by the university forces students to arrange their own exam writers that causes anxiety among students and shifts their focus from the preparation of the exam to find a writer for themselves that further leads to multiple problems. Similarly, Anjum et al. (2021) also explain that the institution does not provide a writer to a visually challenged student that causes him discomfort. More precisely, these difficulties exhibit lack of structural support which adversely affects the motivation of the students to pursue their goal of academic success. This adverse effect, however, can be mitigated by enabling examination support mechanism.

For instance, the students advocate that the university should arrange writers for them, following the policy of HEC. Moreover, participant 6 describes his experience at UMT and suggests that NUML should also adopt a similar approach for the students who require human assistance. He explains that UMT, after finding a writer for the student, shares with the student the detail of the writer including his qualification making it a choice not a compulsion to proceed with the writer that the university arranges for him, so the student also has a choice to proceed with his writer that he finds independently. This choice fosters a comfortable environment, ensuring trust in university’s provisions. Participant 5 also shares her experience that her friends would post in different groups on Facebook for a volunteer, and from there, she found a really

expert writer who was from National University of Science and Technology (NUST). Likewise, the university can also seek for voluntary services. Further, participant 9 proposes in the light of his experiences that the university can allocate a stipend for the volunteers, whereas participant 4 suggests that the university can award them with certificates. To conclude, all the participants highlight that it is their right that the university arranges a writer for them.

4.1.2.1.2 *Unexpected absence of the Writers*

Due to the lack of institutional support, the students have to arrange their own writers, but even if they manage to arrange someone to write for them in exams, they disappear. To this end, the question of reliability comes to the surface because the writers find it difficult to honor their commitment, leaving the visually challenged learners stranded. For instance, the students face last minute cancellations which compound their difficulty and stress, and this trouble forces them either to find a replacement or the risk to leave the paper. As participant 1 says:

Most of the time our writer refuses to come at the eleventh hour which creates a situation of panic. We become distressed and forget everything whatever we prepare for the exam. Then we have to request others with a hope that somebody might agree. It wastes our time. It happened to me thrice.

Likewise, participant 5 reports:

It happened to me not only once but thrice. It happened to me twice in the midterm and once in the final paper. At night, she said that she would come. The next day, everybody got their paper. Everybody started writing the papers. I was calling her again and again, and she was not attending my call.

She further describes that the teachers did not inform the administration about the matter. They were indifferent to the fact that she was sitting doing nothing throughout the duration of examination.

Viewing the firsthand accounts from the perspective of SMD, it is not the impairment rather the lack of institutional support that creates hindrances for the students to perform like other students. As Bolt (2005) posits, “People with impaired vision are not necessarily disabled, but when they are so, the society in which they live is necessarily disabling.” Since the university does not provide writers to the students, it ultimately shifts the responsibility to the students to secure a writer for themselves, and even in case of any mishap like last minute cancellation, the university does not

support the students either. As a result, the students, despite being motivated to achieve success, become unable to attempt their paper due to this lack of support by the institution that does not address the special needs of its students. Consequently, the students' hard work becomes futile due to this barrier, and they are unable to achieve tangible results necessary for good opportunities.

On the other hand, some students also share their positive experiences that their teachers arrange writers for them; however, these supports appeared to be the outcomes of individual efforts typically limited to two to three teachers rather than of systematic institutional interventions. For example, participant 4 mentions:

I was calling my writer as he was supposed to be here 20 minutes before the exam, and it was 8:15. Then, it got 8:20 then 8:25, and he is constantly not answering my calls, and then I think at 8:35, Sir Haseeb, he asked me that where is your writer. I said that sir I don't know ... then at 8:40, he answered my call, and he informed me that he was in Lahore.

He further states that his teacher consulted the coordinator, and the coordinator refused to provide any writer arguing that it is not the responsibility of the university. So, his teacher himself went to an Advanced Diploma Class and arranged a writer for him. Then, he informed the coordinator requesting any accountability be directed towards him. Similarly, once in his class test, another teacher of his became his writer, the teacher helped him in attempting his test, and simultaneously, she monitored the class skillfully. Participant 2 also describes that his teacher was very cooperative that when he did not have any writer for the class test, his teacher allowed him to attempt the test in Braille and read the Braille script to her. She marked him after listening to whatever he had written and asked him to submit the typed script next day for record keeping. Participant 5 also had a writer provided by the university at the time of entry test. She discussed the matter with the HoD, and the HoD arranged a person who was a clerk to write for her. According to Bolt (2005), "The common factor is that disability can be avoided through some kind of social reforms." Therefore, in the light of their experiences, the students recommend that the university should arrange a writer for them which is their right as mentioned in the policies of HEC that the university aligns with, so they can be safe from mishaps.

4.1.2.1.3 Unprofessional Attitude of the Writers

The writers sometimes demonstrate an immature behavior that is marked by rush and haste which ultimately pressurizes the students. The lack of attention not only disturbs the students, but it also results in mistakes and incomplete answers. As participant 1 states that when he attempted the test, the paper was printed back-to-back on one page:

We solved the question printed on the front side of the page. My writer did not turn the page. He did not see the other questions. I asked him if that was it. He confirmed it... I discussed it with other applicants. I came to know that there were other questions as well.

Participant 5 also explains that most of the time, she had a writer from other departments. In the midterm exams, after assisting her, she would have to give her own paper. She used to be in hurry as she needed time to revise the syllabus for her own paper. Her paper would start when the paper of the participant would get over. The participant describes:

So, she used to say that hurry up. Tell me what to write next. What to write next. So, this is obvious that it pressurizes you. The person whom you have brought with you, she is not focusing on your paper. Instead of helping you, she is unintentionally pressurizing you.

Other participants also describe the same situation as participant 2 says, “Yes, we do face this issue. Sometimes the writer is in a hurry because his sole purpose is to write.”

So, when untrained and unprofessional people are arranged as amanuensis, it results in creating barriers for the students. The SMD contends that individuals are disabled not due to bodily impairments, but due to inaccessible physical and social environments which result in disadvantages (Anastasiou & Kauffman, 2013). In this case, the students have to cope with undue stress imposed as a disadvantage due to the writer’s urgency that affects their ability of conveying the answers with accuracy, eventually leading to deduction of marks, making them distant from achieving their goal. This communicates the need of training of the people that serve as writers since such arrangements are inadequate highlighting the improper approaches that the students are forced to adopt to resolve their matter themselves, due to which the students have to adjust with inadequate arrangements that turn an equitable examination into a highly pressurized one.

Furthermore, the scribes demonstrate unprofessional attitude also by

interrupting the students to give suggestions which disrupts their thinking process. Their sympathy leads them to make suggestions to the students that eventually leads to confusion and unease. For example, participant 6 illustrates, “If I want to attempt my question number 3, he used to say first we have to attempt question number 1. How can we jump to question number 3?” Participant 4 also points out:

Their hearts are in a good place, in the right place, but they give suggestions regardless of the fact that they are from other disciplines, but they would suggest that you should write this. You should write that. So, that confuses you.

Thus, it is evident that the lack of adequate training of the people assisting visually challenged learners impacts the performance of the students adversely since the writers make suggestions that fails to meet the standards of fair examination and causes distress to the student who is attempting the exam. To add, maintaining neutrality is one of the major qualities of the amanuensis, however, the writers interfere and overstep this role by giving suggestions to the students. Therefore, the lack of training of the writers creates barriers in fostering independent environment for the students since it only exposes the students to additional stress and pressure.

4.1.2.1.4 Problems Caused by Incompetent Writers

The writers’ incompetency also adversely affects the performance of the students in the exam. The writers who make frequent errors in terms of punctuation, paragraphing, and spellings, compromise the clarity and coherence of the students’ text. In this way, the incompetent writers become a barrier in the student’s way to exhibit academic competency. For instance, participant 1 states that his writer was “unable to read the question properly.” Then he asked him “to spell out the question.”

Likewise, participant 5 mentions that she did not have a writer for entry test, so the HoD arranged a writer who was a clerk. She describes her experience: “I had to tell each and every thing to that person. Here, you have to write this, and here, you have to write that. So, it was very difficult to attempt the paper with him.” Participant 9 also shares his experience:

Some of the writers, they were very poor, very poor. They could not even read the paper to me. I still remember in third semester that there was a question on G. B. Shaw’s play... he read the question follies, and I was so confused, but then, the same problem, the spelling problem, commas problem,

punctuation problem, every problem, and in those semesters, my grades were not good... in two to three semesters, my writers were good. They listened to my instructions, and my grades were also good. So, I was dependent on writers. Good writers meant good grades; bad writers meant bad grades.

Participant 9 further points out that he was “a bright student” and he used to teach his class fellows. However, the fellows he used to teach would get “good grades”, and the participant would get bad grades, due to which he had “a burning indignation.” These insights underscore that the quality of work is compromised by incompetency of the writer because quality of the work depends not only on the student’s brilliance but also on the excellence of the writer which directly impacts the student’s academic achievement. So, these experiences not only affect the immediate results but also have long term implications for the aspiration and the goals of the students since the students’ instrumental motivation gets thwarted by this barrier which can be removed by provision of a competent support as El-Nabih (2014) also highlights that the students need an expert writer in their examinations.

According to Anastasiou and Kauffman (2013), disability is caused due to an organization that takes little or no account of people with impairments. Unfortunately, this is a common assumption that the writer should only possess the basic knowledge of how to write, giving a little to no consideration to his competency. However, an examination is an essential stage in deciding the future of a student, and his academic achievements depend on his performance in examination which makes it crucial to choose a competent writer who can handle structure, organization, neatness, paragraphing, orthography and punctuation with efficiency. So, the student can focus on his content trusting that his response will be presented with accuracy.

Considering this fact, participants state that they would always try to secure a competent writer. For instance, participant 4 explains that he would choose not a writer junior to him, but a writer who would be in the same semester from a different department. The writer would be “accomplished in his English”, so the student would be satisfied with the information presented. The participant states that it was, however, difficult to make the department understand that he needed a competent writer to perform well in the exam, and it would not be qualified as cheating because the writer did not know about the content and the syllabus that the student had. Rather, he just had a good writing ability. Therefore, the department should consider that the competency

of the writer also matters, and they should arrange writers who have excellent writing skills.

Furthermore, another point, that has been observed, is that the students experience discomfort if their writers are changed since new challenges in communication and coordination are introduced at a critical time. The students have to adjust with a new pace of writing, style, and the way their ideas are interpreted which cause uncertainty and discomfort during exams. Due to this, most of the students prefer to continue with the same writer as he/she can understand their flow of ideas. For example, participant 5 had a writer from NUST. She attempted most of her papers with her. Participant 9 also had a writer with whom he was satisfied. The writer assisted him at his intermediate and graduation level. Therefore, maintaining a consistent writer can increase the level of confidence and comfort.

4.1.2.1.4.1 Punctuation Errors. Another issue, that the students encounter, is of punctuation which they find difficult to dictate it to their writers in exams due to limited time. The writers also fail to punctuate the answers properly, disrupting the natural flow of ideas, resulting in a poorly structured text. The poorly structured text loses its effectiveness and results in deduction of marks. To illustrate, participant 2 mentions, “If your writer's punctuation is not strong, he will keep asking you where to put a full stop and where to put a comma which is not an easy thing to dictate.” Participant 1 states the same issue:

When I dictate to my writer, I assume that he will be punctuating the text as well, but sometimes he does not do so. Sometimes, I tell him to, but he forgets to put the punctuation marks. Sometimes when he has to capitalize a letter, he writes it with the small letter.

Participant 4 while sharing his experience also describes:

I was dictating something with full flow, and I was imagining that I have written a wonderful answer with such great ideas etc., but my bubbles were busted when he said, “I didn't put any punctuation since you didn't dictate me any.”

Participant 6 highlights that punctuation is “very much important” in any language. He further points out that when a person writes himself, he is aware of all these details. However, when a person deals with a writer, he forgets to dictate punctuation marks as there is “too much pressure” on the mind:

I would dictate punctuation as far as it was possible, but to be very honest, sometimes I would forget to do so. At that time, my primary focus would be to catch up the time, so nothing would miss.

The students fail to dictate punctuation marks due to four factors. First, the students highlight that they are not given extra time which makes it challenging. Second, the students face difficulty to punctuate the text since dictating punctuation disrupts their flow of ideas as they have to pause and inform the writer about the placement of the punctuation marks. Third, if the students do not dictate punctuation marks to the writer, he cannot do it independently due to lack of training. Fourth, since the students with visual impairment use auditory learning methods, their own knowledge of punctuation is also limited. Due to all these factors, the flow of the answer is disrupted in the paper because of which the students lose marks.

Another point to be noted is that the students' understanding varies according to the case of blindness and their efforts to learn these marks. One student claims that he knows all the usages, whereas the rest of the participant's state that their knowledge is fundamental. They know the basic marks like full stop, comma, and question mark. Participant 4 describes that he does not know how different punctuation marks look like; however, he knows the use of them. In the light of his experiences, participant 7 proposes that learning the usage of punctuation marks is not difficult. There are finite rules and if one learns them, one can master it. The participants highlight that punctuation is a key area for the students of language to master.

The more one reads, the more one becomes familiar with the usage of these marks. The less one engages with the text visually, the less understanding one develops. Considering the fact, the students should be provided with a comprehensive understanding of the topic through accommodative approaches. The students should be involved in activities that can enhance their knowledge; for example, the university can arrange workshops to make the students proficient in the usage of punctuation marks. Moreover, the university can also explore tactile formats and technological based solution like finding a software or application that works efficiently with dictation and adaptive punctuation. To add, university should also arrange trained and experienced writers who understand the nuances of dictation and are also aware of the complexities of language. By taking these steps, the university can foster a learning environment that is inclusive and productive.

4.1.2.1.4.2 Improper Paragraph Structure. The writers often struggle with making proper paragraphs that makes the text look unorganized. Due to this, the readers cannot follow the flow of arguments in a logical manner because the essential information may get overshadowed due to visual clutters. As an outcome of it, the reader cannot understand how one idea relates to another. Since the visually challenged students depend on the writers for presenting their ideas clearly and coherently, the writers, not possessing the key skill to organize the text, can make the students lose their marks.

For example, participant 6 states that it happens usually, and he shares that once he was short of time. So, he kept dictating his writer three paragraphs, and the writer wrote it in a single paragraph. Participant 7 also points out this issue, “If I am not dictating this, if I am not dictating these punctuation markers to my writer, then my whole paper will only be one sentence.” Participant 5 was also hindered by the same issue, and she answered, “Yes, there were such problems.”

The responses of the participants show that the students feel it challenging to dictate paragraph breaks to the writers, and the writers, due to their incompetency, are unable to recognize the natural shift in the content. As a result, the coherence of the content is compromised. In this way, the environment remains unable to provide suitable accommodations to the students, reinforcing the Social Model of Disability. When the institution fails to provide writers who understand the conventions of academic writing, the visually challenged learners get a disadvantaged standpoint. To overcome this problem, it is highly important that the writer should possess knowledge of how to structure a text. At the same time, it is also necessary for the students to know how to communicate their ideas to the writers since the success of the students depends on presenting clear and organized ideas that is affected by mutual understanding between the writer and the student. If the writer possesses the skill, and the student knows how to guide his writer, the student can achieve his goal of presenting a coherent and well-organized text which will lead him to academic success.

4.1.2.1.4.3 Orthographic Errors. The writers assisting the students commit orthographic errors that lead to deduction of marks. The errors diminish the quality of the text by creating disruptions that eventually result in lower grades, and the students are also unable to spot the mistakes due to various factors like limited time or ignorance. As a result, the unavailability of skilled writers causes a serious challenge

for the students to excel in their academic career. For example, participant 7 highlights the issue:

If I am having the examination of drama or novel, then there will be names of characters. Okay? And he will not know how he can write this name in the paper, which correct alphabets he can use to spell that word. He will have to ask from me. Other than that, there is no option. So, it is a very big problem that if it is a two-hour examination, then how come I provide my writer with all the spellings and letters and alphabets, and I have to guide him not only with the structure, not only with the content but also with the spellings.

Participant 9 shows the same concern by saying:

For example, inexorable. These kinds of words like 'exhibit'. He does not know how to spell them. In our discipline, English, students' spellings, no compromise, no go. There is no way that you get good grades unless your spellings are immaculate.

Similarly, participant 5 says:

The writer used to say whatever I would tell her, she would write that, but you are first telling the sentence and then spelling each word which is very time taking. So, I never had any idea that what she was writing.

Participant 6 highlights the same concern that in English Language, "such mistakes do matter." Since it is apparent that it is not practical to dictate orthography to the writers, they should possess the basic knowledge of orthography that is considered a basic skill for amanuensis. Apparently, securing a writer comes as a relief; however, an unskilled writer creates new challenges since they are unable to fulfill the requirements reflecting the social model of disability.

To add, the students report that it is impossible to dictate spellings to the writer, but at the same time, their own orthography is not strong. Since they access the written material using auditory aids, this practice negatively affects their orthographic script because the less visual and tactile exposure of the text results in poor spelling. So, the students need to put extra efforts to learn the spellings which they consider a daunting task since the students already struggle with different problems that make it difficult to concentrate on this particular issue.

In this regard, participant 4 describes:

I am a student of English, but still my spellings are pathetically weak. There

are two reasons for this. First is that if I engage in dictating every spelling, I could not comply with the time limit. So, I completely abandoned this idea, this part of dictating spellings to my writer for every single word. Since I did not dictate any spellings, so I got out of practice, and Alhamdulillah my vocabulary is good, but my spellings are really really weak.

He further explains that one of his friends suggested him to reread a novel or a book of his choice, and he asked him to read the book character wise to improve his spellings. The participant also highlights that the friend asked him to read a book that he had already read because he would only focus on the spelling and not the content. The first reading should be done to comprehend the text and to get pleasure, but the second reading should be done to improve the spellings. However, the participant describes that he did not do it because it seemed a tedious job.

On the other hand, participant 9 states that he did whatever he could to improve his spellings. When he had a little bit sight, he learned the shapes of letters from TV. He explains:

Someone once told me to spell 'kite', and I could not even do that. So, what I did that I learnt ABCD from TV, and how u learnt from TV? For example, I had a Dish TV. It was Indian Cable Services. So, there was a channel, Discovery. So, I knew that Discovery. What's the first letter 'Discovery', what is spelling, so I knew the spellings. So, the first letter is D. Okay, the D is written like this. The second letter is I in Discovery. Oh, it has I. So, I am written like this. So, in this way, I learnt ABCD. I could not ask anyone to teach because for me, it was a matter of shame.

Moreover, to improve his language skills, he would try to read the books. He states that he would not care whether he had to sit “in the rain” or in the “scorching heat”, so he would sit in the light to read books to improve his orthographic script. However, he highlights that it was a time-consuming task since he could only read using a magnifying glass: “I would read only one page in 40 minutes.” So, the university should design targeted activities for spelling improvement of such students because their independent efforts fail.

For the students of English Language, it is necessary to learn correct spellings. Participant 1, while describing his experience states that after spending a whole semester studying a play by Bernard Shaw, he came to know that the spelling of Shaw

was ‘Shaa’ whereas he was imagining them as ‘Shah’. This insight shows that how weak the spellings of the students are.

Most of the students discuss this issue with the teacher and request them not to deduct their marks for such mistakes. The students further argue that they should not be judged on spellings as this is an unfair practice because they do not read but listen, so they should not be expected to have a perfect orthographic script. The students spell a word considering its sounds. Whatever spellings of a particular word they imagine; no one comes to know their assumed spellings of that word unless they spell the word out. As they only listen to the word and hardly type it, they do not realize their own mistake unless a person or a computer points it out. Hence, this is difficult for them to learn spellings on their own. So, there needs to be collaboration between the students and the university.

On the other hand, the students who attended a special school report that their Braille script was completely perfect, but when they switched their medium of writing, the issues like poor orthography came to light. Participants 2, 3, 5, 6 and 8 state that they never faced this issue of poor spellings in their Braille script. Participant 8 describes that he turned blind at an early age, so he changed his school from a mainstream education system to an exclusive education system, and for that reason, he spent an entire year to learn Braille before joining the exclusive school. However, when he joined university, the Braille became obsolete.

In this regard, participant 4 explains that one cannot detach this learning of Braille from one’s experience. If the university demands a sightless student not to use Braille, it would be like to expect a sighted student not to use pen. He further describes, “Some students, they prefer using ball points. Some students prefer using different pens. So, you don’t ask them to stop using one kind of pen simply because the teacher is not comfortable.” The transition from Braille to human assistance is highly problematic for the students which makes them dependent on others; therefore, all the participants recommend that the university should permit the students to attempt their paper in Braille, and the university can hire a blind person as a Brailist who would become a resource for Braille users by reading their papers to their teachers and would also create an employment opportunity for visually challenged people.

4.1.2.1.5 Difficult Nature of Questions

In examination, the visually challenged students face difficulty in attempting certain type of questions: comprehension passage and visual questions. The papers are set considering only the sighted students because the dominant assessment practices are centered on vision that ignore the needs of visually challenged students, due to which the visually impaired students face serious challenges in solving the questions. The impaired individuals are marginalized owing to the dominant structures and norms (Anastasiou & Kauffman, 2013). Participant 1 reports while narrating the experience of his entry test at NUML:

Sometimes he used to read the whole passage for me. Then, he used to tell me the questions one by one. After knowing the first question, he used to read it again to the point that we got the answer. I used to guide him regarding the answer which he had to write down. Then, after reading the second question, we used to repeat the process. That's how I used to solve such a type of question in exams.

Participant 9 also describes that the comprehension passages are difficult to attempt because it requires one to read it again and again to locate the answers. Firstly, it is a time-consuming task. Secondly, it is a mental drill that the student has to do if the writer is not a proficient reader.

Participants 1, 4 and 9 also experienced that their writer was unable to read even the question, so they asked him to spell it out, and participant 4 did not even attempt his complete paper due to the exhaustion caused by his poor reading. This suggests the writer also has to be a brilliant reader, which is one of the basic skills for the role, so he can read the text to the student efficiently because his reading also affects the students' comprehension of the text.

Moreover, some teachers even give some visual questions in the paper and do not consider the presence of the special student in the exam which creates distress for the student during the examination. To illustrate, participant 4 states, "Yes, all types of questions that require you to study a diagram or formulate your answer using a diagram or to draw a diagram. All these kinds of questions are difficult. Really difficult."

Participant 4, while explaining the type of questions that are difficult to attempt in the paper for him, shared his experience of his school level that once in his paper, he got a question that was related to geography which he was unable to understand, and it took three teachers to explain the picture to him. Participant 7 also states that the

teachers should avoid giving questions having visual representation, using which the student has to give his response. He explains that in his PhD at Foundation University, his teacher gave a question related to multi-model analysis, and he had to answer the question using a picture given in the paper. Then, he requested his teacher to change the question since he would not be able to attempt it. Finally, his question was changed.

Similarly, participant 2 points out that he had a question in which capitalization and punctuation were to be analyzed, and he faced much difficulty in solving that: “A writer cannot do all these things unless he knows that. He will not tell you the spellings of the whole paragraph. Due to this, the whole question got incorrect.” Since the paper is not adapted to cater to the needs of special students, they have to struggle to solve such exam questions.

The students are still given visual questions in the paper to solve knowing that the student cannot see. To add, the student is not given proper training to solve such a type of question either. Consequently, the visually challenged student has to rely on his writer to solve the question. First, this is the exam of the student and not of the writer. Second, the response is based on the description of the writer. Additionally, having lengthy passages to comprehend in the exams requires repeated reading, and the student needs to locate the answer with the help of the writer which is a time-consuming task as it demands multiple readings which is not possible for a writer. Therefore, attempting such a type of question is highly challenging in the exam. It is the inclusive institution’s failure to adapt the paper considering its students with visual impairments. Thus, the environment poses hurdles for the students by not considering their special needs and by not providing them with equal opportunities as of other students. Oliver (1996) states that the disability exists not because of any type of individual deficit but because of the society that remains unable to provide appropriate services as per the needs. Similarly, the university remains unable to provide adequate services to the student with visual challenges, and it should remove this barrier by adapting the paper taking into consideration the special students and their level of impairment.

4.1.2.1.6 No Provision of Extra Time

Despite being especially abled students, they are not given extra time. Due to this, the students find it extremely challenging to attempt their paper in the given time. It happens because some faculty members lack awareness about the matter and force the students to submit their papers with sighted students. However, Parveen et al. (2024)

suggest that the faculty should be trained regarding examination protocols to provide a fair and comfortable environment to the visually challenged candidates, and to this end, there should be collaboration between faculty members and disability support staff. For example, participant 1 shares his experience by saying:

It is not given. Extra time is not given. If I tell you what happened in the fifth semester, there was a madam in the fifth semester...There were 10 minutes left. She was coming again and again, and was saying, "There are 10 minutes left. Hurry up wind up the paper." I told her that we blind are given extra time, but she said, "No, it does not happen. You have only 10 minutes. Do whatever you can in these 10 minutes." next time she just took my paper. I tried a lot to make her understand, but she was saying, "It has not happened. It hasn't happened till today."

Participant 4 also reports the same issue:

Once or twice that a teacher, they said that I am supposed to finish in the given time and I am not allowed to do it. So, I said that take it up with the HoD because he understands these policies. Let me just complete the exam first.

Similarly, participant 5 says:

I asked once that I should be given 45 minutes extra as extra time is given to the people with disability. However, the teachers refused. They said that we don't have that much time, but we will collect papers from other students, and you can complete your paper in that time.

So, extra time is not given to the students because the faculty members do not wait for the students due to reasons like ignorance or their personal matters that causes a situation of unease for the student. In other words, the resistance to provide extra time during examination to the visually impaired students is a reflection of unfair treatment that is coupled with the lack of awareness among the faculty about the relevant policies which creates hindrances for the students to attempt their paper efficiently. As a result, the students, despite being motivated, find it difficult to dictate their answers within the time given to the sighted students. Because they have to dictate their answers, they obviously need more time than their sighted fellows. However, the institution does not take account of this issue which eventually affects the performance of the students by creating disabling barriers. Zangi and Annie (2021), on the other hand, contend that the visually challenged students have "immense potential" if they are provided with

“adequate accommodations.” So, to unlock the potential of the students, the university is requested to give extra time to the students by making the faculty aware of the policies.

4.1.2.1.7 Unavailability of a Proper Room for Attempting Papers

Another challenge, that the students face, is in room accommodation. As per the different needs of the students, the visually challenged students require a quiet place to attempt their paper; however, these needs are overlooked at the university. Most of the time, there is no proper sitting arrangement for them, so they have to sit in the same room with their other class fellows that creates unease for the visually challenged student, for his writer and for the sighted students. Further, in an attempt to make the sighted students comfortable, the visually challenged student is made to suffer as he is asked to sit either in the corridor or in the staffroom that reflects poor planning and management of the institution that fails to cater to the needs of the visually impaired students. It indicates that the visually challenged students are at a disadvantaged position since they are not treated equally. Shakespear (2010) asserts that the disability is the outcome of oppression which can be observed in such practices that the students with visual impairments are oppressed and are not given their basic rights to attempt their paper at a quiet place. Further, relocating places like the same examination room, corridor or staffroom demonstrates that the institution remains unable to secure even the dignity of the students.

When they are supposed to sit with their other class fellows in the exam hall, it creates disturbance not only for the sighted students but also for the special student as it makes the visually impaired student and his writer uncomfortable. To illustrate, participant 1 says, “My writer was not feeling comfortable, and I could see it on his face... The other thing that when we both were doing the paper. The teacher was interrupting again and again to talk quietly.” Participant 2 also points out that he is given last two chairs in the same room. “I do feel uncomfortable. We have to speak very quietly, and the writer also faces issues in listening.” Similarly, participant 9 explains that he would mostly sit in the same room. He states:

Teacher would tell me, "Be quiet! Be quiet please! Be quiet! Be quiet beta. Be quiet! and if I was quiet, my writer would say that I can't hear you. If I were a bit loud, "Be quiet!" so I was between the dock and the hot...

Furthermore, participants report that the institution, considering the issue that

the students cannot attempt their paper where the other students do, assigns them corridor. This is not a proper solution as it demonstrates poor planning and management which in turn disrupts the students' performance. The students are supposed to sit in the corridor that also becomes a source of disturbance for them during the paper. As there is a noise of the students who submit their paper early and other disturbances as well, it does not allow them to focus and concentrate on their paper. For instance, participant 1 narrates that he had to sit in the same classroom for first three semesters. Then, a teacher realized this issue, and the solution he proposed was to sit in the corridor: "There is no disturbance usually during the exam time. But yes when the students give their paper before time. They make noise which creates disturbance."

Participant 5 also mentions:

Yes, too much. You imagine it yourself that if you are writing your paper and there are too many passersby. There are two students passing by, three students passing by, and four students passing by. Some are laughing. Some are talking. Some are discussing something. So, it was difficult for me to attempt my paper in the noise. It was very difficult to concentrate.

To add, the students also feel disrespected to sit in the corridor as participant 4 describes:

Actually, the coordinator said that you sit in the corridor. I got indignant, and I refused to. I said that I would not sit in the corridor. You can make an arrangement in a staff room or somewhere else. I can even go outside, and sit on a bench but not in the hall way or in the corridor. I am a student yar. I am not you know a beggar or something that I should sit in the corridor. If other students got disturbed from my noise, I was also getting disturbed from all the noise that came from other classrooms or altogether.

In another attempt to solve the matter, staffroom is allocated to the student that is counterproductive and inadequate because the teachers sitting in the staffroom are usually indulged in discussions that interrupt the students' thinking process. Owing to this, the students cannot perform his best in the exam. For example, participant 4 narrates his experience of attempting his exam in the staffroom:

It actually happened that I had to request other teachers to kindly give me the space to dictate because I couldn't concentrate. They would come, and they would discuss their stuff. Mostly, I kept quiet out of respect, but sometimes,

when I was really lost in my content, then I would ask them to please allow me to think.

Likewise, participant 3 says, “That was irritating for me...So many teachers start their conversation and do their gossips like this.” Participant 3 also points out that the teachers also used to comment when he would dictate his paper to his writer: “They confuse me. No, no, no, no, no, this is not related to your paper like you speak wrong wording. Your grammar sense is poor.” Participant 3 further says that the teachers would start reading his paper intentionally or unintentionally: “Knowingly or unknowingly started reading my paper at that time while I attempt my paper. So, I have no words to explain my feelings.”

Hence, these experiences of the students signal that how NUML fails to practice inclusivity by locating places like corridors and staffroom to the students. These insights highlight that making the students sit in the corridor and staffroom is not an adequate solution as it in itself is an issue that the students again experience. According to Bolt (2005), The SMD “enables recognition of the fact that people are not with, but frequently confronted by, disability.” Consequently, the faculty’s lack of awareness and negligence of the institution in fostering inclusivity lead to suffering of the visually impaired students. Analyzed from the scope of the SMD, these actions not only hinder the academic performance of the visually challenged learners but also reinforce further marginalization.

Since the students have an equal right to attempt their paper in a quiet environment, they should not be marginalized and should not be forced to conform to the dominant norms. Instead, the university should accommodate them and allocate a comfortable, quiet and separate place which is also mentioned by Parveen et al. (2024) because the students need to articulate their thoughts to their writer to write in the examination. Another point is that if there are two visually impaired students having their writers, two separate rooms are required for them because one student dictating his writer can be a cause of disturbance for the other student. Thus, to provide an inclusive environment and to empower the students to achieve their goals, the university is required to take these matters into consideration.

4.1.2.2 Difficulty in Using Computers for Examinations

The students who use computers for paper attempting have to cope with a different set of challenges from the students who use human assistance. The students

already go through hardships when they have to rely solely on their auditory and tactile senses that significantly pose challenges for them as they do not see the screen. The students first find it difficult to switch to computers. Second, using computers has its own drawbacks such as a sudden power cut, accidental disappearance of the files or answers, no extra time given to the students which add to the challenges that they encounter. As a result, the problems like these, existing in the environment, work as barriers for the visually impaired students that hinder them to progress in their career.

4.1.2.2.1 *The Challenges in Transitioning to Technology for Attempting Papers*

The students find it difficult to switch to computers for paper attempting because in their earlier experiences, they did not use computer for paper attempting instead, they used Braille or human assistance. So, the decision to choose computer is difficult for them because they always want to minimize the risks that they can have while using computers. There are students who do not possess the necessary skills, and there are those who possess the skill, yet they hesitate to use it. So, usually, there are always external factors that compel them to choose computers.

For instance, last minute cancellations by the writer and his incompetency are the major factors that force the students to choose computers to be independent. Participant 6 states that his writer could not come, but he sent his sister to assist him. He felt very hesitant with her as it was his first attempt with a female writer. His writer also disappeared in the examinations of matriculation, due to which he had to repeat one subject. So, learning from his experience, he decided to opt for computers for paper attempting. Though his speed was slow, and he had to leave one question in every paper, he decided not to depend on others.

Similarly, participant 9 describes that his writer refused to come when he was leaving his home. Although he had the required computer skill, he was not certain about whether he would be able to manage it or not. When he received his call, he went to the university and discussed the matter with the coordinator; however, the coordinator resisted to allow him to use computer basing his argument that a sudden decision taken by the student does not justify the change of mode of examination that the student is already using. The participant stated that he would not be able to take the exam otherwise. Then, the coordinator allowed him to use computer.

On the other hand, participant 7 chose computers when he joined university because he observed that the writer was not competent enough that he could assist him

in attempting the paper of English, due to which, his performance in the exam was negatively affected. He realized that he had to improve his technological skills along with his language skills to excel in his studies. He describes that he became comfortable with using computers. Despite the fact that he had to face other types of challenges, at least he became independent of others' assistance.

He further describes that he had a complete hold on how to structure his text, how to answer the question and how to punctuate his text with accuracy which was always a matter of doubt when he had a writer. Participant 6 states that his spelling issue resolved as he started working on his spellings knowing that he would not have anyone to rely on. Participant 7, however, highlights that the students get support from the system through auto correction. He suggests that this should not be taken as an unjust practice considering that the students do not read but listen to a text. He further states that the students should be encouraged to use technology for paper attempting. They should be made to practice their technological skills, and the university also needs to understand their type of impairment and the level of skills that they possess.

4.1.2.2.2 Disruptions due to Power Outages

The students relying on technology face issues in case of power cuts. Unlike other students, they have to wait for the electricity or generator to run in order to resume their work, due to this power outage, their time is wasted, and they lose their work as well if they do not save it which causes them discomfort. For example, participant 7 reports:

The computer I was using in the lab; it was directly connected to electricity. It was not having any backup for electricity. So, what happened that if the electricity is gone, if there is any power shortage, then I will be waiting for when the light will come back or when the generator will run again, I will be resuming my answers. So, I was actually trying to save my answers every five minutes or ten minutes which was also a big problem.

Likewise, participants 9 and 10 faced the same difficulty, and participant 9 points out:

Sometimes, the electricity, as it is in Pakistan, when the light would go, then the computer would shut down, and when the computer, the PC would shut down, you would have to wait for it, and you know, you would have to, just to avoid wasting or losing your work, you had to press Control S, Control S, control S all the time.

On the contrary, participant 4 cannot type as he is challenged from his hands as well that restricts him to type. So, he uses software called Dragon for paper attempting. He uses his own laptop for the purpose. He reports that once his laptop went out of charge: “I lost my entire exam. I was writing for one and a half hour, and this happened in my MS.”

Thus, these experiences of the students show that the institution remains unable to provide both sighted students and visually challenged students with equal opportunities, due to which The students having visual impairment remain at a disadvantaged position. More specifically, the reliance on computer is not an issue, but the problem is the absence of systematic supportive solutions that are stable. Since the students have to struggle with technological issues that are combined with no proper solutions and support for backups or accommodations like provision of extra time, this unsupportive environment causes them panic and results in deduction of marks. Oliver (1996) posits that disability is not an outcome of bodily pathology but a result of social and economic structures that exclude and undermine the presence of impaired people. Such an economic structure can be observed in the institutions’ failure to provide adequate arrangements for the visually challenged students.

Therefore, the university should invest in providing reliable solutions to prevent the students from facing disruption due to a sudden power cut. Generators can serve as a temporary fix, but they often cause delays when switching power which leads to wastage of valuable time. So, the university should invest in purchasing Uninterrupted Power Supplies (UPS) as the installation of UPS can ensure the running of computers seamlessly in case of a sudden power cut. The maintenance of the systems and power checks can minimize the risks of disruption and discomfort as well. By taking these measures, the university can provide a comfortable environment free from disruptions that is needed to concentrate solely on the exam.

4.1.2.2.3 *Disappearance of the File*

An accidental deletion of the file also causes anxiety and distress among students since they are not trained to give papers using technology. The students rely on screen readers, and navigating the files using screen readers is slower and a bit complex. Additionally, all students do not possess the skills to deal with such situation, and during exams, any mishap like this can result in failing the exam as no extra time

is given to them. Taking into account such considerations, the process of recovering the file for the students is equally challenging.

For instance, participant 7 mentions:

My file on the system, but the file is not there. I save my answer, but the answer is not there like technical problem some technical problems. I save my file, and close it, and the file is corrupted... some of the time what happened that I saved my file, and when we opened it again, there was one question missing, and the time was already completed..., and I don't know that it is deleted. When I give this paper to the teacher, he tells me that your one question was missing or to the invigilator, and he tell me that one question is missing...

Participant 7 also describes that they format the file without seeing it, so “trying to bold it somewhere”, and “trying to justify it somewhere”, they press some button mistakenly, and the whole part gets deleted: “I don't know that it is deleted.” Participant 9 also mentions the same issue of formatting that he is not “good with formatting.”

To add, participants 7, 9 and 10 state that the administration was also facing some problems. They used to take the paper from the student in a USB, and when they would go to take a printout of it, the USB would be corrupted. Participant 9 shares his experience, and he explains that once his teacher did not get his paper. When the teacher announced the result in the class, he came to know that he was marked absent. Then, the participant inquired the matter and came to know that the administration forgot to hand over the paper to the teacher: “I would have to be very attentive and vigilant to make sure that my teachers get my printed paper.”

So, the loss of the file due to various factors like formatting errors, corrupt USB, and delay by the administration to deliver the paper on time can cause major setbacks to the student. The students use computer for attempting the paper independently, but errors like these can unjustifiably penalize them that reflects the Social Model of Disability which posits that it is not the impairment; rather, the society creates disabling barriers (Shakespeare, 2010). So, these administrative and institutional failures create hurdles for the students and make them struggle with the circumstances beyond their control.

To cope with the challenges, the participants started using some strategies to avoid such problems. Participant 7 describes that he would not work on a single file,

but he would make multiple files and would make a separate file for each question. Participant 7 also states that he started using email for paper submission because this way he would have a backup as well. Moreover, he would also seek confirmation from his teacher whether he/she received his paper or not. Likewise, participant 9 highlights that he had a teacher, Sir Zahid who used to be his invigilator during examination. He would help him with formatting the paper. In his absence, the student had to struggle with it. It also highlights that the institution should conduct a session on formatting and auto-saving platform so that the students would not face such problems.

4.1.2.2.4 No Provision of Extra Time

No extra time is given to the students who use computer for attempting their paper which signals the major problem of lack of accommodation considering their specific needs. Some students need extra time, for they are late blind and are not familiar with screen readers. Even if they are by birth blind, sometimes their typing skills are not that polished that they can attempt their paper in the limited time because they have no prior experiences of attempting their papers using computers. To add, the computer skills of visually challenged students remain underdeveloped as both the groups either attending a special school or attending a mainstream school do not use computers for attempting their papers; rather, they use braille and human assistance respectively. Moreover, unlike the sighted students, the students with visual impairments need to reread their content to connect it to the next idea which is also a time-consuming task.

Despite these facts, when they use computer, it is considered that they have already been given a favor as they are given a choice to select their medium for giving papers. So, they should not demand extra time from the administration. However, it is overlooked that they are blind, and no extra time given compounds their difficulty. Some margin is given to the students with writers but not to the students with computers as the students using computers do not dictate but type, it is assumed that they do not need extra time. However, they may become a victim to any mishap like power outages, deletion of the file, etc.

For example, participant 8 says, “Yes, time management is an issue. They do give you time with a writer, but they don't give you time when you attempt your paper on computer. So, yes, this is a problem.” Participant 6 shares his experience of discussing the matter with the administration:

We did talk to the administration, but they were of the view that they were already giving us a great favor to allow us to attempt the paper using a different mode, and we had no right to ask for extra time. It would be too much to expect from the administration.

Additionally, they require extra time as per their different needs, pertinent to their unique case like late blindness and no or lack of experience to use a computer for paper attempting. For example, participant 4 describes that he was also expected to attempt his paper within the given time despite the fact that he had two impairments. He explains that he is late blind and does not have hands, due to which he cannot type. So, he used Dragon for exams. Dragon is a dictation software that works with voice commands. Regardless of the requirements of his unique case, he was compared with the other blind students who use computers. He describes that the blind students whose typing speed is good enough are taken as a standard to make policies. However, his case was different from theirs as he would face the same type of challenges with the software that he would face with a writer:

In my case, I had to explain to them that I cannot type. I can type, but for typing, I take I think one hour or one and a half hour to write a paragraph because I write only with my right hand so, this is why when I started dictating, I had to make them understand that this is an accomplishment, but at the same time, you also need to understand that I have only replaced a writer with a digital writer.

Furthermore, the students report that they need to revise whatever they write to connect it to the next idea. For this, they again have to go back to previous idea to write the next one which also requires extra time. Unlike visually challenged students, Sighted students have the advantage of viewing the text which they have already composed while writing because their vision enables them to remain visually engaged and mentally connected with their written text that supports their cognitive process to ensure the natural flow of thoughts. So, without deliberate efforts, they passively skim the text which helps them in writing the next part. Visually challenged students, on the contrary, have no visual contact with their written text because of which they require auditory or tactile interaction with their text to make it coherent that consumes time. Further, if it is coupled with any other problem, it obviously exacerbates the situation.

To illustrate, participant 6 says that he faced difficulties in this regard. As he just started using computer to attempt his papers, his typing speed was slow. Moreover,

he had to reread whatever he had written already that negatively affected his performance in the exam. He mentions, “Yes. You need to know what you have written and you haven't. So, this was a very major issue that I had to face in the exams that I had to leave one question in every paper.” He further highlights that they were “not at all” given extra time. They were just given a few minutes if they would say that they have to just “go through it once or compose it a little.” Otherwise, extra time was “never” given to them:

The teachers used to not wait for us. They would simply say that extra time is not allowed, and we have to go back home...So, they would pressurize us to complete our paper within the given time and would never allow us extra time that we had being a blind person.

Likewise, participant 4 describes:

I would do the same thing that I would do with the writer that I would go back to my answers, and then listen from the beginning to make sense of the entire content. So, it becomes time taking. It does become time taking... I lose this thread in my mind of what I am dictating about...

Therefore, no provision of extra time creates hurdles in the way of students. Since they navigate the file using software and not using their vision, they need extra time which is not given to them. This reflects the Social Model of Disability that it is the institution creating disabling barriers for the students by not understanding their unique needs. Due to this, they are made to suffer and are rendered unable to achieve their academic goals. So, the university should understand the idiosyncrasies of each case and should allow them the required time to complete their paper.

4.1.3 Pedagogical Shortcomings

Despite being a part of inclusive education, the students suffer from hardships like exclusive methodology of the teachers. The inaccessible methodology rather than individual's impairment poses barriers in the way of students (Nthama & Annie, 2019). This becomes the reason that they cannot navigate through their academic career smoothly. These environmental and social barriers obstruct their way and make them disabled (Spectrum Centre for Independent Living, 2018). The environment fails to include them properly (Oliver, 2013). As a result, they experience learning disabilities.

More precisely, the teachers while using visual aids undermine the presence of visually challenged students in their class and ignore the other important means to teach

like auditory input that is essential for the students experiencing blindness. The subjects like Phonetics and Phonology, Grammar and Syntax and Foreign Language pose serious issues for the students as the teachers solely rely on visual representation to teach these subjects. Additionally, some teachers show discouraging attitude towards the students. So, all these factors contribute to causing disability. “It is society’s attitude that prevents people to participate” in activities (Spectrum Centre for Independent Living, 2018). If the teacher does not adapt his/her methodology considering the needs of impaired students, it negatively affects the academic performance of the students (Nthama & Annie, 2019). This particular barrier has a negative impact on the motivation of the students. As Gardner (2005) states, it is not only motivation but also the external environment that influences the success of the learner.

4.1.3.1 Absence of Verbal Description while Using the Whiteboard

The use of white board in an inclusive classroom creates inequality between sighted students and sightless students as the teacher designs his/her methodology considering the sighted student and excluding the needs of the student with visual impairment. According to The Union of the Physical Impaired Against Segregation (1976), the society disables people “through being excluded from full participation.” The visually impaired students are included physically in the class; however, their presence is not considered while delivering the lecture. More specifically, the lecture is delivered exclusively for the sighted students which creates a gap in the methodology of the teacher since the teacher fails to use other mediums of teaching that are mandatory for an inclusive setting. As the students do not get proper auditory input from the teacher, it hinders their ability to perform equally as their counterparts. The teacher does not verbalize the written text on the board as reported by all participants. For example, participant 1 states:

Every teacher has their own way of teaching, teaching style. When I tell my teachers, they say, “I will do it. I will do, I will do.” but when they write on the board. They don't speak out... I don't understand the topic. I don't understand what we are studying.

Participant 5 also mentions:

No teacher told me that I wrote this on the board or today we would study this. When you have a special student in your class, you have to give attention to that student because if you treat him like the other students, it does not

work. The special student won't be able to keep up or perform well.

Likewise, participant 6 reports:

Sometimes I had to face difficulties while the teacher writes on the white board, and he or she did not speak even a single word. It was very difficult. Sometimes I asked my class fellows or friend what he or she was writing, but because they were writing. They were busy, so they could not help me at that time.

So, the absence of verbal description restricts the students from their right to be treated equally in the inclusive setting as the lack of insight to the accessible requirements creates hurdles in accessing the material. Participants report that the teachers unaware of the needs of visually challenged learners pose the same type of difficulty every day for them. To illustrate, participant 4 says, “The teachers, they use white board all the time, and every time I experience the same difficulty because I had to ask them to read what they are writing.” From the angle of the SMD, when the presence of a non-sighted student and his/her needs are overlooked, the environment restricts the students from accessing the board.

In this regard, participant 6 suggests:

Teacher should ensure inclusivity in the class. A student can only access the board if the teacher verbalizes it. If the teacher keeps on writing on the board, and he is not speaking a single word out, how would a visually challenged person come to know that what the teacher is writing. So, the teachers should speak out whatever he writes on the board.

On the contrary, participant 9 also shares his positive experience in relation to the issue under discussion. He states that he had a teacher who was very helping: “Sir Zahid helped me a lot especially when he was writing on the board, he would read it out, and he would also come to me.” The responses show that the students are motivated as they seek assistance from their teachers and fellows. According to Gardner (2005), motivated individuals have strong desire and they “express efforts in attaining the goal” which is evident that the students’ desire to access the board is intense, and they express efforts by requesting the teachers and their fellows.

However, they are impeded by the external environment. Such practices are rooted in ophthalmocentrism that considers sight as the dominant mode of communication (Bolt, 2005). Bolt explains that in routine social interactions when a

person with visual impairment becomes unable to recognize any individual, it is not because of his impairment; rather, it is owing to the sighted conventions that demand visual identification.

However, when someone introduces himself by taking his name, he breaks such conventions and contributes to the enabling interactions. Likewise, when this principle is applied on classroom interactions, teachers verbalizing the whiteboard foster inclusivity and challenge the visual bias central to instructional practices by shifting from ophthalmocentric norms to inclusive verbal communication. Therefore, the environment should be made inclusive, and the teachers should verbalize whatever they write on the board to include the visually challenged learners in the learning process.

4.1.3.1.1 *Ineffective Use of Demonstrative Words*

The use of demonstrative words to explain the material on the white board or slides further exacerbates the situation since it causes discomfort among visually impaired students as they cannot understand the visual cues. They do not know what is being referred to when the teachers use demonstrative words. This gap results in less engagement with the content, and the visually impaired students get marginalized relative to their counter parts.

Hence, this barrier is the outcome of pedagogical shortcomings that create disabling environment. Within the framework of SMD, various factors can work to make a person impaired, but it is only the society that makes him/her disabled (Bolt, 2005). Gardner (2005) also supports this view that the external factors rather than intrinsic factors like methodology of the teacher also affect the language learning process. This highlights the need for necessary adaptations in pedagogy that can cater to the needs of all the students.

More specifically, the students report that the teachers using demonstrative words are unable to explain any concept to them. Participant 1 expresses that his teacher uses demonstrative words that makes him uncomfortable: “Yes, I swear that’s what happens. I feel like crying.” Participant 3 also describes that he has been facing these challenges since his childhood.

When the teachers explain the concepts using demonstrative words (this, that, these, those), it creates a gap in the methodology of the teacher which ultimately creates a barrier for the students that hinders their ability to understand the concept. When

viewed from the lens of SMD, unclear encoding of the message on the part of the speaker is a barrier in the way of students which is not related to their impairment. To remove this particular barrier, it is essential to give verbal description for the student having visual challenges to include them in the learning process.

4.1.3.1.2 *Difficulty in Retaining Verbalized Content*

Another level of difficulty that the students face is that they cannot retain the points in their mind even if the teacher verbalizes it. To illustrate, participant 4 highlights that he had to request his teacher first to verbalize whatever he was writing on the board. He narrates that some teachers would come and write points on the board and would ask the students to brainstorm using those points. Even if the teacher verbalizes the points, he “would forget.” He states, “If there are six points, I forget I think two of them.” Sometimes, he would ask the teachers to repeat the points, but most of the time, he would not. He would take help from his seat fellow.

However, he would feel hesitant to take help from them if he forgets the points, “Sometimes, I would feel shy of asking them too because when it is a pattern, I got really embarrassed again and again, I need to ask them...” So, he would “choose not to ask them.” So, the student coped with it in a way that he used to gather those points from the discussion of other students. This suggests that the teachers are not only required to verbalize the illustrations given on the whiteboard but also need to repeat the text, so the visually impaired students can also participate like other students.

4.1.3.2 Problems in Technical Subjects.

4.1.3.2.1 *Grammar and Syntax*

When it comes to teaching tree diagrams, the teachers use white board to make the students understand complex grammatical lexical relationship. However, this technique excludes the visually challenged learners and makes it difficult for them to understand the concept. Since the teachers do not use alternative methods like tactile or verbal explanation, it becomes difficult for the students to grasp the concept (Nthama & Annie, 2019).

For example, participant 1 expresses that his teacher would draw the diagram on the board, and usually she would not verbalize it: “I ask ma'am to please speak out for me please speak out for me. I ask her once, twice, thrice. Sometimes the teacher explains it to me, but most often, she explains it on the board...” Participant 6 also

mentions, “There was no additional step ever taken for us to make us understand those tree diagrams. Rather, we faced this question that how we will do that.” This highlights that the lack of inclusive methodology by the teachers excludes them from the learning process which makes them suffer.

4.1.3.2.2 *Phonetics and Phonology*

The subject Phonetics and Phonology heavily relies on visual representations, so the visually challenged students cannot recognize the phonemes. For instance, participant 6 mentions that he was unable to understand the phonemes “because the symbols were in image form.” So, using only the white board for teaching the subject makes it a challenge for visually challenged students. First of all, the teacher is unable to recognize the presence of the student having impairments. The second level of challenge that the students face is that the teachers are unaware of the needs of the students having varying level of impairments, due to which the teachers fail to adapt the methodology as per the level and the type of impairment the student has, that eventually results in creating and enforcing barriers for the visually challenged students to comprehend the concepts effectively. The SMD states that disability is caused by the society for not being able to remove social, economic, and environmental barriers (Forber-Pratt and Aragon, 2013). Likewise, the institute also remains unable to remove such barriers from the environment as mentioned by the participants.

For example, participant 1 explains:

Yes, he was aware of the issue. He knew that I was blind. The teacher said to me, “you are the first blind student whom I am teaching Phonetics and Phonology and who is facing difficulties in learning it. I myself don’t know how to facilitate you.”

Participant 4 also shares his experience:

In Phonetics, you have symbols, and the teacher would write those symbols, and then articulate sounds. This is /e/ sound. This is /b/ sound and /d/ sound, etc. So, in the first two classes, I sat quietly, but then in the third class, I said that ma'am I am not getting this. You just say that this is the sound, so, how do you point towards the sound? So, she said that I actually draw the symbol. So, I was supposed to recognize those sounds through these symbols, but it was difficult for me.

These responses indicate that the teachers do not consider the presence of such

students in their classes since they lack proper training to include the special students, they are unaware of the fact that the students having visual impairments need to be taught differently. Similarly, participant 7 also describes that his teacher “tried to assist him, but it was not in her strength” to assist him. His teacher took 44 A4 size paper, and with a black marker, she drew each phoneme on a different paper to teach him. Unfortunately, his eyesight “was not so much good that he could benefit from that.” The teacher being unaware of the level of the disability thought that the student would be able to see that: “It was a positive gesture from her.” This shows that the teachers despite their efforts to teach such students fail to teach since they lack proper training. Therefore, it is necessary that the teachers should adapt the methodology not only considering the student with visual impairment, but also taking into account his level of impairment. For partially blind students, large font can work, but for some students who are completely sightless, the teachers should shift towards tactile learning.

As per the lens of SMD, it is the ineffective methodology of the teachers that creates a hurdle, making the students unable to understand the phonemes like other students. If the teachers adapt the methodology considering the needs of the students, the students can be taught these phonemes as their motivation to the understand the concept is evident in the responses. Therefore, teachers should involve other senses of the learners to include them in the learning process rather than centering their methodology on vision (Zangi & Annie, 2021).

4.1.3.2.3 Support from Class Fellows

The class fellows of the students helped and supported them to the best of their abilities. In Grammar and Syntax, the class fellows of the students helped them in comprehending the tree diagrams during class by drawing on their hand. However, the students were unable to understand the diagrams completely, given the fact that they have larger structure, yet this effort contributed to making the concept clearer.

To add, the visually challenged students themselves had to guide their class fellows to extend support in various forms which suggests that the visually challenged student can also guide other students if they themselves are trained how to solve their problems with the help of others. When the students guided their fellows, they always received a positive response from them. For example, in the subject of Phonetics and Phonology, the students report that their class fellows would help them during the class by making the phoneme on their hand. Participant 1 mentions, “Some good guys told

me that the sign looks like small ‘p’, this sign looks like small ‘t’.” The participant uses the words “good guys” which suggest that he acknowledges the supportive learning environment that is crucial for second language acquisition. In addition, participant 10 explains that his friends would make the phonemes on film embossing on his request. Participant 4 also shares his experience that his class fellows helped him:

My class fellows, they actually got together and shaped different wires into those symbols. I had a chart of those symbols that every class fellow tried to prepare. So, that chart was really helpful for me. Two of my class fellows who topped all classes they volunteered to teach me those symbols after every class...

This solution was proposed by the participant himself. His teacher taught him different shapes like circle and triangle at his school level. Despite the fact that his school was also a mainstream education system, his teacher first understood his problem, and then devised a strategy to teach him those shapes. So, the participant also adopted the same strategy to learn the symbols which indicates that the teachers of NUML can also adopt and adapt the methodology as per the needs of their students.

Further, participant 4 also gave the chart to participant 1 to learn the phonemes. Participant 1 explains, “He gave me a chart having these symbols... I asked some friends to help me learn that. So, after every class, they used to teach me for 10 minutes...” It suggests that the students exhibit a strong motivation to learn these symbols as they spend additional time after the class to understand the concepts which means they are aware of the fact that learning these phonemes is essential to get good grades. According to Gardner (2005), a motivated individual takes part in the activities to achieve his goal which the participants do if provided with opportunities. Another essential point which these insights suggest that networking is one of the essential skills which the students should develop as it helps them to navigate smoothly in their academic journey. So, the students should be connected to each other for better learning experiences.

4.1.3.2.4 No Modifications in the Question Papers.

4.1.3.2.4.1 Grammar and Syntax. When the students are given the question of tree diagrams in the paper like other students, no adaptation is done to suit their needs. Rather, the students are expected to attempt the question without giving them any

guidance. Considering the fact from the lens of SMD, this works as a disabling barrier which makes them lose marks in the paper, hence also affecting their motivation.

However, the students devise their own strategies to solve the question, yet it remains challenging to make the writer understand. For example, participant 4 points out, “The key was to remember their instructions that I needed to give to my writer because I wasn't seeing where the drawing is being drawn. “Participant 1 also mentions that it was difficult for him to guide his writer as “he was puzzled.” There was a question in his paper of 15 marks that had seven to eight tree diagrams, but he somehow drew only two and left the remaining: “I guided him a little that how he had to draw NP, and where he had to draw PP, but it was extremely difficult so, I only drew 2 tree diagrams.”

The students explain that their class fellows and family, however, helped them to the best of their abilities in order to make them understand those tree diagrams. Moreover, the students using human assistance in the paper report that their class fellows even showed the tree diagrams to the person who was going to assist the student, yet it was hard to attempt the question. For example, participant 4 says, “My class fellows, they explained every kind of diagram to my writer, but during the exam, it was more of a guessing game for me.” This still remained a challenge because the students are not taught the concept that they can attempt such a question in the paper. Secondly, considering its visual nature, it is difficult for the students to guide their writer to draw them even if the students have command over the topic. Thirdly, the writer who does not understand the concept cannot be expected to replicate them accurately. To add, it is the student who should be made capable of demonstrating his knowledge in the paper since this is the students’ exam and not of their writers’.

Moreover, participant 6 describes that it was not possible to make the diagram in Braille because the teacher would not be able to understand it. On the other hand, the participant did not have that much expertise to make them by using computer. So, the students using computer for paper attempting, devised different strategies for themselves, and they just explained the tree diagram in descriptive form. For example, participants 6 and 9 gave a descriptive answer in the paper, while participant 7 gave a tabular representation. The students report that they, being good at visualization, are able to understand the concept when the teacher explains it in the class. However, it is difficult to capture the tree diagram in their mental map. So, they show their concern that they do require a person to assist them in understanding the concept because they

need to ensure that their mental image matches with the actual illustration presented in the book. These insights further show that they should not only be taught the particular concept, but they should also be trained how to attempt such a question during examinations taking their preferred medium or mode of examination.

From the point of view of the SMD, these papers, being unmodified, are a major barrier as they make the students lose marks in exam which affects their academic journey. “The learning environment is very important and can certainly aid students.”, Gardner (2005) states, according to which the learning environment needs to be made inclusive by employing inclusive methodological strategies and flexible examination practices.

4.1.3.2.4.2 Phonetics and Phonology. Despite the fact that transcription is a question that can only be attempted if the students know the symbols that are known as phonemes which represent sounds, the visually challenged students are required to attempt such questions in the exam. However, they are not taught those phonemes as per their needs that would enable them to solve the question in the paper. If they understand, the next problem that they encounter is how to make their writer understand the phoneme that is to be drawn on the paper because the writer is not familiar with those phonemes. Both groups of the students whether using computer or writers experience difficulty in attempting the question of transcription. In this regard, participant 1 points out, “My writer was looking at my face. I was telling him, and I don't know what he was trying to write...”

Participant 5 also mentions, “It was next to impossible to make my writer understand those symbols as I myself did not know how those symbols looked like.” Participant 6 narrates his experience that his teacher asked him to explain the sounds in explanatory form that existed in a word.” In addition to the gaps in the methodology of the teachers, the paper is not adapted considering the needs of the students. Further, the students are asked to find a solution themselves to attempt the question. For example, participants 6 and 8 state that their teacher did not know how they should attempt the paper. She asked for suggestion from them. The students did not know the solution themselves. Consequently, the students could hardly pass the exam.

Therefore, this rigid and inflexible assessment criterion leaves the students stranded and at a disadvantaged position. In the light of the SMD, the society, failing to accommodate the needs of the impaired people, restricts them to participate in the activities. So, it is not the individual to be blamed but the society (Shakespeare, 2010).

In this case, it is the inflexible examination system.

However, participant 4 states that he used the chart in his paper to make his writer understand those symbols: “I got permission from the HoD to use that chart as a means of explaining transcription to my writer...” He took two hours to complete his paper, whereas the other students took one hour: “I did well Alhamdulillah in those exams.”

On the contrary, participant 9 attempted his paper using computer in the end term, and he also took permission to keep the soft copy of the chart during examination because he was unable to draw those symbols on MS Word. So, he “Copied and pasted, copied and pasted” from the chart to attempt the question of transcription in his paper. In the midterm, he had a writer from Advanced Diploma, and he guided his writer before the paper that how he would dictate the symbols. So, it became easier to work with that writer because the students of Diploma also have this subject of Phonetics and Phonology: “He was a good one, and he knew about the signs, the symbols...” These instances show that the department, despite being its institutional duty, does not assess the condition proactively and devise an appropriate solution, yet it does understand the situation only when informed by the participant. So, the students are left to devise their own strategies to solve the problem. As Khan (2023) also explains, the students try to solve such problems in their individual capacity, due to which every new visually challenged student is confronted with the same challenge.

Participant 5, after attempting the paper, discussed the matter with the HoD who was also his subject teacher which also highlights the institution’s failure to have anticipatory assessment of the matter:

I talked to the HoD in his office. As I told you, he was really nice. He said that he would see it. He asked me to tell him some sounds and then asked me to go back to my class.

Since the teacher did not consider the fact that the student would have problems in attempting the paper, he made no modifications in the paper. The student did not discuss the problem with the teacher before exams either. Thus, the student just obtained passing marks. On the other hand, there was only one teacher in the case of participant 1 who also after observing the bad performance of his student in midterm exams realized the particular matter and consequently, prepared a different paper for the participant on the request of his student. However, there was a question of

transcription even in the modified paper that was of only five marks, yet the student failed to make his writer understand the phonemes as he was not using any aid to make his writer understand. So, he still remained unable to attempt that question. The participant reports that his writer turned “mad.” He made the symbol on the writer’s hand and told him that he had to make the exact symbol on the paper. For “confirmation”, the participant would then ask the writer to draw the same symbol on his hand.

These efforts of the students show their level of motivation to perform to the best of their abilities in their exams, and the effort to achieve the goal is one of the key qualities of a motivated individual (Gardner, 2001, as cited in Lai, 2013). The instances also show that the experiences also varied from teacher to teacher and student to student. Therefore, upholding the standard of fair examinations, the department needs to devise a standard to teach such students these concepts and different methods of solving such questions in examinations while accommodating them as per their needs.

4.1.3.3 Difficulty in Learning Foreign Languages

The students face challenges in learning any foreign language like Spanish and Russian because they have to learn orthographic script of the language to attempt their paper. They come in contact with the language for the first time when they have it as a course in the program, which poses difficulty in the way of the students. For instance, participants 4, 7 and 9 experienced this difficulty. Participant 4 states that he discussed the matter with his teacher, and his teacher asked him to take an oral examination for the subject which made the task more challenging for him, as he had to converse for 10 to 15 minutes in Spanish with his teacher. He describes that his teacher was “asking one thing”, and he was “answering another thing.” He states that he did not deserve to be passed in the exam, but still his teacher passed him.

Participant 7 also describes that he had to study Russian language in seventh and eighth semesters, and he states that it was very difficult for him to take a written exam for that course. So, he requested the HoD to allow him to take an oral examination who argued that if he could take examination of Phonetics and Phonology, he could also attempt the paper of Russian language. The participant in response requested him to have a glance at his DMC that the participant was holding in his hand. He further explained that he just obtained passing marks in that course and requested the HoD to consider the DMC of all the blind students enrolled, that were six in number at the time.

The participant also explained that he could not understand the “symbols.” Then, after having a detailed discussion, the HoD understood his problem. So, the application was forwarded to the Rector, and he permitted for an oral examination. Eventually, his teacher became his writer in his paper. Based on their experiences, the students suggest that university should facilitate the students and should not resist allowing different modes of examination.

4.1.3.4 Discouraging Attitude of the Teachers

The teachers exhibiting negative and discouraging attitude create a hostile learning environment that negatively impacts the performance of the students. The dismissive remarks of the teachers and refusal to cooperate with the students erode self-assurance and diminish the confidence of the students which ultimately makes them not to speak up even when they need to. As a result, they feel hesitant, and stop communicating their needs and problems. According to Khan (2023), “Motivation is affected by a variety of external factors, including the attitudes of teachers and peers, the learning environment, and the social context in which learning occurs.”

In this regard, participant 1 explains that in his online class, his teacher used slides and explained those slides using demonstrative words, which the student was unable to understand:

I asked him to repeat. I said, "Sir please repeat and make me understand." First, I just asked him to repeat, he was not understanding the problem. When I asked him to make me understand. He said, "I will not change my teaching methodology for you."

Participant 5 also states:

My experience with my teachers was awful. They all belong to educated families. The duty of a teacher is not to only deliver the lecture, but he or she has to put himself/ herself in the students' shoes and understand the problems that the student is going through because then, he can teach the student affectively. However, the situation was not like this.

Thus, the negative attitude is one of the barriers that the students encounter in their academic journey (Nthama & Annie, 2019). Such an attitude of the teachers discourages the students, due to which the students do not feel comfortable in the class. Analyzed from the perspective of SMD, this barrier stops the students to take part in the class activities. As participant 1 describes his feelings that he was an attentive listener in the class: “Afterwards, I was unable to focus and concentrate on the lecture.

I stopped asking question because I already knew his answer. I was afraid too that what if he insults me again...” Therefore, the teachers exhibiting a discouraging attitude create a disabling environment for the students. Instead, the teachers should understand the problems of the students, and should guide them instead of being a hurdle in their way. They should enable the students to smoothly navigate their academic journey. Further, participant 4 and 6 express that the same attitude of the teacher is handed down to the students as the students mirror their teacher. If the attitude of the teacher towards the visually challenged student is positive and encouraging, the students in the class also show the same attitude; hence, it is necessary for the teacher to reflect a positive attitude towards the student to create a healthy learning environment.

The above discussed problems explicitly describe that the untrained teachers center their methodology on the sighted students by excluding visually impaired students. The society disables the people by “excluding them from full participation” in activities (Bolt, 2005). In the same way, the exclusive pedagogy of teachers entrenched within the dominant practices of the inclusive education system, is taken as a standard practice resulting in further marginalization of the students having visual impairments.

To add, motivation is a trait of an individual and the teacher should be motivating as well (Crookes and Schmidt, 1991, as cited in Gardner, 2005). Gardner complies with this view and states, “A teacher can provide an environment that is conducive to learning by demonstrating expertise in the material, being supportive and reinforcing, being well organized, having interesting and exciting lesson plans, encouraging cooperation in the classroom, and being consistent in evaluating students, etc.” On the contrary, the teachers who do not consider the needs of the students with visual impairments create difficulties for the students. The students are included physically, but the methodology of the teacher is not inclusive which places the students at a disadvantaged position.

Moreover, society’s perspective about disability leaves considerable impact on the lives of the impaired people (Levitt, 2017). He further states, Since the society locates disability in the impaired people, it shifts away the responsibility from itself to the people. The SMD, however, posits that the impairment is not the cause of disability, but the society causes “disabling barriers.” As Oliver (2013) states that the SMD originates from the idea first appeared in the fundamental principles of disability

document presented in 1970s (UPIAS, 1970) which highlights that the people are not disabled by their impairments but by the disabling barriers erected by the society. Likewise, the teachers, unaware of the needs of such students, are one of the barriers in the academic journey of visually impaired students (Nthama & Annie, 2019).

The students are, however, motivated to achieve success in their career which is evident from these insights. Despite being excluded from full participation; they tend to participate to the best of their abilities. Nevertheless, they are obstructed by the external environment. As Gardner highlights, there are four key factors in language learning process that should be considered which include social milieu, individual differences, learning acquisition context and outcomes. Social milieu refers to the living environment and context of the individuals that influences individual differences. The individual differences include the cognitive factors and affective factors of an individual. The individual differences can be further categorized into four different variables. Intelligence and language aptitude come under the cognitive factor that determines the ability of the learner to grasp the linguistic concepts quickly. On the other hand, motivation and situational anxiety fall under the affective factors. The motivation decides the intensity of efforts that the individual applies to learn the language and achieve his goal, whereas situational anxiety refers to the effects on learners' efforts to acquire the language. The learning acquisition context, on the other hand, includes formal and informal context that affects the outcomes including linguistic outcome and nonlinguistic outcome. The linguistic outcome refers to the knowledge of language like grammar, whereas nonlinguistic outcome indicates the attitudes of the learners (Gardner & Lalonde, 1985).

In the context of this study, the social milieu, including a student's living conditions, medical history, prior schooling, and socio-cultural background, is ignored, and when the social milieu is disregarded, it negatively impacts their learning and limits the effectiveness of inclusive education. His individual differences, particularly cognitive and affective factors, are also ignored. Because activities are designed with an emphasis on visual intelligence which the participants lack, their unique aptitudes and strengths remain unrecognized. As a result, these practices lower students' motivation and increase situational anxiety. The language learning environment, shaped by mainstream norms and structures, often fails to include visually impaired learners. This exclusion leads to weaker literacy skills and leaves them with less

language knowledge than they should ideally have.

Therefore, the un-adapted systems and rigid structures hinder their ability to perform well in the activities. As Anastasiou and Kauffman, (2013) posit, Disability is not caused by the defective mechanism of the body; however, it is “a disadvantage or restriction of participation caused by a contemporary social organization that takes little or no account of people who have physical impairments and thus excluding them from participation in the mainstream social activities.” Similarly, the students are not included practically in the mainstream education system as the practices dominant in the institution are vision oriented, preferring sighted students to sightless students. Due to such preferences, the sightless students become oppressed as their presence is undermined. According to Anastasiou and Kauffman (2013), “Disabled people are the oppressed people” due to these dominant structures and norms.

Moreover, by ignoring the different needs of the visually challenged students, they are considered equal to their sighted counter parts, and are expected to function in the same manner. If “existing differences like disability” are discussed, there can be a risk of “unjustified discrimination”; if these differences are ignored, “the critical human needs” may be left untreated (Hallahan & Kauffman, 1994). Given this fact, the institution remains unable to strike a balance that can adequately address these two concerns. More precisely, the institution struggles to ensure the inclusion of the visually challenged ESL learners while accepting their different needs, in the academic activities.

Therefore, the institution reinforces the concept of disability by excluding the visually challenged learners and misinterpreting the meaning of equality because the students with visual impairments are considered equal to the sighted students, yet they are not provided with necessary assistance which can actually make them equal to their sighted counterparts. Consequently, the rigid examination system, inappropriate methodology and inaccessible reading materials become the impediments which impede them to perform equally as their sighted peers. When the students encounter such hurdles in their academic journey, they cannot achieve good grades essential for their academic and professional career.

4.2 Analysis of Observation Sheets

To explore the lived experiences of visually challenged ESL learners, six classroom observations were undertaken, focusing at the methodology of the teachers.

Maclean (2001) recognized that, “it is obvious that in inclusive classrooms, students learn in different ways. This is a challenge to teachers with diverse group of learners.” Hence, the primary aim of the observations was to explore and analyze the approaches and the techniques employed by the teachers to include the visually challenged learners. Additionally, the participation of the special students in various activities as well as the support that they receive from class fellows was observed. In this section, the observed data are presented in the form of themes to offer a systematic and in-depth understanding of the challenges faced by the visually challenged learners in inclusive classrooms.

4.2.1 Challenges in Accessing the Learning Content

The visually challenged students face challenges in inclusive classrooms due to the prevalence of traditional methodological practices. The pedagogical practices vary depending upon the subject and the style of the teacher. Teachers are major social agents during the teaching and learning process of the learners with visual impairment. A teacher’s general characteristics and role can either have negative or positive impact on a child (Luthans, 1989). Some teachers deliver an explanatory lecture using the textbook as a primary resource. However, some teachers rely heavily on the board along with the textbook to enhance the understanding of their students. These tools and visual aids can facilitate the sighted students, yet they pose challenges for the students with visual impairment by excluding them from the learning process. Resultantly, this exclusion creates disability since Oliver (1996) refers to “disability as the disadvantage or restriction of activity caused by a contemporary social organization which takes little or no account of people who have physical impairments and thus excludes them from participation in the mainstream of social activities.”

4.2.1.1 Challenges in Accessing the Material Provided in the Textbooks

The visually challenged students do not use book during the class, but teachers read out the material to the class which is accessible for the sighted students as well as for the sightless students. However, the sighted students access the material written on the textbook using their visual and auditory senses. On the contrary, the student with visual impairment solely relies on the auditory input that is given by the teacher that marks discrimination between the sighted students and sightless students. Within the framework of SMD, the absence of the text creates discrimination and hurdles in the way of the visually challenged students.

4.2.1.1.1 *Difficulty to Mark Quotations on Textbooks*

The students face challenges in marking the quotations on the textbook in class. The ability to underline and highlight important sentences facilitates the students to focus on the key points and to organize the text. So, the teachers instruct the students to focus on the lines she reads in the class and also informs the students to mark important quotations that she asks them to note down as they are highly essential in understanding the plot and different themes. For instance, in observation sheet number 4, the teacher guides the students to the page number and then to the line. She keeps on instructing the students that which lines are important. The students except the sightless student keep on marking the text that help them in justifying their answers in the paper. However, the visually challenged student only listens to the teacher and does not mark anything. Though he has a soft copy of the text, he cannot mark the text because for it, he has to listen to the book, and then he can mark it. In the classroom, the use of soft copy becomes obsolete as the student has to use software to access it which creates disturbance in the class. Even if the student uses ear phones, it is difficult for the student to listen to two different materials: his teacher, and the software. Additionally, no notes containing these important points are provided to the student considering the special need that makes him deprived of essential information required to achieve high scores in examinations.

4.2.1.1.2. *Difficulty in Understanding Tabular Representations in the Books*

The visually challenged students also face difficulty in understanding the tabular representation to illustrate a concept given in the book. This type of representation enhances comprehension of the students excluding the student with visual challenges. As observed in the observation sheet number 2, the teacher explains the table verbally that is accessible for the student with visual impairment but sets him at an unequal position relative to his sighted fellows that engage with the text both visually and aurally. However, the special student only has to rely on his auditory senses to completely understand the table:

She starts discussing a table given for Semantic Features. She says, "Okay, this table. Semantic Features. For example, there is a table. Alright? And you see the table. Table, the words which are given: table, horse, boy, man, girl and book. These are the examples given. Now, look at this. The other side of the table. Animate, table is animate?" Students reply, "No." The teacher says, "So

minus. What features does it have? Minus inanimate. This is human?" Students say, "No." Teacher continues, "Table is human?" Students answer in negation. Teacher says, "No, so minus human feature. This is female? Maybe in some languages..."

From this description, the table is understandable for the visually challenged student to some extent. However, the student does not engage with the text like his other fellows. Therefore, the provision of equitable learning environment should be ensured by providing tactile learning materials to make them equal to their sighted peers as the tactile learning materials can engage more with the text since their two senses will be involved such as the sense of hearing and the sense of touch.

4.2.1.1.3 Difficulty in Understanding Diagrams

The visually challenged students cannot benefit from the diagrams given in the books to enhance the understanding of learners. The teachers referring to the diagram do not realize that their students with visual impairment, who are also a part of the class, cannot understand it. They show the diagram to the students and explain it to some extent, but it makes the visually challenged student excluded from the learning process because they have to just rely on the explanation of their teacher for understanding the concept presented in the form of a diagram. As observed in observation 5, the teacher teaching phonetics and phonology, refers to two diagrams that he shows to the class on the screen. The first diagram that he shows is of the articulatory system of humans. Explaining it, he takes the names of different speech organs like larynx and vocal cords. He explains the concept that how the vowels are articulated and how consonants like nasals are articulated. For it, "he describes the place of articulation using the diagram."

The second diagram that he shows is of vowel quadrilateral, which he tries to explain to the class verbally while showing them the picture of it on the screen. He makes them practice the first sound that is /i:/ and encourages the students to feel that how the sound is produced. The student along with the class practices and tries to sense it. The teacher then explains the rest of the vowels referring to the chart and asks the class to see the diagram and answer the question. The sighted students look at the chart to understand it, whereas the student with visual impairment tries to feel it by practicing the sound listening to the limited description that the teacher gives. The student's effort to try and understand the concept indicates that he is motivated to learn the sounds, but the environment is not supportive. This unsupportive environment sets him at a

disadvantaged position by not providing him the necessary learning materials essential to perform well in the examination. So, the absence of embossed text and tactile materials leads him to experience this discrimination. As the institution provides an opportunity to all the type of learners to study together, it should also address the diverse needs of the learners to make itself truly inclusive. Therefore, the institution should provide tactile and embossed texts to ensure equal learning opportunities for the students with visual impairments.

4.2.1.2 Difficulty in Accessing the Board

The visually challenged students face difficulty in accessing the board. The teachers use the white board to make concepts clearer for the students. They write the main points and difficult terminologies for the students on the board. “Teachers used whiteboards as part of their teaching pedagogy, which is not particularly helpful for a person who cannot see or who may have severely limited vision” (Ali & Hameed, 2015). Hence, the visually challenged students can only access the board when the teacher or the fellows verbalize it. The teachers do verbalize what they write on the board, but they do not verbalize it consciously and specifically for the visually impaired student. They fail to verbalize the information written on the board in a way that they stop in the middle of a sentence without even realizing it. For example, in observation 1, the teacher discusses the complete exercise with the class, and the teacher assigns an activity to the class in which the students have to write on the board. While writing on the board, no student verbalizes the board to include the visually challenged student; rather, they silently solve their question. The teacher, on the other hand, discusses each sentence later on.

However, “a student makes some mistake, but the teacher does not announce what he has written; she just says that it is not correct.” Subsequently, she explains the correct form of the sentence, yet the visually challenged student does not come to know that mistake which could be a valuable piece of information for the student because he would be able to know what not to do. Additionally, the teacher’s discussion is accessible for the student, but it suggests that the teacher is not doing it specifically for the student since there is another instance that highlights it where the teacher again excludes the visually challenged learner from the class: “She discusses that the sentences must be understood in a linear fashion, and for it she draws a horizontal line on the board.” By doing this, she presents a visual representation for the linear

relationship for the class, but she does not realize that there is a visually challenged student in the class who cannot see that representation. So, he has to wait to understand the concept using the verbal description she gives afterwards.

Further, the student cannot read the words and terminologies that the teachers write on the board. The teachers do not spell out the difficult terminologies for the student having visual challenges that they write on the board. The teachers write key words on the board for the students to know their spelling. For example, in observation 1, the teacher writes syntagmatic and paradigmatic for the students. She does not realize that she has to speak out the spelling for the visually challenged student who should also know how to spell these words correctly. It is the right of the student to know the spelling; therefore, it should be made accessible for the students.

4.2.1.2.1 *Difficulty in Understanding Deictic Words*

Demonstrative and other deictic words have no meaning for the visually challenged students, and the teachers using such words create gap in their methodology because the special student is not able to know what is being referred to. They can only get to know the referent when its name is announced. For instance, in observation 1, the teacher sometimes uses deictic words to refer to a word: “She writes the sentence, ‘Mary left the house.’ She asks the class pointing towards ‘the house’ that what it is.” Using the word “it”, she excludes the visually impaired student from the activity. “To add, the teacher also uses ‘demonstrative words’ to explain one sentence. She uses ‘this’ again and again. She tells the class the grammatical functions. She is saying, “This is direct object. This is indirect object. This is a modifier, and this is complement.” These demonstrative words restrict her special student to answer the question.

Moreover, in observation sheet number 5, the teacher also uses demonstrative words to explain the diagram to the class. He shows the picture of the articulatory system to the class, and to make them understand the role of different speech organs in the production of different sounds, he uses demonstrative words which create hindrance for the visually challenged student to comprehend the concepts like that of his sighted fellows. For instance, “The teacher refers to larynx that is there on the screen using demonstrative word ‘this’.” This exclusive communication makes the visually challenged student suffer in order to infer the referent and causes disruption in the engagement with the lecture. Therefore, to make the classrooms truly inclusive, the adoption of inclusive communication practices is essential.

4.2.1.3 Difficulty in Taking Notes

The students having visual impairments find it difficult to take notes during the class. The notes are an important source for the students in which they record not only what the teacher writes on the board, but they also add their personal insights and understanding of the content studied in the class. Using the notes of someone else cannot withstand the effectiveness of the notes taken personally since they lack personal engagement and insight. However, the students with visual impairments have to rely on someone else for taking notes because they fail to take notes during the class due to multiple reasons. For example, in observation 3 and 4, the lectures are explanatory and verbal, yet the student fails to take notes in the class; rather, the visually challenged student just listens to the lecture. He lacks the necessary skills as he is late blind and he does not have Braille literacy. Additionally, he cannot use laptop during the lecture for taking notes since his typing does not match his teacher's speech rate. This lack of training deprives him of the important points highlighted by his teacher during the lecture. As a result, he depends on his fellows to share their notes with him after the class.

On the contrary, another student uses Braille to take his notes during the lecture. However, he is just able to take notes when the teacher or his fellows verbalize the content. The student is congenitally blind, so he attended a special school from where he gained this Braille literacy that became helpful even in an inclusive setting. Braille literacy makes him independent in taking notes to some extent. So, the students having Braille literacy can make their personalized notes by noting down the key points from the teacher's lecture and adding their own understanding. More precisely, the students can quickly transcribe their notes when the lecture is verbal, and they can also revise their notes independently the way the sighted students do. Therefore, the students need to be made independent to take notes during the class by encouraging them to use Braille or technology considering their unique case. Additionally, the institutions and the government should also focus on enhancing these additional skills of the students that experience late blindness.

4.2.1.4 Delayed Learning Process

The visually challenged students' learning is delayed due to the traditional pedagogical methods employed in the inclusive classrooms. The use of textbooks, white board, screens and demonstrative words need verbal explanations to be accessible for

the visually challenged students. The sighted students access the material as soon as it is shown on the screen or written on the board; however, the students with visual impairment need to wait for the verbal description.

It happens because the teachers first write on the board, and afterwards they verbalize it. For instance, in observation sheet 2, the delay in learning can be observed. The teacher is teaching the types of meaning to the class: “The teacher writes on the board ‘objective meaning’, ‘general meaning’, ‘denotative meaning’ below ‘literal meaning’. Then she writes ‘contextual meaning’, ‘subjective meaning’, ‘associative meaning’, and ‘connotative meaning’ below ‘local meaning.’” While writing a word, she announces it; however, she announces these words in a linear way which does not classify these terms clearly for the visually challenged student. He cannot know that which terms belong to which category, whereas the sighted students can immediately understand it and can take their notes. The visually challenged student does note down the main categories which are literal meaning and local meaning that the teacher announces. However, the student stops taking notes when the teacher announces the terms in a linear fashion because he gets confused. When the teacher again explains it, the student takes his notes which is the time when the sighted students are done taking their notes and are attentive towards the lecture.

Additionally, the use of deictic words also creates this delay in learning of the students. When the teacher points at a word or uses a deictic word, the students are dependent on the explanation that usually follows it. Taking the same instance mentioned above from observation 2, the teacher uses demonstrative words to explain the concept to the class which causes further delay. She uses a ‘demonstrative word’ after it. She says, “In Semantics, we are looking at what? This, this part. This sense.” However, after pointing towards that part, she announces all the words there and says, “conceptual meaning, literal meaning, objective meaning, general sense...” So, the use of demonstrative word “this” creates further delay in the learning of the student with visual challenges. Nevertheless, the teachers aware of these factors can minimize the risk of this delay by using strategies like announcing the text simultaneously and presenting the data verbally in an organized way that is clear for the special student.

4.2.2 Students’ Support and Collaboration

The interaction between sighted and sightless students depends upon the type of activity being conducted in the classroom. When the lecture is explanatory, all the

students are attentive towards the teacher, and any interaction at that time becomes disturbance. So, the visually challenged students solely rely on listening, yet the sighted students also take notes silently while listening to the teacher. However, the participants report that their fellows do send them the notes in the form of pictures and voice notes.

For instance, the interaction and collaboration among students can be seen in observation sheet number 1. The teacher pairs the students and assigns each pair one sentence to solve on the board. The sighted partner helps the sightless partner by reading the sentence to him. They both discuss the sentence and at the time of their turn, the sighted student guides the sightless student to the board: “The fellow helps the student, holds his hand, and takes him to the board. The student just stands there, and the fellow solves the question on the board...” While coming back to the seat, the visually challenged student bumps into a chair, his fellow behind him guides him, and the sightless student remains confident as well. This instance shows that there is collaboration between sighted and sightless student, and the sighted students support their sightless fellow to the best of their abilities. After discussing the sentence, only the sighted partner could have gone to the front to write on the board, considering that taking the sightless student along would be futile because he would only stand there. However, the sighted partner involves the sightless student as much as he can, but this collaboration depends on the type of lecture and the style of teaching.

4.2.3 Participation of the Visually Challenged Student in the Class

The visually challenged students participate in the class differently than the rest of the class. The sighted students actively participate in the lectures. They take notes, read the board, read the text, highlight the text, and ask questions from what they see. The sightless students, on the other hand, completely rely on the auditory input from the teachers, and they hardly take notes which is also conditioned to Braille literacy, and verbal description. So, their participation becomes restricted due to this environmental barrier, owing to which they are set apart from the rest of the class.

For example, in observation sheet 5, when the teacher shows the diagram to the class, the whole class examines the diagram, but the student with visual impairment tries to practice the sound after listening to the description given by the teacher. So, the way of participation of sightless student in the class may differ based on their different engagement with the content presented.

Moreover, consider observation 4:

He responds to the teacher once in a loud voice, but most of the time, he is listening to her silently. When she discusses the table about the components of Semantic Features, he remains completely focused and answers only once to the questions she asks. He just mutters to himself. He mutters thrice when she discusses about location, goal, and source. He understands it, and he answers the questions in a lower voice. The student is sitting in the last row, at quite a distance to the teacher so when he mutters, the teacher is unable to hear it.

This extract shows that the student participates in the class as he tries to engage himself in the class, and he stays motivated to learn. Even when his voice is unheard, he answers the questions which indicates that the student is determined to understand the concept, and he participates in the class activities to the best of his abilities. This particular instance also highlights that if the visually challenged student is seated at the back of the class, the teacher may have difficulty in hearing him. Since the student cannot make eye contact that is an important gesture for engagement, the teacher may struggle to pay attention to him which can further marginalize him by inadvertently influencing his involvement in an activity.

4.3 Discussion

This phenomenological study titled *Literacy Skills of Visually Challenged ESL Learners in 'Inclusive' Education Systems: A Phenomenological Study of NUML*, guided by Social Model of Disability by Mike Oliver (2013) and Socio-Educational Model by Gardner (2010), aimed at exploring the lived experiences of visually challenged ESL learners. The primary objectives of the study were to explore the lived experiences of visually challenged ESL learners in practicing their literacy skills in inclusive classrooms, to investigate the reasons behind the challenges that they face in practicing their skills and the ways which can be used to improve their literacy skills. This qualitative study used in-depth interviews and classroom observations as research methods to collect data that revealed constant themes.

The findings of the study show that the visually challenged ESL learners experience barriers in practicing their literacy skills in inclusive classrooms. The exclusive methodological practices, the inaccessible content and the rigid examination system are the barriers in the academic journey of the students that obstruct their path. These disabling barriers are not caused due to the impairment that the students face but due to the exclusive practices dominant in institutions. As Oliver (1996) states that

disability is “wholly and exclusively social.” Despite these barriers faced, the students pursue their journey with perseverance and endeavor to achieve their goal of performing to the best of their abilities, which shows their instrumental motivation driven by career- and academic-related practical purposes (Gardner, 2005).

The findings suggest that one of the problems which are experienced by the students is improper pedagogical practices prevalent in the institution. These practices are exclusive since these instructional practices are predominantly vision oriented. This finding aligns with the observation of Morelle (2016) and Hanif et al. (2022) who highlighted exclusive methodological practices employed in inclusive classrooms that ultimately became barriers in the academic journey of the students.

In the current study, the students report that the use of white board is common in their classroom, but the content written on the white board is not verbalized for them which excludes them from the learning process. They are further marginalized when the teachers use deictic expressions while explaining the content on the board which in turn contributes to delays in their learning. The students find it difficult to retain the information even when verbalized. The problem intensifies when technical subjects like Grammar and Syntax, and Phonetics and Phonology are taught in the classroom since such subjects heavily rely on visual representation, and to teach these subjects, white board becomes a primary tool. El-Nabih (2014) documented the similar problem that the students face difficulty in subjects like Syntax, and Phonetics and Phonology due to improper methodological practices. Moreover, the teachers cannot teach the students with visual challenges even when they intend to due to absence of required training. Above all, the papers of such subjects are hardly modified to needs of visually challenged learners which puts them at a further disadvantaged position because they are expected to attempt the questions which they are not even taught that makes them unable to achieve high scores in the examinations and obtain their desired academic goals.

Additionally, the data show that some teachers have a discouraging attitude towards them which demotivates them to move forward in their academic pursuits. On the contrary, the current study also observes that the students also have positive experiences with their teachers and their fellows. They highlight that there are teachers who encouraged them to participate and also admit the fact that they do not have adequate training to include them in the learning process. This aligns with the findings

of Acula et al. (2024) who also found that the teachers considered themselves untrained to teach visually challenged students.

Moreover, most of the students always receive support from their fellows. Their fellows help them to their own understanding. In particular, the students receive help from their fellows for subjects like Grammar and Syntax, and Phonetics and Phonology which assist them to understand the concept to some extent. Comparable to these results, both the teachers and the students were found to have a positive attitude towards inclusive education in the study conducted by Hanif et al (2022). The present study further notes that the visually challenged students should also be trained on how to guide others to help them to resolve such problems. When visually impaired students have the ability to initiate support by clearly conveying their requirements and by instructing others on how best to help them, it often ensures successful assistance.

Like Okoye and Adirika (2019), this study also highlights that inaccessible study materials are another aspect that works as a hurdle in the academic pursuit of the students. The students explain that how the unavailability of braille text, limited availability of audiobooks, and limited provision of soft books hindering their academic engagement result in adverse consequences. Comparably, Fatima et al. (2014) explained in their study that the study materials were not available for visually challenged students in braille, soft or audio form, and the reading materials were not modified considering their different needs. More specifically, the study also observes that the students do not have the facility of computers with a screen reader installed in the library. This also aligns with the findings of Fatima et al. (2014).

Like the present study that posits that the use of braille becomes obsolete at higher education level, Jaleel and Anis (2018), in their study, noted that as the students moved towards higher education, the use of Braille became less. In particular, the absence of braille is more than a matter of format; it shows systemic neglect especially for the students who practice their literacy skills using braille in their early age. The responses of the participants show that this neglect makes them dependent on others and marginalize them as they cannot interact with the text at different linguistic levels.

Furthermore, the prohibition to record lectures compounds the problem since it deprives them of critical classroom discussions because the students cannot take quick notes like sighted students due to various factors, such as lack of braille training, slow typing speed, use of white board without verbalization, and the increased cognitive load

resulting from the simultaneous processing of screen reader output and live classroom discussion. This finding aligns with the findings of Fatima et al. (2014) to some extent who in their study found that the students were allowed to record lectures, yet they were unable to take notes.

In addition, the findings of the current study suggest that many books provided by the institution are not compatible with screen readers. Although technological tools like Insta Reader, Kurzweil and OCR do offer potential solutions, they fail to provide error free results. Khan (2023) also observed in his study that screen readers and assistive technology were supportive in nature; however, they did not ensure optimal learning outcomes for his participants.

The present research further highlights that using human assistance for reading compromises their independence, and also poses a challenge of finding a good reader with whom they have compatibility. The study also reveals that when the reader has poor reading skills, it leads to cognitive fatigue and reduced comprehension. The situation worsens when these inaccessible materials deprive the students of preparatory materials necessary for examinations. Khalid et al. (2023) also stated that the students with low vision had to experience multiple difficulties in their exam preparation compared to their sighted counter parts. This laxity marks the absence of different literacy modes which leads to a broader failure of the institution to include the students with visual challenges in the academic activities despite the growing emphasis on inclusive education.

Moreover, rigid and inefficient examination system is the third prominent concern among the students. The research reports that the students with different educational and medical backgrounds face different types of problems as they have to choose between a computer and human assistance to attempt their paper. The students who have late blindness or the students who are not given proper technological training rely on human assistance to attempt their paper. Due to the absence of a university-provided amanuensis, such students are forced to arrange their own writers who are often unreliable. The students report that their unprofessional attitude, substandard academic writing skills, and unsolicited suggestions lead to poor grades. The students further report that the writers make punctuation mistakes, orthographic errors and improper paragraphing in their papers that compromise the quality of their answers and eventually led to the deduction of marks. Like El-Nabih (2014), the present study also

suggests that the students need an expert writer for examinations.

However, the students admit that their own understanding of punctuation and orthography demonstrates a suboptimal level of competence due to the limited engagement with a written text as a consequence of systemic barriers that shape and sustain such cognitive gaps. Papadopoulos et al. (2008) also stated that vision plays an important role in literacy skills, and he admitted that the students having visual impairments make orthographic errors; however, he also observed that the increase in the level of education results in decline in the number of errors. In their study, the students using braille made fewer mistakes than the students not using braille. This observation supports the particular finding of the present study. The participants report that they never experienced orthographic mistakes in their braille script because the students who use braille interact with a text at different levels, and when braille becomes obsolete, it keeps the literacy skills underdeveloped.

Further, there are certain types of questions in examinations that the students face challenging to solve: visual questions and comprehension questions. Parveen et al. (2024) like the current study found that the students face it challenging to answer a question that is in the form of diagrammatical representation. The data of the present study also reveal that the student face difficulty to solve comprehension passage questions since they cannot scan the information, they need repetitive readings to solve it which becomes challenging with a human assistant. The reading style and pace of the reader also impact their comprehension which suggests that scribes should not only possess strong writing skills but should also have enhanced reading skills. Moreover, inadequate seating arrangement also works as an environmental barrier that is external to the students which causes disturbance during the critical time of examination. The institution does not realize that they need a quiet and a separate place to attempt their paper, so they attempt their paper in the same examination room, in the corridor, or in the staffroom. Such arrangements demonstrate institutional failure as these arrangements are disruptive in nature: invigilators while attempting their papers in the same room silence the students considering them a source of disturbance for the sighted students, teachers that are present in the staffroom ignore the presence of the student who is attempting his/her paper, and corridors lack the peaceful environment required for focused work.

Anjum et al. (2021) also had the similar results and explained in their study that

the provision of a separate room, extra time and a writer was not ensured by the institution, and the invigilators were reported to misbehave and interrupt the examination. Like Anjum et al. (2021), the present study also informs that the students are not given extra time during examination which is their right. To add, the present research also highlights that the extra time that is given to the students rarely exceeds a few minutes and most often it is left to the discretion of the individual teachers.

This research also uncovers that the provision of extra time is only reserved for the students who use human assistance since the students that use computers are denied this provision under the assumption that they do not require extra time as they do not take assistance. However, the institution ignores the different critical factors like the nature of his medical condition, his proficiency to use computer with screen reader and unpredictable problems such as power cuts and accidental deletion of the files. Tran and Pho (2020) suggested that visually challenged people with the same degree of vision loss can have different requirements as it depends on the various factors shaping their individual personality, such as family support and intellectual abilities. Likewise, the present study also posits that the visually challenged students should be treated considering their unique case that includes their medical history and educational background.

To conclude, these barriers primarily stem from a lack of awareness among educationalists. The absence of teacher training programs focused on promoting inclusive learning environments results in teachers being unable to adapt their methodology to meet the diverse needs of students.

In addition, the neglect of learners' unique challenges based on the nature of their impairments combined with rigid academic structures, renders the institution unable to provide accessible study materials. Furthermore, the institution's lack of a student-centric approach to examinations and its failure to implement inclusive policies, in line with those of the Higher Education Commission, continue to obstruct students' academic progress.

In the light of these findings, this study has certain implications for policy makers. To facilitate the students, the institution should implement the policies of inclusivity mentioned in the hand-out policy for differently abled students uploaded on the official website of the university, and it should make the examination system flexible by implementing the policy of different modes of examination mentioned in

the handout. This evaluation system, however, emerged inductively from the participants' responses as a barrier not identified in the Social Model of Disability adopted in the study that provides the findings a theoretical weight. Moreover, the university should allocate a specific budget to accommodate the needs of the students, and it should make a comprehensive plan for the awareness of the educators, teachers, students, and staff of the needs of the students with visual impairments. More precisely, the targeted teachers' training programs can equip the teachers with adaptive techniques to use in inclusive settings.

This research despite its substantial findings that provide insights into the lives of visually challenged ESL learners has also certain limitations. The research conducted involved a small context specific sample selected from a single institution that limits the generalizability of results to a larger population. Moreover, the research gave voice to the students through interviews that were complemented by classroom observations of teachers, yet this research did not incorporate the perspective of administrators that could have enhanced the scope of the study and could have enriched its findings. Although the research endeavored to explore the experiences of learners with diverse backgrounds, there is a need to capture the diverse spectrum of experiences across different degrees of impairment, different levels of technological proficiency and educational background. Additionally, my personal experience as a visually challenged individual was likely to influence research findings but through triangulation, I have tried to impart objectivity to my research.

CHAPTER 5

CONCLUSION

This chapter presents overarching conclusion synthesizing the major findings of the study and the practical recommendations for educators, universities and future researchers. Firstly, the chapter provides a comprehensive conclusion derived from the study, encapsulating its essence. Then, the major findings are presented to give an insight into the lived experiences of the visually challenged ESL learners to emphasize areas where immediate attention is required. Finally, the chapter concludes with recommendations for future researchers

5.1 Conclusion

This study, *Literacy Skills of Visually Challenged ESL Learners in 'Inclusive' Education Systems: A Phenomenological Study of NUML* aimed at exploring the lived experiences of visually challenged ESL learners in inclusive classroom. The study was based on three key objectives so as to explore the problems faced by the visually challenged learners in practicing their literacy skills, the reasons behind these issues, and the way the skills can be improved. The study remained successful in achieving its objectives. To obtain these answers, the study followed a qualitative approach employing a phenomenological research design. To collect the required data, the study used method of triangulation to cross-verify the findings to minimize subjectivity and to provide an in-depth understanding of the subject matter. The instruments used for the purpose were in-depth interview questions and classroom observation sheets. The interviews were semi-structured, and participants were selected through purposive sampling technique. This research obtained its theoretical basis from the Social Model of Disability by Mike Oliver (2013) which posits that the society disables the people by not providing adequate support. The other concept of instrumental motivation presented by Gardner (2010) in Socio-Educational Model was also used. The thematic analysis, presented by Braun and Clark (2006), was carried out to present the findings for a systematic understanding of the data.

The findings highlighted that the students with visual impairment face multiple challenges in practicing their literacy skills in inclusive classrooms. The challenges that they encounter are not caused due to their impairment. Rather, the barriers appear due to inadequate support and improper facilitation by the institution. The barriers such as

exclusive methodological practices, in-accessible materials and rigid examination system hinder their academic path. Despite these barriers, the students continue their studies using their individualized coping mechanisms showing their motivation to achieve their academic goals.

5.2 Major Findings

The study was guided by three research questions:

- What are the lived experiences and problems of visually challenged ESL learners in learning literacy skills in an inclusive classroom?
- Why do the visually challenged ESL learners face problems in practicing their literacy skills in inclusive classrooms?
- How can the literacy skills of visually challenged ESL learners be improved?

The findings suggest that the students face challenges in practicing their literacy skills in inclusive classrooms. They encounter these difficulties specifically in three prime aspects: challenges in accessing the study materials, difficulties in taking examinations and improper teaching methodology. These findings reflect the lived experiences of visually challenged ESL learners as they navigate inclusive classrooms, particularly in relation to the barriers they encounter in developing their literacy skills. These barriers influence their academic performance and put them at a disadvantaged position. Despite the challenges, they pursue their studies with determination.

The following themes provide insight into the underlying reasons why visually challenged learners face difficulties in practicing their literacy skills. Each theme represents a systemic or contextual barrier that contributes to the learners' struggles. Firstly, the absence of appropriate study materials stands as a barrier in the way of the learners, affecting their academic performance. The participants report that the institution remains ignorant of this fact and fails to provide them adequate learning materials like soft books in a specific format that is supported by the screen readers. Consequently, the students struggle to manage primary learning material such as textbooks as the participant's report that they do not get audio books, soft books, and tactile learning materials from the university. The participants state that most of the teachers do not even allow them to record their lectures, so they have limited study material to prepare for their exams.

Secondly, the students face problems in practicing their literacy skills in

examinations. The students rely either on human assistance or computer for attempting their paper, and this choice is conditioned by their past experiences and medical history. The students that prefer human assistance to computer lack the necessary skills to attempt their paper using technology, and this lack of training is caused due to late blindness or their early educational experiences which are also influenced by the type of school they attend because the students attending a mainstream school use human assistance throughout their academic journey, and the students who attend a special school use Braille that becomes obsolete. Following this path, they become less confident to take examination, which is a critical aspect of their academic career, using computers.

So, the participants report a heavy reliance on human assistance during examinations; however, institutional support in this regard remains inadequate. The university does not consider itself responsible for arranging scribes, making the students to find their own. In many cases, the available writers are unprofessional, untrained, and lack familiarity with the subject matter, which results in errors that directly affect students' performance. In addition, the students are not given extra time to compensate for the limitations of relying on a writer, which is one of their basic rights. Further, when a writer fails to appear on the day of the examination, no contingency measures are in place. Participants also highlight that examination papers are not modified as they often include visual questions that are inaccessible to them. This lack of accommodation substantially undermines the fairness and inclusivity of the examination process.

Thirdly, the methodology of the teachers excludes them from full participation in the mainstream activities. The teachers, unaware of the problems of visually challenged students, take little or no account of them. For instance, all the students report that they face difficulties in accessing the board, in understanding the demonstrative words, and in the subjects like Phonetics and Phonology, and Grammar and Syntax that heavily rely on visual representations. Additionally, the students sometimes face discouraging attitude of their teachers that further undermines their self-confidence, and all the participants state that the teachers who even desire to help them lack training to deal with them. Most of the student's report that their class fellows, on the other hand, assist them in understanding different concepts to the best of their abilities but only when they are guided by the student

with visual impairment on how to help them.

The reasons discussed above reflect deep-rooted structural and instructional barriers that restrict visually challenged ESL students from completely engaging with literacy tasks in inclusive classrooms. These issues, as expressed by the participants, not only limit their academic progress but also highlight the urgent need for systemic change. Drawing on their lived experiences, the students also proposed meaningful strategies to address these challenges, and the following section outlines their suggested solutions for creating a more inclusive and supportive educational environment.

5.2.1 Enhancing Access to Study Materials through Inclusive Resources

5.2.1.1 Offering Learning Materials in Multiple Accessible Formats

The problems highlight that the institution that aligns with the policies of inclusivity needs to adapt the study content taking into account the presence of learners with diverse learning abilities. The participants explain that the institution should provide study materials in different modes, such as audio recordings, soft books with proper formatting, and tactile learning materials, to address their different needs. The students further opine that library resources should also include books in different formats like in digital, audio and Braille formats as having one format does not fully facilitate them. For example, the tables and diagrams should be available in tactile format.

5.2.1.2 Improving Library Systems and Spaces for Accessibility

Participants 4, 6, 7, 9, and 10 state that there should be some systems having the required software installed, assigned to the visually challenged students which they can use for their study purposes in the library. Along with it, they require a separate space for it as they need to listen to the material. In case of computer, they can be provided with the headphones; however, in case of a friend reading to them in the library, it becomes a source of disturbance for the other readers. Therefore, the students should be allocated separate reading rooms.

5.2.1.3 Promoting Inclusive Learning through Budgetary Support and Organizational Collaboration

Participants 3, 4, 6, 7, 8, 9, and 10 recommend that to include the visually challenged students in the mainstream academic activities, it is important for the university to allocate a separate budget to cater particularly to the academic and accessibility

demands of learners with visual challenges, and this funding can facilitate the provision of accessible study materials, assistive technologies and relevant training programs. In addition to internal budgeting, collaboration with external organizations can greatly enhance the supportive mechanisms for such learners. In the study, many participants highlight the assistance they receive from the PFFB, specifically when academic materials are not provided by the university in accessible format. PFFB allows students to access study materials by providing free book scanning services and by maintaining a pool of digital resources. The organization also contributes to the students' overall independence and academic success as it offers training in Braille literacy, technology, and essential life skills. The implementation of such **collaborative strategies** cannot only reduce institutional costs but can also strengthen the broader framework of inclusive education.

5.2.2 Promoting Inclusive Examination Practices

5.2.2.1 Facilitating Technological Integration for Independent Examination Access

The situation reflects that technology integration is highly essential in the learning process of the visually challenged students. So, the participants highlight that workshops should be conducted to train visually challenged students in which they are made aware of the new technology that they can use for their academic progress, and the workshop should range from teaching basic technological skills to late-blind students and those with poor computer skills, to teaching advanced skills to students who are already proficient. Moreover, the educators should promote the use of assistive technology from the early classes. The students further request that the university should address practical problems like power outages, clunky keyboards and accidental deletion of the paper that are faced by the learners while using technology for examinations.

5.2.2.2 Implementing Flexible and Accessible Examination Modes

The participants also propose that the university should implement the policy of using different modes for examination considering the individual needs. These examination modes may include oral exams conducted with an invigilator, typed responses using screen readers or magnification software, Braille-based question papers, and digital assessments designed with full accessibility features such as keyboard navigation and screen reader compatibility. The participants suggest that brailleists should be hired to facilitate the students using Braille for examination, and

braille should not be made obsolete as it enables the ESL learners to engage with the text at different levels such as at the level of orthography and at the level of punctuation. To ensure appropriate examination modifications, it is essential to consider each student's unique circumstances, including their medical history, degree of visual impairment, and educational background, as these factors significantly influence their accessibility needs.

5.2.2.3 Providing Trained Writers, Extra Time, and a Supportive Examination

Environment

All the participants suggest that the university should provide amanuenses who possess basic knowledge of the subject as well as competent writing skills, and the writer should be able to understand their highly sensitive and critical role. To encourage the students to become scribes, participant 4 recommends that the university can provide incentives to the volunteers serving in this capacity. All the students further highlight that a separate space should be provided to the visually impaired students that meets the standard of examination for attempting papers. In case of two visually challenged students, two separate rooms should be provided, and extra time should be provided considering the medical and academic history of the student. Overall, policies regarding inclusivity that the university aligns with should be practically implemented. The participants further suggest that a visually challenged person who understands the complexities and the challenges of the students should be included in the committee of the differently abled students, so their problems can be truly addressed.

5.2.3 Improving Pedagogical Practices through Targeted Training and Inclusive Awareness

5.2.3.1 Designing Specialized Training Programs for Teachers

The participants highlight the significant role of teachers in shaping the learning experiences of visually impaired ESL students. To overcome pedagogical barriers, it is crucial to equip teachers with specialized training that includes both instructional strategies and attitudinal development. The training should enable teachers to understand individual needs and respond appropriately by including familiarization with various types and degrees of visual impairment. The participants emphasize the significance of teachers verbalizing board content,

avoiding deictic expressions, and permitting the students to audio-record the lecture. In subject areas like Phonetics, Syntax and any new language, which are specifically challenging for visually impaired learners, teachers must provide targeted instructional support. For instance, the students request that they should be provided with large fonts and tactile learning materials to understand phonemes, tree diagrams, tabular representations, diagrammatical representations, orthography and punctuation to understand the concepts that are essential to achieve good grades in examinations. Personalized modifications and oral feedback are also recommended as effective strategies to ensure academic inclusion.

5.2.3.2 Integrating Assistive Technology into Inclusive Pedagogical Practice

Teachers should be trained to guide students in using assistive technologies, such as screen readers and accessible educational applications, particularly for those who are unfamiliar with such tools. This training is important not only for providing technical assistance but also for enabling teachers to critically examine the potentials and pitfalls of these technological tools. When teachers understand how assistive tools function, they can better support students in areas where technology falls short. Participants note that while a screen reader is a powerful equalizer, it also transforms the act of reading into listening, which may hinder the development of orthographic awareness in ESL learners. With this understanding, teachers can develop more inclusive methodologies that compensate for such gaps. For instance, the teachers can guide the students by providing explicit instruction in orthography, choosing the most appropriate tools for a particular task, and combining technological support with targeted pedagogical interventions.

5.2.3.3 Building a Supportive Learning Environment through Awareness and Communication

An inclusive learning environment requires not only institutional commitments but also active participation from the student community. General awareness programs, such as seminars and sensitization sessions, can play a significant role in educating sighted students about the needs of their visually challenged counter parts. In promoting inclusive values within the classroom, teachers should take the lead by guiding all students to have a positive attitude and supportive behavior towards the visually challenged learners. At the same time, the learners with diverse needs should also be encouraged to communicate their

needs clearly and timely. Equipping them with networking and interpersonal skills can significantly enhance their academic and social experiences because the findings of the study suggest that learners who maintain strong peer networks and who are confident in expressing their needs are less likely to suffer and experience neglect or isolation. Moreover, by sharing personal strategies and lived experiences, the students with visual impairments can also support one another, creating a sense of solidarity.

Having presented the findings, the researcher observes that the results are similar to the those of the study conducted by Khan (2023) who explored the macro-level problems of visually challenged English language learners in inclusive higher education settings in Pakistan. However, the present study narrows down its scope by focusing on micro-level problems, specifically targeting their literacy skills development in inclusive classrooms. Moreover, the findings of the current study resonate with the findings of previous Pakistani researchers like Parveen et al. (2024), Shaheed and Nazmeen (2023), Khalid et al. (2023), Hanif et al. (2022), Anjum et al. (2021), Ehsan (2018), and Fatima et al. (2014). These researchers, having varying focus, determined the same institutional and methodological problems across different levels of education and regions in Pakistan. These results also align with those of international studies like Acula et al. (2024), Attachoo and Sitthitikul (2020), Okoye and Adirika (2019), Nasution (2019), Susanto and Nanda (2018), Morelle (2016), Kocyigit and Artar (2015), and El-Nabih (2014). These similar results signify that these problems are not isolated and incidental problems, but structural and systemic issues entrenched within the education systems worldwide. They indicate that the policies regarding inclusive education remain only at discourse level, and the implementation of these policies still remains in question.

Like the current study, previous studies acknowledge these problems as structural failures resulting from the poor implementation of inclusive education policies. However, the present study builds on them by exploring the impact of these barriers on the literacy skills development of visually challenged ESL learners and on their instrumental motivation, which determines overall academic progression. It further highlights that these routine difficulties are systemic barriers caused by a disabled and disabling environment. While earlier studies portrayed impaired students as

inherently disabled and struggling in inclusive education systems due to a lack of inclusive practices, the current study reframes this notion by arguing that it is not the individuals who are disabled, but rather the practices within such institutions that are disabling. By foregrounding the experiential and motivational consequences of this exclusion, the study emphasizes that these barriers are not passive shortcomings in policy, but active obstructions to academic success. In this way, the current study positions itself within the broader discourse on inclusive education by offering a context-based contribution, showing how globally identified patterns of exclusion manifest in the development of literacy skills among visually challenged ESL learners in Pakistan's higher education landscape.

5.3 Recommendations for Future Researchers

The present research provides insights into the literacy experiences of visually challenged ESL learners in inclusive classrooms, and the suggestions listed below are particularly for future researchers. These recommendations aim to guide further investigation in this area by considering gaps which emerged during the course of this research.

- The researchers can investigate the role of assistive technology in developing literacy skills of the visually challenged learners. In particular, they can explore the uses and impacts of different applications and software on English literacy skills that play a key role in their academic success. For instance, the researchers can also analyze the role of digital Braille in English language learning.
- The future researchers can also conduct research on the difficulties faced by visually challenged learners in learning different native and foreign languages, focusing on their literacy skills.
- The researchers can also focus on the literacy skills of ESL students with physical impairments along with visual impairments because their challenges may be different from those of students with only visual impairments.
- Comparative studies can also be carried out to investigate the different experiences of students with varying type or level of visual impairments (complete blindness, partial blindness, congenital blindness, or late blindness) and varying academic history (inclusive education or exclusive education. The intersection of these varying factors may shape their experiences differently.

- The demographic location and gender of the students also play their roles in shaping literacy related experiences of visually challenged ESL learners, so the research can be conducted in this area as well.

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APPENDIX A

PARTICIPANT CONSENT FORM

Title of Research Study: Literacy Skills of Visually Challenged ESL Learners in ‘Inclusive’ Education Systems: A Phenomenological Study of NUML

Researcher Name: Zuha Talat

Institutional Affiliation: National University of Modern Languages, Islamabad

Contact Information: zuhatalat1998@gmail.com

Purpose of the Study:

You are being invited to participate in a research study that seeks to explore the challenges faced by visually impaired ESL (English as a Second Language) learners in inclusive higher education environments. The goal of this research is to understand the literacy skill development of visually impaired students and the role of assistive technologies, with a focus on identifying gaps in support systems and accessibility in Pakistani universities.

Participation Requirements:

If you agree to participate:

- You will be asked to take part in one-on-one interviews.
- The time commitment for your participation is approximately 1 hour.
- Participation in this research is entirely voluntary, and you may refuse to participate or withdraw from the study at any point without any penalty or consequences.

Confidentiality and Anonymity

Your responses will be kept confidential and used solely for research purposes. Any identifying information, including your name and personal details, will be anonymized in all reports, publications, and presentations. Data will be stored securely and accessed only by the researcher and authorized supervisors.

Potential Risks and Benefits

Risks: There are minimal risks associated with participation. If any question makes you uncomfortable, you have the right to skip that question or withdraw from the session.

Benefits: Your participation will contribute to a better understanding of the challenges faced by visually impaired ESL learners in higher education and may inform policy improvements and inclusive teaching practices.

Voluntary Participation and Right to Withdraw

Your participation is entirely voluntary. You have the right to:

- Refuse to participate.
- Decline to answer any question.
- Withdraw from the study at any time without any negative consequences.
- Informed Consent

By signing this form, you acknowledge that:

- You have read and understood the information provided.
- You have had the opportunity to ask questions and receive satisfactory answers.
- You voluntarily agree to participate in this study.

Participant Name: _____

Signature: _____

Date: _____

Researcher Name: _____

Signature: _____

Date: _____

APPENDIX B

INTERVIEW QUESTIONS

Group 1

Q1. Would you please introduce yourself briefly (name, age, educational background)?

- Q2.** Which city or region are you originally from?
- Q3.** Where are you currently residing (e.g., with family, in hostel, on your own)?
- Q4.** What is your current academic level and department/program at NUML?
- Q5.** What is your first language or the language spoken at home?
- Q6.** What is your age?
- Q7.** What is your gender?
- Q8.** How many siblings do you have?
- Q9.** What is the occupation of your father and mother (or primary guardians)?
- Q10.** Have any of your family members experienced a similar visual condition?
- Q11.** What type of visual impairment do you have (e.g., complete blindness, low vision)?
- Q12.** Is your condition congenital (from birth), or did it appear later in life?
- Q13.** At what age did your visual impairment begin or get diagnosed?
- Q14.** Do you know the cause of your visual impairment (medical condition, accident, hereditary, etc.)?
- Q15.** Did you receive any treatment, surgery, or therapy for your visual condition? If yes, please share briefly.
- Q16.** Is your current condition stable, or has it changed over time?
- Q17.** Do you face any additional health conditions that affect your education or literacy practices?
- Q18.** Are you registered with any disability support authority or organization?

Group 2

- Q1.** What type of school did you attend? Please share your experience of being a part of the institution, especially in terms of how your literacy skills (reading and writing) were supported.
- Q2.** What type of college did you attend? Share your experience, particularly regarding how your reading and writing needs were addressed.
- Q3.** Why did you join NUML?
- Q4.** Which program have you taken and why?
- Q5.** What are/were your expectations from this university, particularly in supporting your literacy development?
- Q6.** How have you found this university in terms of inclusivity, especially regarding literacy-related needs?
- Q7.** How better was/is it in terms of literacy-related inclusivity as compared to the institution that you have ever attended?
- Q8.** Was/Is your classroom inclusive in terms of activities that support reading and writing skills?
- Q9.** How did/do you practice your literacy skills (reading and writing) in the classroom setting?
- Q10.** How was/is the methodology of the teacher in facilitating your literacy development?
- Q11.** How was/is the attitude of the teachers and other students towards you, especially when it came to reading and writing tasks?
- Q12.** Did/do you get accessible study materials to support your reading and writing needs? If not, how did/do you arrange the materials?
- Q13.** What is your preferred medium for reading and writing (e.g., Braille, screen reader, human assistance)?
- Q14.** Why do you have this preference, and how does it support your literacy learning

Group 3

- Q1.** What challenges did/do you face in developing your English literacy skills (reading

and writing), and what do you think we're/are the reasons behind these challenges?

Q2. What difficulties did/do you encounter while using Braille to practice your literacy skills, and why do you think these difficulties occurred/occur?

Q3. What problems did/do you face when relying on human assistance to develop your literacy skills, and what are the reasons for these challenges?

Q4. While using different software or technological tools to support your literacy learning, what issues did/do you face, and why do you think those issues arose/arise?

Q5. In developing your English writing skills, did/do you struggle with organizing or structuring your text? If yes, what specific challenges did/do you experience, and what are the possible causes?

Q6. Did/Do you face difficulties with spelling in English? If yes, what do you think are the reasons for these difficulties?

Q7. How do you understand and use punctuation marks in writing? Do you find punctuation challenging? If so, what makes it difficult for you?

Q8. What challenges do you face in understanding or constructing complex sentence structures, and what do you think are the reasons for these challenges?

Q9. Have you faced any issues with vocabulary in reading or writing tasks? If yes, why do you think these issues occur?

Q10. What types of exam or classroom questions did/do you find most challenging to answer, and why?

Q11. Which English language course or subject area did/do you find the most challenging, and what factors made it difficult for you?

Group 4

Q1. What techniques or strategies have you personally found useful in developing your English literacy skills (reading and writing)?

Q2. What kinds of classroom practices do you think can help improve the literacy skills of visually impaired students?

Q3. In your opinion, how can classroom environments be made more inclusive to support your reading and writing development?

Q4. How should teaching methods be adapted to better support the literacy needs of

visually challenged students?

Q5. What types of feedback or support from teachers help you improve your writing and reading skills most effectively?

Q6. What role can peer support play in helping you enhance your literacy skills, and how can it be structured to work better?

Q7. What kinds of reading or writing materials are most helpful for your learning, and how should they be provided?

Q8. What technological tools or software have been helpful in developing your literacy skills, and how can their use be improved?

Q9. How do you think literacy skill development could be better supported through the institution's policies or services?

Q10. What changes would you suggest in examination or assessment methods to better reflect and support your literacy abilities?

Q11. What support or training do you think teachers need in order to help students like you improve their literacy skills more effectively?

Q12. From your experience, what gaps exist in current classroom practices or policies that hinder the development of your literacy skills?

Q13. How can the availability and accessibility of reading and writing materials be improved in your institution?

APPENDIX C

INTERVIEW TRANSCRIPTIONS

Interview 2

Interviewer: Would you please introduce yourself?

Participant: Yes, my name is 2, and currently I am a student of BS English, third semester, and I did my matriculation from a special school, Baseerat High

School for blind, and I did FA from a normal college like Degree College.
The issue of blindness is by birth. I'm by birth blind. Currently...

Interviewer: Currently?

Participant: Currently I'm in the third semester of BS English.

Interviewer: You must have had English as subject in your matriculation as well as in your FA. Right?

Participant: Yes.

Interviewer: So how did you use to attempt your paper?

Participant: I was very much dependent on Braille language. So, when I was in school, I used Braille language to attempt my paper, but in Board exams we use writers because it isn't so accessible in Board exams so we use writers to help out ourselves in our papers.

Interviewer: So till Grade 8th you used Braille, but in Matric and FA you switched to writer.

Participant: Yes.

Interviewer: When you switched to the writer, what challenges did you face?

Participant: I did not change my writer for four years, but for two papers I changed my writer, and attempting paper with a totally new student is quite challenging because of the communicational gap and there are issues: some of the students cannot understand like what we are saying because everyone has his own background and spelling issue specially like most of the students studied in English medium and we studied in Urdu medium so there were spelling issues and these type of issues were major issues.

Interviewer: Why was your school Urdu medium? Is it so for all the special schools?

Participant: Basically, it is for my school. Then in FA, it was Urdu medium because the students study Arts subjects and these subjects are usually in Urdu, and the school was basically for blind students, and it wasn't so advanced. That's why it was in Urdu medium.

Interviewer: So you were facing spelling issues. When you were using Braille did you come across this problem?

Participant: No, because it was in our hands so we can tackle that issue since we cannot spell out every word. So they made spelling mistakes in the Board exam,

so that may be an issue.

Interviewer: Were you able to convey all your thoughts properly to your writer? Because when you write, you are very comfortable, but when you have a writer with you, you are not that comfortable, you cannot articulate your thoughts properly.

Participant: Yes. True! This is the main issue, especially in university. Till 12th grade, we had copy paste like paper, but at university level, we have to be creative, and creative language is more used, so there I am facing this issue.

Interviewer: When your writer writes a paragraph, and you take a pause, do you face difficulty in dictating the next paragraph with respect to cohesion and coherence as the first paragraph skips from your mind, and you find it difficult to recall it and as you cannot see, you cannot skim it like the other students?

Participant: Yes, we do face this issue. Sometimes the writer is in a hurry because his sole purpose is to write. If he is not in hurry, we get pressurized. We cannot skim. It is not easy for us to get it read. So, this is an issue.

Interviewer: You always have a writer who is younger than you who is less qualified than you. Does it affect your participation in exams?

Participant: Yes. In the Board exam, when we are having exams of Grade 10, we are allowed to have a writer of ninth grade. As exams of Grade 9 and 10 are conducted simultaneously, we have to get a writer from eighth grade which creates a gap.

Interviewer: Do you face issues in sentence structuring and their cohesion?

Participant: Yes, as well as in punctuation. If your writer's punctuation is not strong, he will keep asking you where to put a full stop and where to put a comma which is not an easy thing to dictate.

Interviewer: Share any bad experience with your writer please.

Participant: In the recent exams, it happened that there was a question of brainstorming. I was getting it solved. The writer was unable to understand it, and he took one and a half hour to solve the question. The exam was of 2 hours. It was paper of Academic Writing. There was a paragraph to analyse critically. Along with it, there was another question

of paraphrasing. There was only half an hour left for these two questions. It was a critical type of question. In its features, punctuation and capitalization were also to be analysed. A writer cannot do all these things unless he knows that. He will not tell you the spellings of the whole paragraph. Due to this, the whole question got incorrect.

Interviewer: Do you get extra time in exams?

Participant: Yes. I do get it. Sometimes I don't, but most often I do.

Interviewer: Have you ever faced resistance from any teacher?

Participant: Yes, in the first semester. Then I talked to the HoD. After that I get extra time for the exam.

Interviewer: Do you get a separate room to attempt your paper?

Participant: No, in the same room, I get the last two chairs, and I have to do my paper there.

Interviewer: Don't you get disturbed or uncomfortable because of the other students?

Participant: I do feel uncomfortable. We have to speak very quietly, and the writer also faces issues in listening.

Interviewer: Teachers also instruct to speak quietly again and again?

Participant: Yes.

Interviewer: How do you take notes in class?

Participant: I note down all the main points on Braille. If I miss anything, I ask any classmate to send his notes, and I note down the missing points. I type it on the computer if it is more important.

Interviewer: Do they send you the notes in audio?

Participant: No, no, they send in the form of pictures. I use a reader, or I ask my cousins to read the sent notes.

Interviewer: When you use Braille in your class, how do your friends react?

Participant: It is interesting in NUML, only two students asked me which language it was, and I told them. In my college, students used to ask such type of questions but here not so much.

Interviewer: What's the input of your teachers? How do they help you?

Participant: I face problem in quizzes and assignments because the teacher uses slides while delivering a lecture which is very easy for me. They hardly use white board. That's why I do not face much difficulty in it. The teacher

who ask for a handwritten assignment, I request them to allow me to submit a typed assignment. When there is a quiz, I request them that I would write on Braille, and then would read it to them. Even one teacher is that much cooperative that she took an oral quiz from me and asked me to submit a typed quiz next day to keep a record of it.

Interviewer: How do you read slides?

Participant: On the phone I use talkback and on the laptop I use NVDA.

Interviewer: How are your computer skills?

Participant: They are normal, not that advanced and not that bad.

Interviewer: Can you type well?

Participant: Yes.

Interviewer: Then why don't you use a computer in your paper?

Participant: I asked the HoD once before starting the degree but at that time it didn't seem adjustable to me. I will try it again. So, I am using writers for exams.

Interviewer: Do you face problems in finding a writer?

Participant: I have three to four friends. If any of them is free, he comes to help me with my paper. I trust them that if they are free, they will never say no.

Interviewer: What are the subjects that you have studied so far in BS?

Participant: In the first and second semester, related to English, we had two subjects, Reading and Writing skills, and Composition and Writing skills. In the first semester, we had Reading and Writing skills, Mathematics, Environmental Science, History and Human Rights. In the second semester, Entrepreneurship, Statistics Composition and Writing Skills, Islamic History and Information Technology.

Interviewer: In the third semester now?

Participant: Academic Writing, Introduction to Linguistics, Introduction to Literature, Islamic Studies and Pakistan Studies.

Interviewer: You haven't studied Phonetics and Phonology yet?

Participant: Not yet.

Interviewer: In the first semester, for the subject of Reading and Writing Skills, what type of assessment was given for reading?

Participant: She gave us a book. It was in pdf, so I could do that using my mobile phone. Actually, in that subject, we had to analyse the text, and

differentiate facts from opinion. We had no other activity of reading skills. It was more focused on writing skills.

Interviewer: Which medium is easier Braille or writer?

Participant: Braille because everything is in our own control. We can manage everything accordingly; however, when we have a writer, there's extra pressure, and we can't manage things well.

Interviewer: Have you ever faced this issue that your writer has not done paragraphing properly?

Participant: Yes, once.

Interviewer: Then your marks were deducted.

Participant: Yes, once I got 18 marks out of 30.

Interviewer: When your teachers return you the paper, do they give you feedback? Do they know about your issues?

Participant: Some teachers do, but some don't.

Interviewer: The teachers who don't, have you ever told them about your issues?

Participant: No, you can call it my carelessness because after every six months your semester is changed, and in every semester, you have five to six teachers and telling the same thing to five to six teachers. This is my mistake. I used not to tell them. It should be told.

Interviewer: Have you ever had a surprise written test in the university?

Participant: Yes, once.

Interviewer: Then how did you attempt that?

Participant: Sir asked me to take help from a writer. Then I took a student one semester junior to me and attempted the test.

Interviewer: How do you participate when there's a reading activity going on in your class?

Participant: I listen because you can't participate in that.

Interviewer: Do you think lack of reading badly affects the orthography?

Participant: Yes, this is the main reason because when we use Talkback or even computer, we listen to it, we don't read the spellings. The other students of course see the spellings wherever they read a word.

Interviewer: You also had a subject of Mathematics. How did you manage that?

Participant: I was able to understand most of the things in the class. I used to take

notes for the things that were difficult for me. I also have a cousin. I have been studying with her since my childhood, and she knows how to teach me. So, it was not that difficult.

Interviewer: What was the attitude of your teacher?

Participant: After every question, he used to come to me to ask whether I understood or not.

Interviewer: You learnt Braille language to be independent, but switching to the writer don't you think has made you dependent?

Participant: Yes, definitely. I think taking exams with the help of computers should be promoted.

Interviewer: Don't you think that teachers should be taught Braille language, and teachers should already be aware of all the issues?

Participant: No, I don't think that teachers can learn Braille language, but yeah, they should be aware of all the issues.

Interviewer: Why do you think Braille language would be difficult for the teachers?

Participant: Yes, they won't be able to have a grip on Braille language. We learnt it as kids and at that time your brain is sharp, and you can learn things easily. In university, teachers are in their 50s sometimes. So, I don't think it will be easy. Moreover, it is not a primary skill for them. Their preference would be sighted students. There would hardly be one or two cases of blind students, and learning Braille would not be preferred. Rather, the use of computers is more practicable for both students as well as teachers. They can get a print out of the paper and mark it.

Interviewer: What sort of issues do you face while typing or editing?

Participant: When a word is underlined, the laptop doesn't tell me that the word is underlined. There may be a feature that tells you, but I don't know. Other than this, my editing and typing skills are good.

Interviewer: Do you do all your assignments yourself?

Participant: Yes

Interviewer: Do it easily?

Participant: Yes.

Interviewer: What are the software that you have in your laptop?

Participant: NVDA and...

Interviewer: And?

Participant: In mobile phone Insta Reader and Talkback which is obvious.

Interviewer: Which is better: Insta Reader or NVDA, and why?

Participant: NVDA is a full-fledged screen reader. So that is better but if you want to read images, then Insta Reader is better. Insta Reader is specifically for image reading. You have to upload an image, and for image reading, you cannot use NVDA whereas if we talk about overall usage, then NVDA is better. You can compare it with Talkback, but in Talkback you face typing issues. So, NVDA is better.

Interviewer: In Talkback, does the speed decrease?

Participant: Yes, I don't think our typing speed on mobile phone can be good. I don't think so. Mine is not.

Interviewer: If I have noted down something on my register, I take a picture of it and then upload it on Insta Reader, will it read that to me?

Participant: It won't support it so well. It will read screenshots etc. really well, but yeah, it will read, and you'll be able to understand the subject matter or what the text is about but not the whole information completely.

Interviewer: What type of issues do you face when you read a book using NVDA? Do you face issue in finding any word or going from page seven to page one?

Participant: Yes, I face such issues, but if the software supports the format, then I move heading to heading and if I know the heading or if I have the idea that under this heading I will get that word, it becomes easier.

Interviewer: Do you think that if you come to know about whatever you are going to study tomorrow, you can perform better in the class?

Participant: Yes, I think this should be done that the slides should be given one day before so we can go to the class having read the slides because sighted students can see the slides while listening to the teacher, but we cannot do so, and it is also not possible for us to listen to two different things at the same time.

Interviewer: Do you think that as you cannot read, it affects your word bank that you do not have rich vocabulary?

Participant: Yes, it affects a lot.

Interviewer: Using NVDA, can you access the data easily on Internet?

Participant: Yes.

Interviewer: Do you use YouTube for studies?

Participant: No, I read from the documents sent by the teachers. For assignments, I take help from Internet not YouTube.

Interviewer: What would you say in terms of the policy of NUML?

Participant: I would say that use of computer should be allowed and it should be made accessible. As far as methodology is concerned, the teachers are not that much bound as they are in schools and colleges, so making a policy with respect to methodology would not work that much and it depends on the teacher.

Interviewer: You are saying that computers should be allowed. So have you faced any challenge or issue?

Participant: Yes, I asked the HoD and he said that the IT department would have to deal with it. Then I didn't ask again. It is also risky if at the final moment, something wrong happens or if they don't have the software like JAWS.

Interviewer: Do you know Talha? He uses his own laptop in the paper as well as Hamza and Waqas.

Participant: Talha is in MPhil, right?

Interviewer: Yes

Participant: Which department is he from?

Interviewer: English Department.

Participant: That's great. You can take your own laptop and attempt your paper on that, but our HoD is very strict.

Interviewer: Who is your HoD?

Participant: Dr. Zawar Hashmi.

Interviewer: Should a separate room be accommodated?

Participant: Yes, yes, definitely.

Interviewer: Which language is easier to read using Braille; English or Urdu?

Participant: Both are easy. Urdu is easier because at that time, out of six subjects five were in Urdu. So reading Urdu was easier back then.

Interviewer: So you're not facing any issue with regards to inclusivity in NUML?

Participant: No.

Interviewer: Okay, thank you!

Participant: Thank you.

Interview 3

Interviewer: Would you please introduce yourself?

Participant: My name is three. I completed my matriculation from a special school named Qandeel High School, and then I switched to general education. I completed my intermediate as well as graduation from Post Graduate College for Boys, Satellite town, Rawalpindi. Then, I completed Master in English from NUML. Then, completed second masters from Allama Iqbal Open University. Then, MPhil from Alhamd Islamic University. Now I am doing PhD from my university which is Muslim Youth University.

Interviewer: Okay. So, in your journey, you had a subject of English since your childhood in your school, in your college and in your university as well. What were the problems that you faced in English language?

Participant: From the beginning, I must say this is not our mother tongue. So just based on cramming, even though we cram grammar as well. Can't understand this or that.

Interviewer: Okay fine. So what is your story of blindness? When did you turn blind?

Participant: This is my family history and... You know I am by birth blind.

Interviewer: So when you were in a special school, how did you use to write?

Participant: Braille, Braille method is so common. As usual, impaired students and teachers use it for literacy.

Interviewer: Okay fine. When you were having papers of matriculation, what did you do then?

Participant: Obviously, Pakistan had no choice except writer, so I used that.

Interviewer: When you were using the writer for the very first time, what challenges did you face?

Participant: So many challenges. First one is confusion because I have no bonding with him, and you know he was not understanding me, and we both were confused at that time. Paper was lying on the desk in front of us. Communication gap was a big problem. Second, he was unable to understand my problem and I was unable to understand him. Secondly, I spoke, I must say I spoke one sentence at one. He couldn't understand.

He said you should speak out like word by word. And you know that? I forgot whole sentence, whole grammar. Lots of issues I faced.

Interviewer: Okay fine. So you have told me that when you were discussing the whole sentence, so he was like unable to understand you or grasp the meaning of that whole sentence. Then, he was asking you to tell him word by word. So, I think this is the problem of cohesion and coherence. For example, when you are telling word by word, you forget the first part of the sentence or of the paragraph whatever you have written before. So, do you think you face problem of cohesion and coherence in your text? Were there issues like that?

Participant: Yes, of course. Cohesion and coherence problems were on a high swing. Like grammatical mistakes, word mistakes, understanding mistakes. Suppose my mind use present indefinite tense and suddenly he says to me you have to tell me just past like was, were. I was confused. I never ever say was and were, and slow speaking issue is also an issue because the board examiners don't allow you to speak loudly, not loudly but not normally you would say.

Interviewer: And were you sitting with other students, or were you sitting in a separate room?

Participant: Yeah, I belong to special school so that's why my eight fellows and their writers, 16 members were sitting in one room.

Interviewer: Oh my God! That would be a crazy part.

Participant: Of course, their voice was disturbing me, and my voice disturbed them.

Interviewer: Fine and there would have been issues like the supervisor or whoever the invigilator was. He must have been thinking that one person would hear or would listen to the other person who is dictating. So, there would be chances of cheating or something like that. That's why he was doing.

Participant: Yeah, of course, I must say even though I mention here, though are totally unaware of disabled learners' skills and disabled learners' needs. They must say we had to complete your paper and go on because you don't need to carry on or pursue your studies whatever you can do with your study. Even though that teacher training degree like B.Ed. and M.Ed. They have a chapter to understand the special learners' problems, but

unfortunately, we own our degrees just for earning and not for understanding.

Interviewer: Of course, you are right. Well said. When you had a writer, how did you find your writer? Was that given to you by some authority, or you found on your own?

Participant: No, am very lucky and I am proud enough of my school because they arranged writer for us. I mean for whole class. We were eight students I told you.

Interviewer: Were they paying something to that writer?

Participant: Yeah, little bit, something of pay, something of refreshment, something of cherish meant whatever you want to ask.

Interviewer: So was he younger than you, junior to you?

Participant: It is rule made by the board committee or university committee, so you can never violate them.

Interviewer: Do you think it is just to have a writer who is junior to you because sometimes it is very difficult for you to make your writer understand when he is not mature enough to understand you?

Participant: Yeah, of course, because he was in his teenage, and I was also a teenage. So, grabbing, jumping, mood swings and anger and jolliness was in a full swing. Both me and him. So, that was the major cause we won't understand that.

Interviewer: So, do you think that the writer for example whenever you have a writer junior to you, he does not know many concepts that you want to convey to him. That's why it gets very difficult for you to attempt your paper?

Participant: So, if he understands my concepts, it means cheating is going on, and he is related to my subject, and he reads my subject already, and he knows my topic. So board committee, University and your higher authorities are not capable to do this. If I am in art section, they arrange for us a science writer. I mean he has a science subject and if any visually impaired you know which is a very rare case belongs to science subject, they can arrange for him or her art subject writer so subject variation is also a very big cause but if subjects are same then cheating goes on according to them.

Interviewer: So, when you went to college, what was the case there?

Participant: First of all, they won't accept. My answer is simple because some special seniors, I mean some visually impaired seniors, going through to this college so that's why there were some issues with their teachers and clerical staff, so first they refused me for admission. Then, they realise five fingers are not equal so that's why they allow me to sit in a class and slowly but gradually teachers know that if anybody commits a mistake, we can't label them. For example, if any student misbehaves with teacher, teacher labels them as all visually impaired students like this and behave like this. So when I pursue my studies from there so, realise no, person's to person variation is very common whether he is disable or whether he is normal student, any sighted student or any especially abled student.

Interviewer: Hmm right, so how you used to attempt your paper over there?

Participant: From matriculation or I must say from ninth grade, ninth standard or ninth class whatever you wanna ask to this class you wanna which name suggest for this class. I used writer through our matric.

Interviewer: Okay. So, when you went to NUML, you were having writer over there. What was your experience in NUML related to your writing skills? Were you having a writer?

Participant: Yeah, of course, but again, they have different you know rules and regulations for me specially your writer isn't... or belongs to English subject not in a BS or not in a masters. So, other subject and first of all, you can say or you must say variation of subject was the very big problem.

Interviewer: So, it must have been very difficult for you to find a writer because usually, at that time, all the students are having their exams.

Participant: Yeah, of course, I arranged my writer on my own and from college side and this writer belongs to bachelors. Two years' bachelor's program was going on at that time. So that's why, my maternal uncle helped me around it.

Interviewer: Okay fine. When you were attending the class, what was the methodology of the teachers? Were they using white board? If they were using the white board, did they use to say it out whatever they were writing on the

board?

Participant: They never ever changed their method. What they use, whatever they want. They don't consider me like a special student. Just they deliver their lecture, and I listen them, and I was not able to record their lectures because in a class you know so many useless topics were going on except studies, so I was unable to record their voices and their lectures, and they owned me, you sit in our class, but they don't change their teaching method.

Interviewer: So, it must have been very annoying for you. For example, when a person writes on the board, for example, the topic and then he says like 'we are going to discuss this today', and you don't know what is 'this'.

Participant: Yeah. Sometimes I felt and sometimes I am not because I just told you. I have been facing all these problems from my childhood so that's why.

Interviewer: So, you have told me that the teachers didn't change their methodology. So, was there any teacher who was concerned or who showed a little compassion towards you?

Participant: Only on sympathy or empathy not more than this.

Interviewer: Like in what way?

hanged their method. What they use, whatever they want. They don't consider me like a special student. Just they deliver their lecture, and I listen them, and I was not able to record their lectures because in a class you know so many useless topics were going on except studies, so I was unable to record their voices and their lectures, and they owned me, you sit in our class, but they don't change their teaching method.

Interviewer: Hmm, was there any teacher who was providing you with e-notes or e-books or anything that you could read?

Participant: Yeah, no teacher provided us any book. Just they label books. You have to read in your own way, and I search on Internet, and I purchase in hard form. Then cut down leaf by leaf and then scan my book, and sometimes midterm date sheet was announced, and I had no study material.

Interviewer: Hmm, because scanning takes time.

Participant: Yeah.

Interviewer: Hmm like what were the issues that you were facing in a scanned book

because sometimes the words are not in their proper form or in their original form?

Participant: Yeah, of course, I must say scanning is a blessing for visually impaired, but a little bit issue I faced like overlapping of wording, overlapping of lines even though from book binding, from this side also cut it. This word was not readable but if we don't have any scanner or scanned book, so we are unable to do any reading.

Interviewer: Hmm... So, you were telling that the teacher used to tell you that you have to read this book, so you have to find the book on Internet on your own. So, how are your technological skills?

Participant: My technological skills I must say 50 and 59 because some websites are supported by our software named JAWS, so I requested to my brother and sister, please help me, and you have to find out this book, and this credit goes to them.

Interviewer: Okay so you are... Are you JAWS user or an NVDA user?

Participant: Basically JAWS user

Interviewer: JAWS user

Participant: But JAWS is not supporting for that website so.

Interviewer: Do you switch to NVDA?

Participant: To some extent, I use NVDA for those websites.

Interviewer: That's great! Okay fine. So, can you tell me what are the issues that you face. For example, when you have a book in pdf form or in word form, what are the problems that you face in reading that, in reading a book, using JAWS?

Participant: First of all, spellings issue. You won't be able to learn both things together. For example, main theme or main idea of the book and then spelling as well. Suppose you are sighted student, so you can read once or twice or thrice, so you extract the main idea of the book and spellings automatically come to your mind without any extra effort, but in our case, we have to put effort to learn spellings as well, and the second effort is to extract main theme or main idea of the book, and second you can read out somewhere else. 75% learning is possible from visual sight, only 13% learning from listening. So, we can rely 25% on listening skills. So, you

can imagine... It is a very huge and big task for us so that's why sometimes, we you know from high listening, from because mobile is talking, computer is talking laptop is talking, lectures are listened. So, I become a patient of migraine due to excessive listening.

Interviewer: Hmm... that is a very serious issue. Do you face issues in jumping from one page to another while using JAWS?

Participant: Yeah. It's also a very big issue. For example, you have a book of 200 pages, and you wanna read 150 page, so you can go leaf by leaf, and it takes a lot of time, but this issue, technological issues, I won't consider because if JAWS disappears from our life or a scanned book disappears from our life, I must say, we are nothing.

Interviewer: Of course, you are right, and for example, when I use JAWS, so I have issue that I have to read. If I have to skip one paragraph, and I have to go the other one, I can't do that.

Participant: Yeah, these issues are so common.

Interviewer: And what about punctuation?

Participant: Punctuation like spellings which I mentioned earlier. We have to learn each and every thing like eyes is the scanner of your body, so we don't have this facility. So, God knows better which is you know reward for us you know hidden in it, but we have to learn punctuation. We have to learn spellings as well. We have to learn where paragraph ended, from where paragraph started, sentences, past, present, future. So, we have to learn each and every thing. So if any sighted student reads one page at once. So, a non-sighted student should read that page thrice or more than four or five times. Then, he is able to write or able to speak in front of anyone or in front of writer.

Interviewer: So, you were telling me that you used to wait for your scanned books, and sometimes you had to take papers without that book. So, how did you manage that?

Participant: Obviously, this credit goes to my parents, my siblings. They are around me. They stand around me. They read for me. They don't leave me. They forget their tasks you know. They protest as well. So, I thank them.

Interviewer: Ma Shah Allah, Okay. So, there wasn't any type of support from your

teacher or from your fellows?

Participant: Fellows were very supportive. If any fellow finds out online material, they send it to me so that's why they can record for me as well. So, this person to person variation was going on, and just I must say, teachers were supportive morally, spiritually, but if you wanna ask me functionally, they won't.

Interviewer: Okay. So, were you given slides or something like that in the class?

Participant: No, in our time, not for me, but for everyone, you have to speak out in front, standing in front of the dice or standing in front of the class using the white board, and you know my problem. So, I won't use the white board so that's why. Slides were not common then.

Interviewer: No, were the teachers using slides or not?

Participant: Few of them. It depends on teacher to teacher.

Interviewer: So, they used to send the slides to the students?

Participant: In masters, especially NUML or so in various universities like AIOU which I mentioned earlier, Alhamd Islamic University and in my university, so they are able to send.

Interviewer: Were you able to read those slides?

Participant: My brother again helps me a lot. He can transform these slides; excel form, power point form into word form.

Interviewer: So, you must be having issues with the books that are in the image form. Right?

Participant: Yeah, a lot of issues.

Interviewer: Yeah, because first of all, it is very difficult to find a book, and when you find the book, you find out that the book is in image form.

Participant: Of course, even some books you know are so huge, more than 100 pages or more than 200 pages, so your family unable to record it.

Interviewer: Yeah, of course. So, do you think that your teachers were not helping you though they were aware of all the problems that you had?

Participant: No, no, no, no, after your interview, I wanna mention these things, teachers training, I must say, should be given to them because not just visually impaired, they are even unaware of physically challenged children. They are unaware of deaf children problem. They are even, I

must say, umbrella term, they are totally unaware of learners' difficulties.

Interviewer: Hmm, yeah, you are right.

Participant: These things should be included in their training.

Interviewer: What were the subjects you were having issues with? There must have been some subjects in which you were having more difficulty.

Participant: If you ask about it, so from beginning, Math was very problematic for me. not for me, for visually impaired students. Even, we don't have any math expert instructor then, we found out. We were in 9th standard, so that's why, and in masters, Phonetics and Phonology, and second one is Intro to Language in which your teacher gives the question, you have to make a family tree of the different languages, so.

Interviewer: Right.

Participant: Syntax as well. When your teacher says to you, make a tree diagram of sentence verb in starting, and you have to write as tree; verb and then noun.

Interviewer: So, how did you practice all these things? Of course, there would be transcription and the language tree and then the tree diagram, so how did you practice all these things?

Participant: My fellows were very cooperative, so my friend named Aqib, he gives me instructions how to make tree diagram, so as much I can learn without you know visual sight. More than 90%, I learnt tree diagram from him, and I make with the help of writer, so according to Phonetics and Phonology, I learn different things for my writer like (ultra) upside down 'u' have to be written down (ultra) upside down 'o' and t+e has to be written down like (ultra) upside down 6 like this, these kinds of symbols I used.

Interviewer: For Phonetics and Phonology, you dictated like this, what about tree diagrams? How did you dictate a tree diagram to your writer?

Participant: Before paper, I make a tree diagram in front of my friend, in front of my writer, and he knows the idea how tree diagram looks like, and then obviously tree diagram will never change, but except a sentence situation.

Interviewer: So, you used to draw on his hand, or you just showed him on the book?

Participant: On a blank paper.

Interviewer: Okay. On a blank paper. With the help of a pen?

Participant: Yeah, yeah, with the help of a pen, I never mention, I am so superior, but my intellectual skills are so high that's why.

Interviewer: And you were able to draw these things on paper with the help of a pen. Wow! Amazing! Okay. So, you used to make spelling mistakes in the paper as well. Right?

Participant: Yeah, of course because time is so short, and you are unable to speak each and every spelling like 'this' and 'is' this and that, so, you are not able to do this.

Interviewer: That's obvious. So, do you think, the student whom you were having in your masters was not from the same department, he was from another department, and his language skills were not that polished, so was it affecting your marks or your performance in the exam because of course, he would be making mistakes related to punctuation, related to spellings and so many other things?

Participant: You can pick my answer from my performance. I topped in Arts section in school. I topped intermediate in college in Arts section. I topped graduation. Not topped, I got first position even though in Art section in my college, and you won't understand, but I got only 2.99 CGPA from NUML and if you count my number, I was on a 15, 14 to 15 and around 26 to 27 students were in my class. So, you can judge, as well, yourself.

Interviewer: The drastic change.

Participant: Yeah

Interviewer: When you used to get your paper back for example, when the teachers show you your paper after checking them, were they giving you any auditory feedback, or how did you use to check your paper?

Participant: Again, teacher gave me auditory feedback, and I encounter them, but you know I check my paper with the help of fellows.

Interviewer: Hmmm, what are the applications that you use on your mobile phone for reading?

Participant: I never ever installed any application. I just preinstalled Talkback, Find out in my mobile.

Interviewer: Fine, but there is an application that is called Insta reader.

Participant: So many people mentioned it, but I never ever tried.

Interviewer: Fine, so, were you given extra time in the exams or not?

Participant: No, even though board has a rule to provide 45 minutes extra to special students, but superintendent was angry, and he flared up, please finish your paper, and you know using hectic wording so NUML has no rule. Alhamd has no rule, and Allama Iqbal Open University has a rule, but again this paper conducted outside of the university in various colleges, so like our board exams, again superintendent was irritating. You have to finish. You have to finish, and in my university, I have no experience because this is my first semester.

Interviewer: Actually, I'm asking these questions primarily you know keeping NUML in mind. So, you were not given extra time in NUML, so, how did you manage your time to attempt your paper in that particular time? It would have been very challenging for you.

Participant: Yeah, of course, I requested my invigilator or to my teacher. Please you have to collect the paper from other students. You can collect my paper at last. So, in this process, I avail 10 to 15 minutes.

Interviewer: That was a good trick.

Participant: Yeah.

Interviewer: Were you given a separate room in NUML, or were you sitting with other students?

Participant: They arrange special staffroom for me, and so many teachers were sitting over there, so that was irritating for me. Even though one teacher should sit in that room, but so many teachers start their conversation, and do their gossips like this.

Interviewer: So, you were unable to recollect your thoughts, and it must have been very disturbing.

Participant: Of course, of course! When I interact with my writer, so they must say. They confuse me.' No, no, no, no, no, this is not related to your paper like you speak wrong wording. Your grammar sense is poor'. You know, student, especially, special student, I must say, already in a depression side or already confused with the writer because you don't have any understanding. You haven't spent much time with this person. I must say, this is not a paper, but this is your future, so please be ready to write down

to your future. So, they pass their comments. Even though if I was on a straight side or if I was on a wrong side, so they won't disturb me while attempting the paper.

Interviewer: That is very awful. They shouldn't have done it. I think, at that time, nobody should interrupt.

Participant: Yeah, yeah. Some teachers, visitor teachers I must say, they comment on paper. They visit the staffroom. Knowingly or unknowingly started reading my paper at that time while I attempt my paper. So, I have no words to explain my feelings.

Interviewer: I can understand you. So, when you were sitting in the class, have you had any type of surprise quiz?

Participant: Sometimes, some teachers, it depends on teacher's mood or teacher to teacher. So, sometimes surprise quiz, I find out, and sometimes planned quiz.

Interviewer: How did you use to attempt that like surprise quiz because you had to arrange writer for yourself. So, what was the scenario?

Participant: I must say, God help those who help themselves. This idiom for that. I have many fellows. I mean bus fellows. I have a number in my mobile, so I call them. They compromise their classes, and they write for me.

Interviewer: That's really great. So, have you ever had any type of oral quiz when your class was having written quiz, and your teacher said, okay you cannot write, so we can go for an oral quiz?

Participant: No, no, they offered me. Few of them, they offered me oral quiz, but I won't because Ma Shah Allah, Ma Shah Allah, they are PhD doctors or some teacher, they are Post PhD. While I started speaking (leaves midsentence). When you speak fluently, you know you commit so many grammatical, punctuation mistakes so that's why they interrupt you. No, no, no, no, this sentence is wrong. You know in NUML; accent practice is so common. So, because we are Pakistani, English is not our mother tongue. We speak in desi style. So, they 'no no, no you should behave. You should speak like that'. So, I avoid oral quizzes. I prefer written quiz.

Interviewer: Of course, in written quiz, you get time to think about something. Right? But in an oral quiz, it is a rapid fire round.

Participant: Yeah, of course, instead of quiz, teachers judge your personality, your body language, your speaking skills. I must say so many things.

Interviewer: Yeah, I got your point. If all the students are having MCQs, so they are having a statement over there, and then they have MCQs over there like options over there, so they just have to tick. On the other hand, if you are going to have an oral quiz, you would have to speak out an option to explain something.

Participant: First of all, they judge your memorization skills: 'I speak this sentence for you. You have to guess it out without any option'.

Interviewer: Without any option, you have to tell me what it means or who said this. So, they wouldn't give you options in oral quiz. Right?

Participant: Yeah.

Interviewer: Yeah, that was of course very challenging. So, is there any other issue that you faced in NUML related to staff or any other thing that is related to your reading or writing?

Participant: While reading, I have no teacher who says to me that you have to read it out. For writing, I arranged writer for quizzes, for midterm, for final term as well, and presentations not so common in our master's time actually. So, I must say, behavior was very good and appreciable. So I mention it here specially.

Interviewer: So, there was a Participant, I was having an interview of his, and he told me that there were some teachers who would scold him one way or the other. He said to one teacher that he didn't understand, and the teacher said, "I cannot change my methodology just for you." so was there?

Participant: No, no, no, no, no, it was very huge that experience he faced. I never ever faced, not in NUML but not anywhere you know where I studied. I also my personality is that, within first classes, teachers know, he is eligible and capable when I raise my hand, when I ask question, when I tell him or her answer whether it is wrong or right. They listen carefully. They appreciate me. Even though I have told my story to you in college. Some senior special students misbehave with their teachers but when I passed two or three days in my college, teachers understand my nature so that's why.

Interviewer: So, you have just mentioned, you used to raise your hand. When a student raises his or her hand, what the teachers do is that they don't take your name. They just look at you, and you are supposed to speak up or when the teacher says, 'yes you', so you don't know whom he is talking to?

Participant: No, no, no, no, no, no, no, I must say, my intellectual skills Alhamdulillah, with the help of God, are so sharp. Even, they call the attendance first day. Second day, I face this type of issue, and on the third day, I call my name as my own because my name comes after this name, and in a classroom, so teachers, in start, so sometimes, sometimes, they you know, they are unable to cram 30 or 40 names at once, but with the passage of time, with three, after three or four months, we say five classes, they learn my name, and if they wanna ask me anything, they call my name

Interviewer: Wow! That's great.

Participant: Wow!

Interviewer: So, what are your recommendations? First, you have told me teachers training.

Participant: My recommendation is top to bottom. Everybody criticise teacher, but teacher is sympathetic. Teachers are humble. Teachers all engage to post, suppose and deliver their best of best performances, but the issue is that they won't understand special needs and problems. So, government should include special education, institutions as well, and then the government should start teachers training programs as well how to entertain learners with special needs not to mention here visually impaired because I am visually impaired, so I always speak about the visually impaired. No, all disabilities should be covered in a teachers' training. I must say, basic, basic of the methods of all disabilities how to teach, how to entertain, how to arrange class for them. What you give should be best of best for this student, this type of students.

Interviewer: Okay. So, suppose, if you are given an audio library, how would it be?

Participant: I must say Braille should be common because when sighted students read anything, he won't learn spellings, he won't learn punctuation, he won't learn this line, paragraph going to end. From this line, paragraph going

to start this or that. All of this we faced in audio side. Audio library should be arranged, but audio library you know on a secondary source. Primary source should be Braille because when you touch learn through tactile method, when every punctuation, every word going through under your fingertips, so you won't put extra effort for the spellings, for the punctuation, for the paragraphing, so you only have to extract the main idea. So, if those students who are late blind or they are accidentally blind, so Braille course should be arranged for them.

Interviewer: So, that's great. So, what do you think if you can write your paper on Braille, and if the teachers are given training how to read Braille, how would it be?

Participant: No, no, no, teachers training should be how to entertain the student, or any Brailist or sign language instructor should be engaged. At least, at least, one sign language instructor, and one Brailist should engage in every institution, and moreover, when this thing is so common, with the help of Allah Almighty, so, this thing goes on departmental level. English department has its own Brailist and sign language instructor. History department has its own, but in first step, the government should arrange at least at least one Brailist and one sign language instructor for every institution.

Interviewer: Wow! That is a very good and new recommendation. Is there any other recommendation that comes to your mind related to technology any type of e-book?

Participant: E-books, teachers should provide to class. Teacher should provide it to the class as well as to the learners with special needs. This material is based on slides, in pdf form, it's totally based on learner. He can convert to whatever he or she is satisfied with, with the help of friends or may be his or her skills are so improved that he or she converts it on her own will. So, teachers should provide it, each and everything, in the class or especially if they have learners with special needs if they teach.

Interviewer: Yes, you are right, and what about extra time?

Participant: Yeah, extra time should be inculcated too. Four to five methods should be launched for the learners with special needs I must say, visually impaired

students, first one is writer method. Second one is computer method. Third one is Braille method. Fourth one is audio recording method, and fifth one is audio computer method. So, University takes responsibility to do this. I mean, I wanna give example of writer if they arrange writer from any other department, so university should teach how to write the paper at least once or twice or thrice. Without practice, students, they are also confused because they are also untrained. They never ever face such an experience, so university put their effort.

Interviewer: Hmm, that is really great. You told me about computer method. So, why didn't you use computers in your exams?

Participant: My skills are not improved.

Interviewer: Ahsan, not that good. Okay, fine. You have told me about Braille method, and you have talked about the computer method and the other method, writer method. What if the university, as you are saying that the university should arrange a Brailist, so this way if a university can arrange a professional writer for the student, what about that?

Participant: No, in a writer, to some extent, it is good, but to some extent, it is bad. When you speak it out in front of anyone, your spellings skills you know so vanish. Your punctuation, you don't know where you put comma, where you put capital so that's why. When you write with your own hands, university should provide extra time to you. To you, I mean to special learner, so it would be better for them.

Interviewer: Yeah, it would be better for them. Along with extra time, for example, you are given extra time, and you have a writer, but the writer is not capable to attempt your paper as he is junior to you. For example, you have to attempt the paper of Phonetics and Phonology. You are very intellectual Ma Shaa Allah, but there are some students who have problems like they are not that...

Participant: University should arrange; I mean not one writer for one student. University should train batch of writers if they have special learners. No, university organizes any student program in which student willingly wants to inform there.

Interviewer: Who can attempt papers of such subjects? What happened to me was that

I was attempting the paper, and I had a really good writer like she was from IR department, so a teacher was sitting over there and he asked her what was her department, so he said that her English must be good. So, I said that Sir I am going to attempt the paper of English, so how can I bring someone who doesn't know English at all. So, he was like, 'yeah, you're right'.

Participant: I must say, teachers training program should be arranged from top to bottom because our mental setup is old. Our thinking is old. I must say, sick. We are mentally sick.

Interviewer: Hmm, you are right. You have talked about two other methods: audio computer method and audio recording method. What are those? I don't know about them.

Participant: In audio recording, you have any recorded device placed in front of learner with special needs, and anybody he or she can write down the question, so he or she records it in front of any teacher or under the pressure of any teacher or doctor, and audio computer method is same. Except any device, you use laptop or computer for the recording as well you have to switch on like typing mode. You speak out, and computer writes down, but this thing is so advanced.

Interviewer: Hmm, okay, fine. Yeah, there is a student who is using it, and he is using Reagan for it in his laptop. Like, you have talked about a device, for example, audio recording. What that device, what is the function of that device? That device only records whatever the special student is saying.

Participant: Yeah, only on recording, based on recording.

Interviewer: So, the paper will be checked based only on that recording?

Participant: Yeah, of course, some skills are compromised, but main idea delivered and given to any teacher.

Interviewer: Okay, so where do you belong to? Like basically from which city?

Participant: I'm from Islamabad.

Interviewer: You are from Islamabad. So, what is your father doing?

Participant: My father is senior subject specialist. Like you can say 19th grade instructor.

Interviewer: Wow! Ma Shah Allah, and your mother?

Participant: My mother Ma Shah Allah is principal

Interviewer: Principal of which school?

Participant: A.B.C

Interviewer: Ahan, and how many siblings do you have?

Participant: Four including me

Interviewer: And you are the youngest one?

Participant: Yeah, of course.

Interviewer: And in your siblings, is there anyone else who is having the same issue
as you have?

Participant: Yeah, of course.

Interviewer: One or two?

Participant: My sister and Me.

Interviewer: Okay and you have one sister and two brothers?

Participant: No, we are two brothers and two sisters including me.

Interviewer: Hmm, hmm, fine. Ma Shah Allah. Thank you so much for your time!

Interview 5

Interviewer: Hello

Participant: Hello

Interviewer: Would you like to introduce yourself?

Participant: Yes, my name is 5 and.

Interviewer: Yes?

Participant: And I have done graduation from NUML University

Interviewer: Hmm, and what was your subject?

Participant: My subject was BS English, and in every semester, we had different subjects, but my major was English.

Interviewer: Okay. In which year you did graduation, and in which year you joined?

Participant: In 2018, and I joined in 2013.

Interviewer: Which area do you belong to?

Participant: Recently?

Interviewer: Basically, where are you from?

Participant: Basically I am from Mansehra.

Interviewer: Currently, where are you living?

Participant: Currently, Islamabad.

Interviewer: What was the occupation of your father?

Participant: He used to do a job in Kuwait as a salesman.

Interviewer: Alright. Was your mother a housewife?

Participant: Housewife. Yes.

Interviewer: How many siblings are you?

Participant: We are five brothers and two sisters.

Interviewer: Okay, alright. What was the reason to join NUML?

Participant: The reason to join NUML was that I studied in Karachi. When we shifted to Islamabad, I had to get admission in a university. I went to Islamic University, but the admissions were not open there. They asked me to try somewhere else. I didn't have any idea that which university should I join, or I didn't have this in mind that I would go to NUML because when I came here, I did not know which university should I go for. Since the admissions were open here, I joined NUML.

Interviewer: Alright. What is the issue of your eyesight?

Participant: The issue of my eyesight is that I am by birth blind, and doctors say that the cells are weak. Eyes are fine, but the cells are weak. So, there isn't any treatment yet.

Interviewer: Have you got treatment for it?

Participant: Yeah, a lot. Lahore, Karachi, Islamabad, everywhere. Even my father sent my documents to America, but the doctor said the same that there is no treatment for it yet.

Interviewer: Okay, which school did you attend?

Participant: I attended the school that was in Karachi. The name of the school was (not understood).

Interviewer: I didn't get the name.

Participant: (not understood).

Interviewer: Would you please say that again?

Participant: I Dare You for Blind.

Interviewer: It was a special institute?

Participant: Yes, special school.

Interviewer: And which college did you attend?

Participant: It was the same institute. I did FA from there.

Interviewer: How did you practice your literacy skills over there?

Participant: In that institute, we had Braille system. We used to read books that were in Braille, and same was the case in writing. We used Braille for writing. In Braille, you have a frame and a pen, so we had that. We used Braille till eighth grade, and we also took the notes in Braille for the preparation of exam, but we have exams with writers because in board exams, you have to attempt your paper with writer.

Interviewer: So, when you had writer for the first time, what challenges did you face?

Participant: The first experience that I had was challenging because you know the age of a ninth grade student. When I sat with the writer for the first time, it was difficult. I would tell her to draw a diagram and to write a heading, so she was not sure how to draw it or how to write the heading or where to write the heading, how to do this and how to do that. In all this, time would get over, and one question would always be left.

Interviewer: Hmm.

Participant: The papers were lengthy, so we couldn't complete them in time. If we talk about writers, it is very difficult to find a writer. Then, the board has its own procedure. Then, they would ask for a permission letter, then, for pictures, and then for certificates. You can just say it is not less than begging. You have to request that much. I still remember, when I had the papers of matric, I gave 500 PRs per paper to the writer, and the person did not even know how to write (مطالعہ), when she asked me, whether this word has 'earn' or 'اُ', I got so tensed that what she would be writing. So, there were issues like that.

Interviewer: Similarly, you would be having issues with spellings in English Language?

Participant: A lot.

Interviewer: Hmm.

Participant: Because the writer used to say whatever I would tell her, she would write that, but you are, first telling the sentence and then spelling each word is very time taking. So, I never had any idea that what she was writing. I used to get really good marks till eighth grade. However, later on, my marks were not satisfying considering my preparation for exams.

Interviewer: Were there issues of paragraphing?

Participant: Yes, there were.

Interviewer: Did you have problems in dictating like one Participant was telling me that when he dictates a whole sentence, his writer would ask him to go word by word and when he would dictate him word by word, he would forget the whole idea.

Participant: Yes, this is true.

Interviewer: Don't you face any problem of spellings in Braille?

Participant: No, that is very easy. The way the other students write on the paper, similarly we write on Braille. So, Braille is quite easy.

Interviewer: So, were you given extra time as you are saying that it was difficult for you to complete the paper in the given time.

Participant: Verbally, it was given, but not actually. It was said that 45 minutes would be given to special students but they never gave us extra time.

Interviewer: When you were having your Board exams did you sit in a separate room or with other students?

Participant: In all the exams, we all special students would sit in a same room separate from the other students, but once in the Board exams of 9th class, we sat with the other students in the same hall.

Interviewer: How many students were there who were blind?

Participant: We were 12 in number.

Interviewer: When you all would sit together, were you not getting disturbed by each other's voices because there would be disturbance as you all were dictating to your writers?

Participant: Yes, there was disturbance. The teachers would say that we should dictate quietly, and it was very difficult to dictate quietly because the writer was not comfortable with that since he had to listen first. Then, he would write. After writing, he would come closer, and would tell us whatever he was writing. So, a lot of time would go to waste in this process.

Interviewer: So, when you sat with other students, you must have faced the same kind of challenges?

Participant: Yeah, we had to face resistance from the other students because they were saying that they were getting disturbed, and they were unable to attempt the paper in our presence.

Interviewer: What was your purpose to choose BS English?

Participant: I will speak truth. Actually, I chose BS English because I thought that it would get me a job.

Interviewer: When you went for the entry test, what was the scenario?

Participant: Yes, in that, I was given a writer by the university. I went there, and I told them that I had no writer. So, they arranged one for me because the HoD (Head of Department) was really kind.

Interviewer: What was the qualification of that writer?

Participant: Actually, he was clerk in the office of HoD, and he just knew how to use a pen.

Interviewer: Okay, what issues did you face with that person?

Participant: A lot. As I told you that I had to tell each and every thing to that person. Here, you have to write this, and here, you have to write that. So, it was

very difficult to attempt the paper with him, but Alhamdulillah, I passed the test.

Interviewer: Do you face any problem in punctuating your text?

Participant: In what sense?

Interviewer: When you are writing a paragraph, do you have idea where to put punctuation marks? Full stop and comma are common, but what about the other punctuation marks?

Participant: No, I don't have any idea about it.

Interviewer: So, you would be unable to dictate your writer then.

Participant: Yes, yes

Interviewer: As you don't dictate it, the writer does not write it. Ultimately, your marks would get deducted.

Participant: Yes, this is how it was.

Interviewer: Okay, when you joined NUML, what was the environment of your classroom?

Participant: The first day in the class?

Interviewer: Yes, yes.

Participant: The first day in the class was normal. Everybody was talking to each other, but with me, they only said hello and then said goodbye.

Interviewer: So, as you chose BS English, in that, there are some reading activities done in the class like reading a novel, so how did you participate in that?

Participant: In reading activity, we used not to participate. All the other students would read, but we would just listen.

Interviewer: Did the teachers use white board in the class? As some teachers write main points on the board, and some draw a diagram on the board to make the students understand the idea, so did the teachers dictate whatever they would write on the board?

Participant: No, no. They used to come and say Salam to the whole class. They used to draw on the board, and then they would start the lecture. Never in my experience, any teacher, no teacher told me that I wrote this on the board, or today we would study this. When you have a special student in your class, you have to give attention to that student because if you treat him like the other students, it does not work. The special student won't be able

to keep up or perform well.

Interviewer: So, would you take help from the students to dictate whatever was there on the board?

Participant: I used to ask the person sitting next to me.

Interviewer: So, the students take notes in the class. The students note down whatever a teacher writes on the board. So, what was your way of taking notes?

Participant: I was unable to take my notes in the class. My class fellows were not helping either. So, I had a fellow in my university bus. She was really nice. She used to help me in my studies. She used to read all the notes to me. I used to borrow notes from a student, and then would give her the notes with an MP3. She would record those notes. So, that's how I studied in my BS.

Interviewer: So as you told me that there was no help from the teachers and from your class fellows, so whenever there was a writing activity going on in the class, how did you participate in that?

Participant: So, whenever there would be a writing activity in the class like the teacher would conduct a written test of 20 marks that was compulsory in every semester. For that, they would even say that we had to get a writer for ourselves. In this world, if we have people who don't help you, so we also have people who are good. Outside my class, I always found really good people. I would request different girls to come and write for me. Some would refuse, but I used to get my writer eventually because I would humbly request them to just come for 10 to 20 minutes. She would come for 20 minutes to attempt my test, and then she would leave. My experience with my teachers was awful. They all belong to educated families. The duty of a teacher is not to only deliver the lecture, but he or she has to put herself in the students' shoes and understand the problems that the student is going through because then he can teach the student affectively. However, the situation was not like this.

Interviewer: What were the subjects that were difficult for you? Were there subjects like Phonetics and Phonology and Grammar and Syntax or any other subject like this?

Participant: Yes.

Interviewer: Which one?

Participant: Yes, we had Phonetics and Phonology, and in that we had sounds that we were supposed to learn.

Interviewer: So, how did you learn them?

Participant: Let me tell you one thing. We had a teacher of that subject. His name was Sir Arshad. He was the HoD. He was really nice, and he was really cooperative. After drawing on the board and telling the class, he used to come to me and helped me in practicing those sounds. He would articulate those sounds and would ask me to repeat. However, I was still unable to make writer understand those sounds.

Interviewer: In that, you have some symbols and for each symbol, you have a different sound. Since you were unable to see those symbols how did you learn them? Did the teacher draw those symbols on your hand or he gave you a chart?

Participant: No, there was nothing like that. He would just tell me that this sound is like this and this sound is like that.

Interviewer: For example, if I am teaching in a class, so I would just say that this is /p/ sound, this is /b/ sound, and this is /t/ sound, he would only tell you the sounds and you did not understand the symbols?

Participant: Yes.

Interviewer: Then. How did you attempt the paper?

Participant: In the paper, we had to transcribe. So, it was next to impossible to make my writer understand those symbols as I myself did not know how those symbols looked like. So, I talked to the HoD in his office. As I told you, he was really nice. He said that he would see it. He asked me to tell him some sounds and then asked me to go back to my class.

Interviewer: How many marks did you get in that paper?

Participant: Passing marks.

Interviewer: Was there any diagram that you needed to draw in which there was vocal cords?

Participant: No, there was no diagram.

Interviewer: Was there any other subject like in which you had any type of tree diagrams or anything like that?

Participant: No, we did not have any subject like that. Actually, we were the students

of English, so only had subjects like Drama, Novel and Poetry.

Interviewer: Didn't you have Grammar and Syntax?

Participant: Sorry?

Interviewer: Syntax.

Participant: No.

Interviewer: Did you have Introduction to Linguistics in which you needed to draw language trees?

Participant: No, there wasn't any subject like that.

Interviewer: Were you given a separate room in NUML to attempt your paper?

Participant: No, not a separate room. They would ask me to sit outside my class in front of the door, in the corridor. Me with my writer used to sit outside the class not in a separate room, staff room or library.

Interviewer: So, there would be disturbance in the corridor?

Participant: Yes, too much. You yourself imagine that if you are writing your paper, and there are so many passersby. There are two students passing by, three students passing by, four students passing by. Some are laughing. Some are talking. Some are discussing something. So, it was difficult for me to attempt my paper in the noise. It was very difficult to concentrate.

Interviewer: Were you given extra time or not in NUML?

Participant: No, no, no. I was not given.

Interviewer: Didn't you ask for it either?

Participant: I asked once that I should be given 45 minutes extra as extra time is given to the people with disability. However, the teachers refused. They said that we don't have that much time, but we will collect papers from other students, and you can complete your paper in that time.

Interviewer: As there would be subjects like drama and novel that are very lengthy. So, it is difficult to read those lengthy dramas and novels, so how did you read all those dramas and novels?

Participant: I told you that I had that fellow. She was very nice to me. She used to read all those things to me. I would like to mention one thing here that I used to have MP3 in my initial classes, I discussed this problem with my teachers that like all the other students, I also need notes. I cannot take that notes, so I need a favor from you that if you put that MP3 on the dice or in the

pocket. They had so many issues in that as well. They said that we discuss so many other things in the class, so this is not possible. I requested them, but they refused out rightly.

Interviewer: Would your friend read all dramas and novels to you or only the main points?

Participant: No, no only the main points not the whole books. I would only attempt paper with the help of those recording and whatever I would retain in my mind from the lectures of my teachers.

Interviewer: Then, it would be difficult for you to memorize the spellings of the names of characters?

Participant: Yes, it was.

Interviewer: Since we cannot read, our spellings are also not that good.

Participant: Exactly, not that good.

Interviewer: How were your computer skills?

Participant: My computer skills were not that good. This was the major issue. We came from Karachi, and I didn't have permission to go outside that much. I just had the permission to go to university because of my mother. Moreover, you can also understand that being a blind person, it is not easy for me to go outside and join PFFB (Pakistan Foundation Fighting Blindness), and there was another institute. So, it was so far. It was easy to attempt my paper on a laptop, but since I didn't have the skill, I could not do so.

Interviewer: When you shifted to Islamabad, you did not even contact PFFB for audiobooks?

Participant: I did contact them, but the problem was that they did not have the audiobooks of most of the novels and dramas that I had in my syllabus.

Interviewer: They also scan the books.

Participant: At that time, they did not have this system of scanning the books. They just started it two to three years ago.

Interviewer: So, you told me that you didn't get any type of assistance from your class fellows or teachers.

Participant: Yes.

Interviewer: Only your bus fellow helped you.

Participant: Yes.

Interviewer: For reading, your fellow would help you. You didn't have any type of software.

Participant: Yes.

Interviewer: For writing, you used Braille.

Participant: Yes. I would like to say that there were two boys in my class. Sometimes, they would help me. But there was no help from the side of females.

Interviewer: Did you have difficulty in understanding the Demonstrative words? When a teacher comes, he writes something on the board and then starts speaking.

Participant: Yes, I had difficulty in that. The teachers used to come to the class and would write the topic on the board. Then, they would just start speaking, and sometimes, I did not have any clue that what they are talking about or what the topic was.

Interviewer: And you didn't even ask them to speak out?

Participant: Yes, I did ask them, but they would always say that we don't have enough time. You just see that I only asked them to keep the MP3, and they just refused. They did not have any consideration for it that they had a blind student in their class, and they did not know how to deal with her.

Interviewer: So, the attitude of the teachers was very discouraging.

Participant: Yes.

Interviewer: Sometimes, when teachers want you to say something or answer the question, they just point towards you or look at you, so did you experience this, or did it create confusion for you?

Participant: Yes. Sometimes, the teacher would point towards me, how could I know that they wanted to ask from me. So, the person sitting next to me would tell me that Sir is addressing you.

Interviewer: Did you experience anything like at eleventh hour, your writer refused to come to attempt your paper?

Participant: It happened to me not only once but thrice. It happened to me twice in the midterm and once in the final paper. At night, she said that she would come. The next day, everybody got his paper. Everybody started writing the paper. I was calling her again and again, and she was not attending my call.

The teachers who were there, they were that indifferent towards me that they didn't even bother that they would arrange a writer for me. I just kept sitting during that exam. Seeing that teachers did not do anything, I was unable to attempt my paper of 30 marks. I kept waiting for my writer and kept calling, hoping that she might come, but the teachers didn't do anything either. They didn't have this thought even of bringing any student so that I could attempt that paper. I just went home doing nothing.

Interviewer: Was there any other bad experience with your writer as in every term, you have a new writer? What were the questions that you found problematic to solve like most of the students feel difficulty in solving comprehension passage?

Participant: Yes, the comprehension paragraphs were difficult for me to solve because in that, we have to read again and again to find the answers of the questions. It was obvious that I had no blood relation with my writer or he was not my friend either. So, I could not say to the person to read again and again for me because a person can read twice and thrice not more than that. I would also feel hesitant to say that. So, yes. The questions like this were difficult for me.

Interviewer: It also happens that you yourself feel ashamed of asking him repeatedly.

Participant: Yes, you do. The one favor that the person gives you that he comes for you. And then, you start irritating him. So, you feel really bad about it.

Interviewer: And sometimes, the writer is also in a hurry. He wants you to complete your paper as soon as possible which pressurizes you.

Participant: Yes, I faced such issues. The person you have brought to help you, he is in hurry, but this is not their fault either because most of the time, I had writer from the other department. So, in midterm exams, when my paper would end, hers would start. So, she used to be in hurry because she was trying to complete my paper before time so that she would get some time to revise the syllabus for her own paper. So, she used to say that hurry up. Tell me what to write next. What to write next. So, this is obvious that it pressurizes you. The person whom you have brought with you is not focusing on your paper. Instead of helping you, she is unintentionally pressurizing you.

Interviewer: You used to have a writer from other departments?

Participant: Yes, I told you that I had some fellows that were helping. So, they would post in different Facebook groups and pages. From there, I once found a writer. She was from NUST (National University of Sciences and Technology). She was a really nice girl. She used to come for me whenever I was in need. Later on, she stopped coming because she got into some family issues, but I think, why are we made dependent on others? Why can't we attempt our paper independently like the other students?

Interviewer: Yes, like if you had got the permission to write your paper on Braille, you could have attempted your paper yourself.

Participant: Yes. But I'm not saying that because Braille is a little difficult since there would be no one to read that, but what I am saying is that the university should provide you with writer if your writer does not come accidentally, so that we can also attempt our paper. Instead of getting worried for my papers, I would most get worried because of my writer, and due to this, I could not prepare well. So, the university should look into this matter.

Interviewer: So, your recommendation is that the university should arrange writers for blind students.

Participant: Yes.

Interviewer: Seeing that unemployment rate is so high, and for blind person, it is difficult to secure a job even after being qualified, so what if the university hires a Brailist for such students who can read their paper.

Participant: Yes. That is great. As the unemployment rate is so high, and the blind students are not given a job just because they are blind. So, the university can offer a job to a student who is Brailist to work as a Brailist over there. It would be encouraging as well for him. It will also make ease for other blind students whose computer skills are not that good.

Interviewer: What are your recommendations regarding the teaching methodology?

Participant: At least the teachers should change their behavior towards the special students. They should behave well, so the students can stay motivated to continue his studies, and would want to attend the university. They do not need to put that much effort. At least, they can allow the students to record the lectures.

Interviewer: Sorry?

Participant: I'm saying that they can allow the students to record the lectures.

Interviewer: Yes, like they could have kept MP3 and could have recorded the lecture for you.

Participant: Yes.

Interviewer: What about having an audio library?

Participant: Yes, audio library should be there. So, blind students won't have to rely on someone else they won't have to run after the people and request them to record the novels. He can get audiobooks for those novels and dramas, and he can listen to them and can prepare the presentations from there. They should create an audio library.

Interviewer: Hmm, so, do you think that the institutions should develop some strategies through which the spellings and punctuation be improved?

Participant: Yes, they should.

Interviewer: What are the other strategies that you would recommend that can be helpful for the blind?

Participant: Extra time should be given to the special students because it is evident that the student who attempts their paper, using human assistance needs, more time. So, they should give at least 45 minutes so that the students can also attempt the paper efficiently and peacefully.

Interviewer: What if the teacher dictates whatever he writes on the board?

Participant: Yes, the teacher should speak out whatever he writes on the board. He should announce the topic and whatever he writes on the board, so the students would also come to know that they have a special student in their class, and they have to take care of him as the teacher is doing. If the teacher is not considering all these problems, the students would not do that either. So, it is must that the teacher should take care of the special student, and the students will mirror it.

Interviewer: Yes, you are absolutely right.

Interviewer: So, whenever you had an individual activity any reading activity in the classroom, how did you read at that time?

Participant: Whenever we had any activity like this, I used to ask the student sitting next to me to read out loud so I would be able to listen to it as well. So,

after saying that, she would read it to me.

Interviewer: So, she would not read aloud herself, you had to say to her.

Participant: Yes, I had to ask her to read aloud because they didn't have awareness.

Interviewer: So wasn't there any input from the teacher in this regard?

Participant: There was a teacher. Her name was Aroosa. She used to ask the student to read aloud so that I could hear it too, but overall, there was not that much awareness about this matter

Interviewer: Individual activities are usually difficult for the blind students. So, what was the preference of teachers? Would they assign you individual activities or group activities more often?

Participant: They had no preference. They would do whatever they would feel like. Sometimes we would have group activities, but sometimes we would have individual activities.

Interviewer: How have you found NUML as compared to the other institutions that you attended?

Participant: Very bad, my experience with NUML has been really bad.

Interviewer: I have got that from your interview.

Participant: Yeah.

Interviewer: Okay. Thank you.

Interview 8

Interviewer: Would you please introduce yourself?

Participant: Thank you very much. My name is eight, and currently, I am working at a bank. I am a visually impaired applicant. I did my early education from a special institute. After that, I enrolled myself in general college, and I did my graduation from Punjab University and masters from Rawalpindi. My disability is Retina Pigmentosa. My eyesight became weak with the passage of time, and now I am partially sighted.

Interviewer: When did you notice that you were losing your sight?

Participant: When I was in eighth class. Since my eyesight is low by birth, but I did not feel like that at that time when I could ride, I could ride bike and bicycle. I could easily go to the mountains, this and that. In 8th class, I felt that my eyesight is losing.

Interviewer: So, you have told me that you attended a special school.

Participant: Yes, yes.

Interviewer: Before that, before your eighth class. Were you in the same school?

Participant: Yes, I was in a special education institute. I was in the same school. Basically, when I was in normal school, I couldn't pass the exam because I could not see the board. I wasted my two years in fifth class. I realized that I am a special child. Then, I enrolled myself into special school.

Interviewer: Say it again.

Participant: What?

Interviewer: The last sentence.

Participant: Okay, okay. I don't know how to say. Stop, stop stop, stop recording.

Interviewer: Wait a second. I heard this sentence that you could not see from the board. So, it was difficult for you to...

Participant: Yes, yes. So, I could not pass fifth class for two years when a doctor recommended me to enroll in special education institute.

Interviewer: When you were in a mainstream school, at that time, you were facing problems like you told me that it was difficult for you to see from the board, so what were the other problems that you were facing in that school. Were the teachers aware of this issue or not?

Participant: No, basically, teachers were also surprised. It was a first experience for them as well. I was a backbencher since my early education. Even nowadays, when I have trainings in my office, I sit at the back. So, at that time, I could not see the board. One teacher said that you please come forward and sit on the first bench like even then I could not see the board like teachers realized it that why this guy is doing this. So, my teacher Saima, her first expression was teacher is kidding with me and with the class. So, I was very naughty in school, and no one took me seriously. So, when I could not pass fifth class twice, then they realized that there is something wrong with Participant eight. So, after that, I went to the medical board, and doctor recommended to join special education institute.

Interviewer: So, when you were not able to see the board, who used to help you then?

Participant: There was no one who could help me at that time.

Interviewer: Like no friend?

Participant: No, actually, I was a very naughty and frivolous student, frivolous applicant, frivolous boy of my class. So, my friends were also you know like-minded. So, I didn't ask anyone to help me, and nobody did help me.

Interviewer: And how you used to read at that time. For example, when we do some activity in the class, and when we come back home, and we study. So, how did you use to study at that time?

Participant: Actually, I belong to a lower middle class family. My father was a Labor; even in public sittings, I proudly announce this that my father was a Labor.

Interviewer: Hmm.

Participant: When I was coming back home, there was no tuition for me. There was no academy. So, I forgot everything the very next day. Again, I would go to the school and do nothing.

Interviewer: So when you went to your special school, how was your experience over there?

Participant: Literally, at the start, it was very difficult for me. It was a totally new world for me. So, you know it was very difficult. It was dots, 6 dots and very narrow dots, thin lining of Braille. So, everything was very

complicated for me. So, I spent one year learning basic Braille, and initially, you know I was very upset, but with the passage of time, when I learnt things, I got a little confident, and it took almost two years in coming back to education, and then when I had learnt Braille, Braille books, contracted Braille, you know things started.

Interviewer: You studied using Braille at the special school, and you spent a year learning that, you must be facing some problems while attempting your paper through Braille.

Participant: Yes, yes, yes, yes, exactly. That was also a very tough time because there was no writer at that time. On Braille, you have to write your paper. You have to attempt your paper by your own self.

Interviewer: Hmm.

Participant: You are responsible for your own mistakes and your own excellence.

Interviewer: Hmm.

Participant: So, it was difficult. When I spent one year, I was able to write my paper on Braille. I was able to write my paper on Braille, on simple Braille not on contracted Braille.

Interviewer: Hmm, hmm. So, there are different types of Braille.

Participant: Yes, there are two or three Braille, I think two or three grades. One is simple Braille. Second is contracted Braille, and the third is advanced.

Interviewer: What happens in simple Braille?

Participant: You write the way you write on a paper.

Interviewer: And what about the advanced one?

Participant: Sorry?

Interviewer: What about the advanced one, the third grade?

Participant: The third grade is also mathematics contraction, Arabic contraction and things like that.

Interviewer: So, you used to give your paper like using simple language, the first grade?

Participant: Yes, initially, I attempted my paper on simple Braille. In the next year, when I learned contractions, I used contractions in my advanced level paper, and you know, after two years, things were in positive direction. I was able to write my Braille exams easily.

Interviewer: Hmm, till eighth grade, things went like this, but when you have the board exams, what was the case over there because you cannot use Braille?

Participant: It is also interesting and a blessing in disguise. You know in Punjab, in early classes, you also give board exams. In eighth class, Board takes exams of eighth class. In fifth class, it also comes under Punjab Board.

Interviewer: Yeah.

Participant: So, in eighth class. I was the topper of Punjab province. I got high marks in eighth class, and I got third position in all Punjab and first position in Rawalpindi. Like initial two years were very tough for me, but when I learned Braille, it became easy. There was an option of Braille whether you want to choose Braille or whether you want choose a writer. So, I chose Braille. While attempting my paper on Braille, I got third position in overall province. You know, in fifth grade, I was a frivolous and a naughty person, and in eighth class, I was a topper in Punjab, top three. So, everybody was respecting me that Mr. Eight was a very naughty one. There was a time that Mr. Eight was very naughty and frivolous, but now he has learned Braille, and he can do anything.

Interviewer: So, after that when you appeared in the exams of eighth grade, did you face any challenge in that?

Participant: I faced multiple challenges. Basically, my spirit had doubled. My enthusiasm had doubled because I was a topper in top 3, in eighth class. In ninth grade, I gave extra time to my studies. I was thinking that I will top Rawalpindi Board. This time I will get first position. I will be the topper of ninth class, but in ninth class, there was no option of Braille in respective board of Rawalpindi. There was no option of Braille. Unfortunately, unwillingly, I had to choose a writer. So, there was a condition that writer should be one class junior, and you know there are multiple issues in hiring a writer. First of all, you know the school administration of private sector, basically, they don't allow you. Basically, they think that the time of our students will be wasted, and this is one main challenge, and even in government schools, there are students that are junior or senior to you no matter. Unfortunately, their grooming is not up to the mark. So, unwillingly and unfortunately, my writer's

writing was you know not efficient or up to the mark, and he had very rough writing. How I know this because once I was taking my exam in examination hall, and superintendent, he asked me that Mr. Eight you should have got a good writer at least, and your writer should know the ethics of writing. So, he was not inserting headings, commas, full stop and you know bla bla. The main challenge as I told you that it was unfortunate for me.

Interviewer: So, you have told me that when you used the writer for the first time, you faced these problems. He was not writing properly. His handwriting was poor, and because of that, your superintendent asked you to bring someone who was better than that. Was there any other challenge while dictating him because when we are dictating someone, we are not comfortable that much?

Participant: Yes, basically because it is like two-way traffic. When your writer is not reading perfectly or efficiently, then you know unintentionally, you become uncomfortable. So, same case was with me. Unfortunately, his writing was not up to the mark, his reading was not as well. Secondly, I had no idea about the questions or answers. If the answer was not in my mind, independently, he took the decision to write my answer. So, I thought okay, okay, it happens. When my superintendent asked me to change my writer or I should have different writer in the examination hall. So, I was totally free in mind, and I was like let him write what he writes.

Interviewer: So, if you didn't know the answer, he would write it on your behalf?

Participant: Yes, yes, yes, yes, definitely because when your superintendent asked you that your writer needs to be changes, and your writer's handwriting is not too good. So, your paper is zero. You cannot move when you are taking your exam. Basically, there are formalities when you change your writer. It takes too much time like a month or two to change your writer. It is time consuming because you are appearing in board exams. If your first paper is on Monday, your next paper will be on Wednesday. So, you don't have much time to find a new writer for yourself.

Interviewer: Didn't you feel bad if you didn't know the answer, and your writer would

write it?

Participant: It was the case because the superintendent said that you need to change your writer. His writing was poor too, and the superintendent told me that his writing was not good either.

Interviewer: Okay, did you face any other problem like when you were at special school, how did you prepare for your exam? Did you read from the Braille books?

Participant: Till eighth grade, I read through Braille. In ninth grade, we had audio material available.

Interviewer: From where did you get the audio material?

Participant: We used to get it recorded voluntarily.

Interviewer: Was the school not providing you the audio materials and recordings?

Participant: No, no, no, no, no. There is an institution. There is an institution with the name of PFFB that is Pakistan Fighting Foundation Blindness. The institution would provide you with books that were selective, but for the past papers, it did not. Obviously, it was the time of cassettes and tape recordings. So, it was difficult for us. It was difficult to forward and to keep pressing the button until you get to the chapter you want.

Interviewer: Why didn't they do anything? It was a special school, and they should have catered to your needs, but they didn't do anything. There was a Participant, and he was your class fellow. He told me that you had a teacher who used to record lectures for you in MP3.

Participant: Basically, I told you that these were volunteer services. MP3 is not a rocket science. MP3 was the solution we had at that time. Even when I topped, I got an MP3 as a gift, but it was difficult to use MP3 because if you have all your chapters recorded and all the questions recorded and all the answers recorded into that, it is difficult for you to find the required data from it.

Interviewer: So when you switched to college, what problems did you face, and which college did you attend?

Participant: I attended Post Graduate College, Satellite Town. There wasn't Math's, and the main problem that I had was in Maths. So, I didn't have Maths as a subject at college. So, they would deliver the lectures. And I would

listen to that. I used not to go to academy. To do the high services of writing my paper, I paid my writer really well, and got really good grades.

Interviewer: So, didn't you face any communication gap with your writer?

Participant: No. As I have got the experience, I knew this time how to choose the writer, and how to guide him. I knew that I had to guide him before the paper that how he had to write the headings and stuff like that. I knew that I had to take him to my teacher so that he could guide him well.

Interviewer: So, how did you give your Sendups?

Participant: In Sendups, I attempted one paper on Braille. I asked my friends for the rest of the papers.

Interviewer: Your class fellows or your other friends?

Participant: No, no, other friends.

Interviewer: How did your teacher read your paper written on Braille?

Participant: There was another teacher who could read Braille as he was blind, so he read my paper to my teacher. So, that's how he checked it, and I got really good marks in that subject.

Interviewer: Oh, that's great. Then, what happened that you chose English as your major in BS?

Participant: Actually, in Matriculation, I got really bad marks in all the papers, but only in English, I had a bit better marks. Even in maths, they passed me with a star. So, I thought to go for English. In eighth class, I topped, and I was very hopeful to get good marks in Matriculation, but I was really disheartened. So, English was the only subject in which I had better marks as compared to the other subjects. The second thing was that I got really bad marks in English in intermediate which also made me take this decision that I would go for English as my major in BS.

Interviewer: So, the reason was that you got bad marks in intermediate, and you decided that you would choose English?

Participant: Exactly, exactly.

Interviewer: What was the reason of choosing NUML?

Participant: I told you earlier that I am a son of a Labor, and I had no idea about doing masters from NUML. So, I had this friend who called me and asked that where are you getting admission for masters. I said what is that. He

replied that it is MA. I asked him what will happen after MA. He said that I don't know. He applied, and took the entry test. 35 days were gone. 35 days passed, and after that I got zealous for it. So, I went to NUML, and asked from the relevant department to conduct my entry test. So, I took my test, and again I got first position for the morning shift. I don't know how it happened. They just said as your marks are good, so you can join. So that's it. Actually, my English teacher was a very expert teacher. We couldn't understand English back then. So, he made us understand the main concepts in Urdu. Based on which, I attempted the entry test whatever he taught me, and I passed the exam.

Interviewer: From where did you do your bachelors?

Participant: Punjab University.

Interviewer: Punjab University. So, in that University, didn't you face any problem of writer?

Participant: No, no. The person who attempted my intermediate exams, the same person was there in the examination of university.

Interviewer: In bachelors.

Participant: Yes, yes. So, I didn't face any difficulty in that examination.

Interviewer: As you told me that you gave the entry test separately, how did the university allow you?

Participant: I requested them. I told them that I missed the entry test, but I have passion for studying further. Participant Six was my friend. He said that we had to do this. So I agreed. So, I requested them on special grounds. So, I guess, they did it on special grounds, and the classes were not started at that time.

Interviewer: When the classes started over there, how was the environment? Was the classroom inclusive or not?

Participant: Basically, the teachers were very cooperative. When your teachers are cooperative, automatically your class mates also become cooperative and kind to you. So, same case was with me and with Participant Six. We both were class fellows. Although at the time of exam as we didn't switch to computers, the first two semesters; midterm and end term were difficult. It was a difficult task for me. Finding a writer was not easy and

the different problems that you face during examination. However, over all, it was well. It was good.

Interviewer: The first challenge that you faced was finding a writer. There were multiple challenges that you faced during your exams as well. One of which was of spellings.

Participant: Yes.

Interviewer: Can you tell why these mistakes were there? What was the reason of those spelling mistakes?

Participant: Basically, when you have eyesight problem, and you cannot see your books, you face this spellings problem.

Interviewer: Is it difficult to dictate spellings to your writer?

Participant: Yes, it is time consuming. You cannot spell words because they only give five to ten minutes. So, it gets a little difficult.

Interviewer: Did you have any problem in punctuation because earlier those mistakes would not count, but when you were doing your degree in language, you need to take care of all these things?

Participant: I never used punctuation because if I was dictating him to put the sign of colon, he would draw for example semi colon on our hand to confirm the sign, and we were not aware how it looked. So, I would rather let it go without punctuation markers.

Interviewer: Do you yourself have the understanding of punctuation?

Participant: Yes, but not the way they are used in books because I have forgotten them, but I know exclamation mark, colon, semi colon, and apostrophe like that.

Interviewer: Did you face any problem in sentence structuring like sometimes while dictating, we keep on dictating due to which, our sentences become so long that the reader finds it difficult to follow our thought?

Participant: Yes, it happened to me.

Interviewer: What?

Participant: We should dictate small sentences. When you dictate long sentences, you make mistakes of punctuation. What we do is that we become philosopher, Shakespeare, and John Donne. In order to write like John Donne, we make mistakes of punctuation and different other mistakes.

Due to which we get poor result, and our marks get deducted.

Interviewer: Did you face any problem in paragraphing?

Participant: Should I tell you one thing that I didn't get support from my family. No one guided me how to do things. So, I used to get the heading written, and that was it. I never went for paragraphing.

Interviewer: So, you did not guide him to make paragraphs?

Participant: No, I would just ask him to write the headings.

Interviewer: So, it was up to the writer how he writes.

Participant: Hmm.

Interviewer: You were using writer for your exams, but how did you take your notes in class?

Participant: In first two semesters, I would ask for permission from teachers to record the lecture. Some would allow where as some would not. So, the teacher who would allow, I used to record their lecture and memorise it by listening to it later on. After spending two semesters, we had vacations. In the holidays, I aimed to enhance my computer skills, and I started learning very passionately. In the third semester, I started typing my notes when the teacher would deliver the lecture.

Interviewer: As some teachers were not allowing you to record the lecture, how did you do preparation for the exams of those subjects?

Participant: Well, I was totally relying on my fate. I would have to face whatever comes my way. So, at the time of exams, I would just watch some videos on YouTube in my exams, and would just attempt my paper somehow.

Interviewer: So, didn't you get help from your friends?

Participant: Friends helped me as much as they could, but they were also like me. Some were from backward areas like Waziristan. I was also hesitant to take help from all my fellows. I was just closed to some fellows, and I would only take help from them if they complied. We used to do group study just before exams.

Interviewer: In English Literature, you need to memorize different quotations. How were you doing that?

Participant: I just studied the summary. I also watched movies of some novels and dramas. When you watch movies, you develop an understanding of it,

some quotations from the movie will stay in your mind, and that helped me in my papers.

Interviewer: Some people search material on the internet. Some use scanned books. You didn't use any rather you took help from YouTube.

Participant: I watched movies directly from YouTube, and memorized the quotations from there.

Interviewer: Sometimes the movie is different from the actual novel.

Participant: Yes, you are right. There is sometimes exaggeration in the movies.

Interviewer: There would not be quotations in my paper so often. I would only use the quotation which my friends helped me to memorise, and those quotations were very small like the quotation of John Keats that was love is beauty, and beauty is love. So, I will only use such type of quotations in every paper, and it will not get highlighted in my paper.

Interviewer: Did the teacher speak out whatever they were writing on the board?

Participant: Some would speak out, but some would not.

Interviewer: So, what would you do about the teachers who would not speak?

Participant: I would ask my friends to send me the screen shots, so I would take help from there.

Interviewer: Didn't you request the teachers to speak out?

Participant: No, I took help.

Interviewer: From whom? From your fellows or your teachers?

Participant: Sometimes from fellows and sometimes from friends.

Interviewer: When you shifted to typing, did you face any problem in typing?

Participant: No, I didn't face any issue in typing because the systems on which we had to attempt our paper had the talking software, and my typing speed also became quite good because I practiced. When I attempted the exams of midterm in my third semester, I was really happy. My spellings problem did not remain an issue either because while practicing if I came across any word that was difficult to spell, I would memorise the spellings of that word. So, I didn't face any issue in spellings. Yes, I was unable to know the shape of a letter, but I would just cram the spellings.

Interviewer: Your friend told me that he was unable to attempt the last question of every paper because there was no time left for it because of his slow

typing speed.

Participant: Yes, time management is an issue. They do give you time with a writer, but they don't give you time when you attempt your paper on computer. So, yes, this is a problem.

Interviewer: Did you get extra 45 minutes to attempt your paper?

Participant: I don't know how much time is given now. Yes, 45 minutes are given if you are attempting your paper with your writer. However, I would only get 15 to 30 minutes when I used to attempt my paper with a writer.

Interviewer: Did you get extra time in Matriculation, FA and BS?

Participant: Yes, I got extra time in Matriculation.

Interviewer: What about FA and BA?

Participant: I didn't need extra time in FA and BA.

Interviewer: When you had writer with you, would you sit in the same room?

Participant: No, we would sit at a side. We were not allowed to sit with the other students in the same hall. So, they would allocate us another spot, and we would sit over there.

Interviewer: In the corridor?

Participant: Yes, in the corridor.

Interviewer: Did you not get disturbed by the passersby?

Participant: No, I did not get disturbed. I just passed the time. So, I was not that bothered. There were some students who used to get disturbed, but I was not getting disturbed as I was passing the time.

Interviewer: Were there any subjects in which you had to face problem like Phonetics and Phonology, Grammar and Syntax and Introduction to Language. So, are there subjects like that?

Participant: Yes, yes, I had subjects like that.

Interviewer: Tell me how did you learn Phonetics and Phonology?

Participant: There were some tree diagrams that were difficult, and there were some words, I don't remember now what they were.

Interviewer: It was transcription.

Participant: What?

Interviewer: Transcription.

Participant: Yes.

Interviewer: So, how did you learn that because sighted students can see the symbols, and they practice while watching those symbols?

Participant: Our friends helped us. They would make symbols on our hand, but I was unable to attempt this question perfectly in the paper. I was also unable to attempt the question of tree diagram even when I was using computers.

Interviewer: Your friend was telling me that he used to explain those symbols in the paper.

Participant: Hmm, it was difficult. There were some cluster sounds and things like that. I don't remember exactly. I was using computers, but I was having difficulty no doubt. I don't remember about my friend how he was doing, but it was difficult. I don't remember exactly.

Interviewer: How did you learn the tree diagrams?

Participant: I did not learn them, but I just got the idea that how it was. My friend drew it on my hand, and told me that this is NP, and this is VP. I just wrote the same concept in my paper whatever he told me. I did not make any tree diagram. I just wrote what I was told.

Interviewer: Then how much marks did you get?

Participant: I got average marks in both subjects.

Interviewer: Were the teachers cooperating with you?

Participant: Basically, I am a very keen observer. I am very naughty, but I would feel things. I had a teacher of Poetry. In that paper, I used the assistance of a writer. I got bad grades because of the mistakes. In Poetry, you have to write lines as well. So, I got less marks in that exam. I went to my teacher and told her about the problem. She asked me to tell her about it verbally. Then, she questioned about different concepts. Then, she increased my marks. She understood my problem. I told her that I had problem in spellings and stuff. She understood it, but there were some teachers who would not understand. Most of them were understanding and cooperative.

Interviewer: The teachers were understanding your problem, but they didn't know how to help you.

Participant: Yeah, some were understanding my problem while some were not. The teacher needs to consider such issues.

Interviewer: Okay, what type of software do you use in your laptop?

Participant: I use NVDA and JAWS, not NVDA but JAWS. I also use narrator.

Interviewer: Do you face accessibility issues using the software?

Participant: Yes, if you scan a document and convert it into pdf, the software does not read it. It does read the pdf scanned images like taken by CamScanner. Usually the students use CamScanner and create a pdf. That pdf is not accessible with the screen reader.

Interviewer: Was it difficult for you to jump from one page to another if the document contains so many pages and if you are at page 110, and you want to go back to page 74?

Participant: No, that was not a problem if it is on Word; you just need to insert a shortcut command, and you can easily jump to the desired page. The second way is to press control F and write down the key words that you want to find, it will take you there. If you want to go to chapter number 13, write chapter 13, and you will directly go there.

Interviewer: Do you find difficulty in finding the data from different websites?

Participant: Not at all.

Interviewer: Not at all?

Participant: Not at all.

Interviewer: When you were in masters?

Participant: Yeah, when I was in first two semesters, I faced this issue because I didn't have any laptop.

Interviewer: Were you provided with e-notes?

Participant: Most of the teachers used to give notes in hard copy, but some gave e-notes.

Interviewer: Were they giving generally or were they doing specifically for you?

Participant: No, no, generally.

Interviewer: How did you read your hard notes?

Participant: We would read them with the help of our friends. When we did group study, our friends would open their notes, and would read. Our notes always stayed in the cupboard because obviously those were not of any use for us. So, we used to get help from our friends.

Interviewer: If you get hard notes today and tomorrow you have a test; how will you prepare for that?

Participant: Yes, that is difficult, but nowadays there are some glasses. They capture whatever is there on the page by scanning and reading it to you. If the students are given those glasses, it would be of great help, but the glasses cannot read handwriting. It can only read typed text.

Interviewer: That is great. Tell me what applications are you using in your mobile phone?

Participant: In phone, I use Talkback and Eloquence.

Interviewer: What?

Participant: Eloquence.

Interviewer: What are the features of that?

Participant: Talkback works a little slower than Eloquence. The perception speed of Eloquence is better than Talkback. For example, if you write in Urdu in Roman Urdu “ap ka kya hal ha?”, Talk back will read it slower, but Eloquence will read it faster.

Interviewer: Okay, what recommendations do you have for the university?

Participant: Whatever we discussed, I can say from that is first of all, the university should give extra time to the students who attempt their paper using computer or a laptop. They should give 45 minutes extra to such students as per the policy. Secondly, they should also give a writer who is one class junior to us but at least he is proficient in English Language, so there are no mistakes of spellings and punctuation in our paper. At least, his written script should be quite well. Thirdly, universities have funds, so they should also arrange some gadgets for the students’ usage with which they can perform their activities well. So, the students should not have to spend on such gadgets; they don't have to use their own resources. The university should arrange them for its students. If they cannot give them permanently, they should give it till the time the student is in the university. There are devices like My Orcam Device; it reads the text to you if you have a hard text. It also reads currency. It tells you how much money you have in your hand. Then, the teachers should also allow the students who have not switched to typing to record the lectures, so they should be able to attempt the paper. The teachers should also compensate visually challenged students who use writers for spelling or punctuation

mistakes. They can call the students to them before marking the papers and can ask them about the concept. It is obvious that we cannot see the spellings the way the other students can. We don't know the shape of the letters, and we listen to books. We don't know the spelling of the words. This is a genuine issue which I think teachers should consider. That is all. These are some suggestions, and the best suggestion is that the university should allocate funds for the students who are visually challenged or special students. They should arrange special gadgets for them. This is the era of AI. People are talking about flying cars, and we are discussing such things. Scholarships should also be given to such deserving students. Overall, all these things should be considered.

Interviewer: They provide e-notes because I think such things should be preferably used, so the students like us can also access the material.

Participant: Exactly, exactly.

Interviewer: So we can get rid of this dependency.

Participant: Hmm, yes, exactly.

Interviewer: Would you like to say something at the end?

Participant: Thank you so much. I hope your research would be fruitful and positive information for the administration and management, and I hope that they would take good and right decisions.

Interviewer: Hmm, In Shah Allah.

Interview 10

Interviewer: Would you please introduce yourself?

Participant: My full name is participant 10. My date of birth is September 17th, 1982.

I am 41 years old. I am married and have a daughter named Zaneera Iqbal. She is about 8 months old now. Currently, my profession is teaching. I am posted as a Lecturer of English at Government Degree College Hayatabad, Peshawar. I live in Phase 6, Hayatabad. I completed my Master in English in 2014 from NUML, Islamabad. After that, I taught in the private sector. In 2016, I was appointed as a Lecturer in English in the government sector through the KP Public Service Commission. I have been working in the government sector for about seven and a half years now.

Interviewer: How many siblings do you have?

Participant: As for my family, we are five siblings. I am the eldest. There are four brothers and one sister.

Interviewer: What about your parents?

Participant: My father, who retired as a Wing Commander from the Pakistan Air Force in 2007, lived with us. However, due to my education, I had to move to Islamabad. Later, for employment, I came to Peshawar. Currently, my father and mother are settled in Karachi.

Interviewer: Which place are you from?

Participant: Basically, my background is from Lakki Marwat, Khyber Pakhtunkhwa. We are Pathans, and we belong to the Marwat tribe. As I mentioned earlier, my father served in the Pakistan Air Force. Because of this, we traveled with him to different Air Force bases across Pakistan. Currently, I am settled in Peshawar, while my parents are settled in Karachi.

Interviewer: What type of visual impairment do you have?

Participant: My visual impairment is by birth and is due to a genetic problem.

Interviewer: At what age did this issue appear?

Participant: It was diagnosed when I was two years old, around Eid. However, the problem wasn't very serious at that time, so the doctor recommended

glasses. We kept changing the glasses over time, and things were going fine in that way.

Interviewer: So, why did this issue appear?

Participant: When I reached the age of 10 to 12, my eyesight started weakening rapidly. Then there was one doctor who recommended a surgery. We opted for that surgery. But after the surgery, we found out that it was suggested on wrong diagnosis. And due to this, my eyesight kept getting weaker and weaker. In the next 5 to 6 years, my eye sight was completely gone. Currently, I only have light perception, and my eyesight has worsened rapidly. Nearly ten years after the surgery, it was discovered that the problem was with my retina. But the surgery was performed for squint and nystagmus which caused further complications. The actual issue is Chorio-Retinal Detachment (CRD) and Macular Degeneration. These two issues—Chorio-Retinal Detachment and Macular Degeneration—are the reasons for the problem with my retina.

Interviewer: Did you get any treatment for this impairment?

Participant: Doctors say that until a retina bypass or transplant is developed, there is no permanent cure for this condition.

Interviewer: What type of school did you attend?

Participant: I started my academic journey from mainstream schools like Pakistan Air Force schools, and now they are known as Fazaiya school system so I got 3 classes in this. At this time, my eyesight was not that bad. I had glasses on but I had problems in reading text and reading board. These two problems were very big. One was reading text, and another was writing down notes from board.

Interviewer: Please share your experience of being a part of the institution.

Participant: I will talk about 4 sections. Number 1, accessible study material was because I used to read some texts which I used to make notes or my parents used to write to me, but I used to have problems in reading small font books, but some books were written by my father or mother so this problem was going on. Number 2, accessible examination system. I used to write big text in my classes. Later, I used to use markers in my 3rd class, so I used to write big text in my classes. But I had problems in

writing, and I used to have speed issues. Number 3, inclusive environment, so for inclusive environment, mainstream schools have very ruthless environment which was my experience. Teachers are not trained to fulfill individual needs, so they are not trained to adapt to the environment. So, here in mainstream schools, the survival of the fittest formula is used. If you are complying and getting down to their standards, then the work will continue. But if you are not getting down to the standards of that school and you have any individual needs, like you need a large print, or you need additional time in the exam, or you have to write big, or you have to use markers, or some kind of issues then they don't have any technique available for this. Even if they don't have your eyesight completely then they don't have any books or any material because they are not trained on this. They don't have anything available. So in mainstream schools, I don't recommend that if you have a disability and you need accommodation unless there is a policy in the mainstream school that the teachers of the mainstream school should be taught about this, they should be trained otherwise they cannot fulfill the individual needs.

Interviewer: How was the attitude of people towards people with disabilities?

Participant: At school level, people's attitude was mixed. Some people were supportive. They used to guide people. They used to tell them how to do it. But some people were not supportive. They used to include teachers, students and acquaintances in the environment. They used to try to make sure that people with disabilities should not be in mainstream schools. Especially the attitude I saw, this was very much done at that time. Although schools were very good but some people were not supportive. They used to think that people with disabilities should not be in mainstream schools.

Interviewer: So, how did you cope with this unsupportive attitude of people?

Participant: When I got my education from a mainstream school till 3rd class, my eyesight was very low because I had surgery, and it was difficult for me to cope up, so there was a lot of delay in my education. After that delay, someone guided us to go to Al Maktoum Special Education Center in

Islamabad, and they will guide us to get education. My father contacted them, and they interviewed me. We decided to learn Braille first, and then we will decide what to do next. Then, I joined Al Maktoum Special Education School in 1996, and they gave me admission in 4th class and I started learning Braille. I stayed with them from 1996 till 1997. Then, my father got transferred to Karachi, so I went to Karachi. When I went to Al Maktoum Special Education Center, I liked the environment there because it was a special education school, and I was getting individual attention. The environment was very good. The teachers were very cooperative. They were very nice and caring because they were trained for this. I felt much better. They taught me Braille.

Interviewer: Please share your experience of being a part of Al Maktoum Special Education Center in terms of accessibility of study material etc.

Participant: Ok, I will talk to you about those 4 areas and how my experience was there. The accessible study material was provided in Al Maktoum Special Education School. They provided books in Braille from class 1 to 10. They tried their best to provide all the textbooks in Braille, but their resources were limited. The government was providing them resources till 5th class. They were providing 6 to 10 books in Braille with the help of parent's teacher association, and there were volunteer teachers too. The environment was very good, and they had thermos foam machine, and they used to make copies of the books. Students were able to get English books and other courses, and because they had textbooks, they could read and make their own notes. The second benefit was that if we talk about ESL, then spelling, punctuation, sentence structure and all these things, because we could read with the help of Braille, so I felt very good when I gave the 4th class exam in Braille. Now, let's talk about the accessible examination system. They used to give the 8th class exam in Braille. All the tests, quizzes, finals, midterms were in Braille, and the teachers could check them too as they had the writing system available. If someone had vision and could write then they would give their paper in a normal way, but if someone's vision was gone, and they used Braille then they had the Braille system too. So, it was a very strong system, and

I built up a lot of confidence in it that we can do something by ourselves. So, I gave the 4th class exam and passed it. The test was to see if I could write in Braille or not and from there, I passed the 4th class. The inclusive environment is such that in special education institute there is an inclusive environment because it is a special education. Individual needs are fulfilled. Every student is paying attention, and especially teachers are trained here, or the environment trains them itself, so the environment is inclusive. Whether it is quizzes, drills, exercises, you have the material in an accessible form, and you don't have to face any situation that you feel that the environment is not inclusive. The attitude of the people, the attitude of the teachers in special education, the attitude of the staff with the students was cooperative. They used to help each other, and if they knew about each other's needs then if there was any problem or helplessness then we used to solve it very quickly. Even teachers used to give their extra time to solve the problems.

Interviewer: So, the environment was quite cooperative there.

Participant: Yes. In 1997, after passing 4th class, I came from Al Maktoum Special Education Center to Karachi. In Karachi, I started my education again in 5th class from Shaheed-e-Millat Special Education Center, Gulistan-e-Johar. This was also a special education school. Here, I got the same environment as in Al Maktoum Special Education Center. From here, I took my matriculation exam, SSC, secondary school certificate exam. I got the rest of the education from here from 5th to 10th. But the biggest problem here was that, first of all, let's talk about accessible study material. Here, study material was not available in accessible format because they did not have such resources. Here, we had to make our own notes in Braille, or we had to record through audio. Here, there was a problem of textbooks. They did not have resources to provide textbooks to students. So this was a big challenge.

Interviewer: So, how did you arrange study material for yourself?

Participant: We had to make our own notes, or the teacher dictated it, and we made notes in the class. We used to make notes in the class and used it to study, or we used to make our own notes from home or record on audio tapes.

We were not so interested in computers at that time. So we used to study from that. Examination system was such that it was accessible here too. Large print text was available. Normal writing system was also available. Braille medium was also available. So those who could not see at all, they used to give their paper in Braille. Those who could see a little, they used to write in normal, big, big. Or teachers used to provide them with large print paper. So they used to do their work in that way. So the examination system was also better here because the test was also taken in Braille. And there were no quizzes or anything else. The examination system was also better here. It was like Al Maktoum special education center. But the matter of accessible study material was wasting a lot of time. Material was not available. It had to be arranged by itself. The inclusive environment was like special education school, like Al Maktoum special education center was inclusive. Similarly, here also, in Shahid-e-Millat special education center, the environment was fully inclusive, and there was no big issue. Teachers used to help in the classroom environment too because teachers were trained for special education, or the environment had trained them. So they used to take students in an inclusive way. The issue was that accessible study material was not available. So the spelling mistakes, punctuation mistakes, sentence structure, formatting issues, learning proper formatting, or such issues exist because you didn't read it yourself, you had to rely on something else. You had to rely on audio. So these issues were presented in ESL cases. Apart from this, no books of grammar were available which you can read in Braille. No proper books were available. So because of this, you had to rely on audio, the material you got in the classroom environment, or you had to rely on what was taught. So, this was the issue here. People's attitude was also good here. It was like Al Maktoum special education center. There was no big issue. The whole system was right. People used to support each other. The same kind of environment was there like Al Maktoum special education center was. This was the same kind of environment in Shaheed-e-Millat special education center.

Interviewer: What about the examination system?

Participant: Okay, the system of accessible examination was good till 8th class. But the exams of 9th and 10th class were from Karachi board, so you needed a writer for that. So, this became a nightmare at that time because you had given your exams yourself. You needed a writer in 9th and 10th class, so we used to practice sitting with the writer. In my case, I used to practice sitting with the writer, so that our individual understanding could be formed. But this was a big problem. Meeting the writer, sitting with him and practicing, and then developing an understanding with him. This was a big problem especially relying on his handwriting and taking his self-decision. This was a problem with students in 9th and 10th class. In my case, I used to practice sitting with the writer. In my case, I was lucky that I took the writer from the permission board, and the writer was also from a good school.

Interviewer: When you had writer for the first time in your exams, what sort of problems did you face when you had this experience of having a writer in your exams?

Participant: One rule was that if you have to give an exam in 9th, the writer should be of 8th class. And if you have to give an exam in 10th, the writer should be of 8th class. So this was a big problem because one class was behind, and his speed was not able to be at that level. The level at which the speed was required was not sufficient. So there used to be the issue of speed. These people used to provide extra time of 45 minutes, but sometimes that time was not sufficient. Sometimes the paper was not complete because the handwriting of the writer was slow, or the writer used to get irritated. These were the problems. In my case, the writer was trained, so he didn't have to face much problems.

Interviewer: Hmm.

Participant: After doing matriculation or SSC in year 2000, I was guided that the facility of accessible computers is available. I was guided by a gentleman named Mr. Saeed who used to come to Pakistan from UK during summer vacation or winter break. He used to train students here. During this time, some friends and acquaintances guided me to meet Mr. Saeed and learn how to use JAWS. They trained me for 3 months, and they guided me to

access basic JAWS and computer via Windows and MS Office. I learnt about internet from them, and I got awareness about computers and how to use them. I decided to study computer science as I got to know about computers. I decided to take admission in Pakistan Air Force's main stream colleges and pursue computer science at intermediate or FSc level. I took admission in FSAF in Karachi and completed my FSc with computer science in 2002. I completed my FSAF with Mathematics, Economics and Computer Science. I was affiliated with Federal Board, and I took exams from it. Now, let's talk about those 4 points. Accessible study materials were not available in the colleges. I used to make notes in Braille, and recorded them on audio. I used to transcribe them on Braille, but the problem was that it was difficult to use Braille. I used to type some material on computer via MS Word or notepad. I used to gather some material from audio, computer text, MS Word or Braille, and used to study them on internet. I used to gather some material from the internet and used it to study. Teachers were not trained in special education, so they could not provide accessible study materials. Some teachers used to give some material, but it was not sufficient. They used to give the material in the form of accessible study materials which was a waste of time. I was not able to do reading so I used to do spelling, punctuation, formatting, grammar etc., but since my background in English was good, I didn't have to face so many problems. But at this level, since you have not read it yourself, and you have made the notes yourself, the textbooks are not in accessible form, so the spelling, punctuation and formatting problems are very high.

Interviewer: And what about the examination system?

Participant: So, let's talk about the Accessible Examination System. Here also I needed a writer, so I had to give the paper with the help of a writer. I tried to develop understanding with the writer, I practiced a lot, but the problem at intermediate level was that the paper was very lengthy here, and it was a big challenge to finish them timely. Although the Federal Board also gave 45 minutes extra to finish the paper, but the problem was that since I had opted for Mathematics, Economics and Computer Science, there

were also diagrammatic representations, so getting the paper done with the help of a writer was a big challenge. If we talk about ESL, my background in English was good, and the medium of language was also English in college, so in the case of ESL, I did not have to face so many problems. But it is usually seen that when children come to college level, since textbooks are not available, so in the case of ESL, they have to face a lot of problems.

Interviewer: Was the environment inclusive at this institute?

Participant: Let's talk about the inclusive environment. Since teachers were not trained in special education, and accessible study material was not available, so ensuring an inclusive environment was a big problem for teachers. They tried their best to include it in their activities, exercises and drills, but the problem was that since the material was in an inaccessible format, or they wrote on the board, or there was an impromptu activity, so during that time we did not have a laptop, and they did not know how to use the Braille, so it was a big challenge for teachers to include us in an inclusive environment. So, here we had to do our own care, and we had to take part in activities, friends used to help us, but two problems were that the accessible study material and the teachers were not trained to cater to the individual needs. These two things were such that it was difficult to provide an inclusive environment.

Interviewer: How did the people here behave with visually impaired students?

Participant: People's attitude was that since people were matured here, so they helped us, they used to dictate notes; we used to make them in Braille, or record them in audio. Laptops were not available at that time, so it was expensive. Laptops were not within reach, so we had to record in audio, or they used to dictate to students, or parents and siblings used to dictate, so we used to make notes and work, so it was like this.

Interviewer: Right.

Participant: In the year 2002, after completing intermediate, FSc or HSSC, I continued my computer science. I took admission in Virtual University of Pakistan, BS Computer Science. This university was online, and my computer skills were also good. The study was done online, with LMS, Learning

Management System. We used to log in and do our work through internet. We used to do quizzes, tests, assignments, presentations. But for mid-term and final term exams, we had to go to examination center. The environment was good, because it was online. This was a good experience. Now let's talk about the four areas. First, accessible study materials, one good thing about Virtual University of Pakistan was that they had already made notes and handouts for every course. They were available in MS Word and PDF. They were also available, lecture-wise. They also made notes in Allama Iqbal Open University. So here, time was saved. They also had textbooks in PDF mode. Students and teachers shared their textbooks online. So here, accessibility of study material was not a big problem. In the case of ESL, we had four or five courses. As my basic focus was on computer science, ESL courses were not that difficult. And because study material was also available, they did not bother us much. Study material was available in PDF and MS Word. If there was no study material, we used to scan it. At that time, I had the option of scanner. I performed OCR in it. OCR was a problem, but ESL had to scan very little. So in the case of ESL, study material was not a big problem. But other than ESL, like computer science courses, or mathematics courses, they had diagrammatic representations. And we had the issue of accessible study material. But because your research is related to ESL, study material is available in ESL, in the Virtual University. And in an accessible form, it is very good. Let's talk about the examination system. The examination system was like this. Writer or helper was needed here. So I took permission from them to arrange writer or helper. It was very difficult to arrange because here the problem was that every course had midterm exam and final exam. Because you had to go to the examination center and give online. So, the problem was that the writer had to be searched through online software. So that the person who has the skills can use the mouse properly. And he can interact with the computer. So, not only writing, but also typing. So this was a big challenge for us. As the software was not accessible in the beginning, we could not use it with the help of JAWS. Later I requested them. They

labeled the software buttons, and gave me permission to install JAWS. The computers of our center: you can type MS Word or Notepad in them, your writer or helper will select the text from there, and paste it in our examination software. So, here I used both mediums. I had installed JAWS on their computers. I typed my answer myself, and then the helper or writer or their invigilator with me, I used to ask them to select the text from here, and paste it in the relevant place in the software. Later, they made the examination software accessible. So, I had to ask the helper or writer to paste it there. I used to type it there. And save it there. So they didn't have such a big issue. They had this facility available.

Interviewer: So, did you face any other problem in this university?

Participant: Yes, the problem was that computer science courses and mathematics courses had diagrammatic representation. And I had a problem with drawing diagrams through the computer. It was a big challenge, so I used to select the writer or helper who could interact with the computer. So, he would draw it, and later we would select it, and paste it in the software. So, this was the case. But there was one benefit. Since JAWS was allowed to me, I could do more than 70% of the paper. I used to ask the helper or writer to select the text from there, or I used to request them to select the invigilator, so they could help me paste it there. So, this is how the accessible examination system worked which was quite good. But there was a problem. There was a policy issue. They didn't have a clear cut policy. So, every time I had to request them, I had to take permission, and I had to struggle a lot for that. Sometimes the exam would start, and I didn't get permission from them. So, I had to make them make calls from the examination center, and then they would get permission from there, and then the exam would be conducted. This was the problem. So, their problem was the policy issue. Now, I don't know if they have a policy or not, but at that time, they didn't have a clear cut policy. They had to take individual permission.

Interviewer: Since it was an online system, how did they make it inclusive?

Participant: Let's talk about the inclusive environment. Since the system was online, everyone used to interact online, and their LMS was accessible. So, there

was no problem with that unless there was a diagrammatic representation. Otherwise if there was a quiz or a presentation or an assignment, we could interact with that LMS. There was no problem. The environment was completely inclusive. We could interact with the instructor anytime, and we could interact with each other. But there was one thing, the instructor or teacher wasn't trained to fulfill special needs. Still he would try his best. If we would email him that I have these needs, so what can you help me with. So, he would provide some text, or he would provide some books which would solve the problem. The fourth thing is the attitude of people. Since all interaction was online, so there was no attitude. Mostly, it was that people were cooperative, and they used to interact with each other. And there was no such thing. The people around us used to think that instead of face to face, we are participating in the online education system. So, this is maybe less than that. It is inferior, and the face to face communication system or education system is considered superior in our society. But my personal experience was like that with virtual university. My experience was very good.

Interviewer: How were the exams conducted in this university considering your special case?

Participant: In the exam in Virtual University, they used to give me 30 minutes extra in mid-term and final-term exams, but the problem in these 30 minutes was that the typing speed mattered a lot. In the second exam, we had to get the question from JAWS. So, it took time during that time. The third problem was that we needed helpers or writers. As I said, some portions were inaccessible, so we had to select the question from the list and paste it in the exam software. The problem was that the time tracking of the exam software was also a problem. It was made for the common people and it was tracked accordingly. So, the time tracking issue was also an issue. Later, they changed the software and fixed it. The software used to exit and our time used to be completed. So, sometimes the question was not completed, and we had extra time so we had to tell them. So, these were the kinds of issues. The issue was related to extra time. So, I suggested them to take at least 30 minutes to 1 hour or 1.5 hours, but they

did not accept it. So, they used to give me 30 minutes at that time.

Interviewer: Right.

Participant: I had taken admission in BS Computer Science at Virtual University, but I had already completed my two-year degree program. There was an option in between that if you have completed four semesters, then you can exit with a BS Computer Science degree. Since the market situation was such that it was difficult to progress in Computer Science, I had to exit with a two-year degree program. After completing my BSc in Computer Science, I applied for MA in 2010 in Islamabad. But since I was switching from Computer Science, they gave me admission in Zero Semester. They have a Zero Semester for MA English and BSc. If you have any deficiency courses or you are switching from a field that is not relevant, they give you a Zero Semester, and then you get admission in the full-fledged discipline. I completed my BSc in Zero Semester and then I started MA English in 2011.

Interviewer: So how did you manage that? Was it difficult switching from one to the other?

Participant: So now, let's come to the four areas. I was switching from online education system. I had many facilities there as I talked to you. Here, I am again in the face to face education system. Let's talk about Study Materials. Study Material was not available here, but here I was lucky that I had internet facility and laptop. I had good computer skills and my friends were cooperative. So, I used to arrange my own study materials especially these long novels, dramas, poetry, prose, spark notes, cliff notes, e-notes, monkey notes, I used to get them from these websites. Especially these three websites were very useful. At that time, they were free. Now they have become premium. They have invested money on them. At that time, they were free.

Interviewer: Which websites did you mention?

Participant: I have mentioned Spark Notes, Cliff Notes, E Notes, Novel Guide, these websites helped me a lot because I used to get full text on it, poetry, drama, prose, novel, and also study guides, so I used to do most of my work with them. If there was nothing available, then study guides used to

dictate notes to friends. I used to record on my computer or directly type on it because sometimes it was difficult to type directly, so I used to record on my computer, and then type on it, and use audio to do my work. We used to request teachers but teachers did not have accessible material, so we used to get normal material and then we had to transcribe it. This was time wastage, so this was the problem: we had to do all the care with the study material because of the accessible study material. The university had nothing, and no one could provide it. So, we used to get only the material from internet, or we had to compile our own material. The second is accessible examination system. In normal, when I took admission, I gave them application from day 0 that I will give my paper on computer, and I will be given permission to use JAWS. So, when I got admission test here, they gave me permission to use JAWS, and I gave my paper in MS word, and I solved it, and then they checked it, and did my evaluation. After that, I gave my exam in all semesters through MS word, so this was a good thing that I never needed a helper or writer.

Interviewer: Any other major problem that you faced there?

Participant: The problem was that there was policy issue here as well, so they had to struggle a lot for Midterm and Final term. They had to take different exam permissions to use JAWS. Second thing was that they did not have infrastructure in English department, so they had to take help from computer science department, or they had to take help from IT section in library. So, I had to go before exam and install JAWS on two computers, so that if any of them was not doing one thing then I could conduct my paper on the other desktop computer. So, the procedure was that they used to assign me an invigilator in the lab and that invigilator used to bring the paper with him or type my paper in MS word. After that, I used to solve it in MS word, so the invigilator used to take the paper and sign it, and then he will collect it with other papers. This procedure was good but there was power outage, but in NUML, generator was available so they used to switch on the generator, and I used to save my paper with them. As my computer skills were good so I never faced the issue that my paper was not saved. But one issue was critical that when invigilator

used to take paper print, sometimes the paper would get lost. So, this was the problem that I had to search for that paper. Sometimes, I would get negligence on some level, so I could not reach the concerned teacher, so I had to search for that paper. So, it was very difficult for me. I had to struggle a lot to get that paper out of the record. I had to search for the soft copy of that paper, I had to take the print of that paper, and then I had to reach the concerned teacher. So, sometimes the result would be failed. So, this was very difficult, but later they took this matter seriously. So, the invigilator used to take the paper and sign it, so I never used to leave the paper in the envelope. So, this was the problem with examination system in NUML. But the best thing was that I used to solve my paper by myself, so I did not need any help. This was the best thing. My confidence level was also better, so I never used to use spelling, formatting and other things because I used to do my paper by myself. They used to give me 30 minutes' time because the policy was such that they used to give 30 minutes, but again that time was not sufficient. At first, they did not give time. Later, they allowed 30 minutes, but every time I had to remind them for 30 minutes. So, I used to spend time with them. Let's talk about inclusive system in the classroom environment. So here also the same problem was that accessible study material was not available, and the teacher was not trained about special needs. So, they used to try their best to make us use inclusive system, but for inclusive system at the student end, they had to try very hard. They had to sense things from the beginning and notes etc., but here one good thing was that I used to have my laptop in class, so I used to type whatever activity was there, and I used to email the teacher. At that time, I used to show it, so the work got a little better, but still the problem was that teachers were not trained to fulfill special needs. The exercises and activities they brought with them were designed for normal people, so with that I had to arrange everything by myself, and we didn't have accessible study material. So, this was the problem.

Interviewer: How was the attitude of people in NUML?

Participant: The attitude of people, teachers and students was cooperative here in

NUML. I didn't have to see anything like this that teachers didn't cooperate in classroom environment, or students didn't cooperate. So, teachers and students were very cooperative, and I had a very good time with them. Wherever I used to face problems, they used to try their best to solve them by themselves.

Interviewer: Was there any subject that was challenging for you like there are some subjects like Phonetics and Phonology and Grammar and Syntax?

Participant: Yes. Tree diagrams were often used in Morphology and Syntax or in Introduction to Linguistics or in Linguistics courses, but these were not so many questions. I used to write their description. The student used to tell me what's the issue. If you want to know more about the tree diagrams, I used to tell them the description. And if they want to know more about the tree diagrams then I would tell them. The student was very cooperative. I used to draw the tree diagrams with my hand to know what is this, what is this. So, I used to practice with that. And besides that, there is another tool called Embossing Film. It is not available in Pakistan. It was in UK, available in R&IB. Now it is not available in them. I used to get it from them when I was doing BS. It used to be sheets, and if you used to draw with pen, it would come up. So, to keep future note, I used to draw tree diagram with a class fellow. It would come up; it does not come up so fast. It does not come up, if you keep it on rubber or hard surface and draw something with pen. It stays on it for a long time, so with that I used to make most of my tree diagram notes. So, I used to remember what is in this tree diagram.

Interviewer: This Embossing Film thing is quite convenient, I must say.

Participant: This embossing film is a very good thing. I used it for the symbols of Phonetics and Phonology of the IPA. But these sheets were limited, so I had to ask for a little while drawing the background of my BSc computer science. Then I used some available sheets for my courses during my MA English.

Interviewer: Any other major problem that you faced in the courses?

Participant: You asked me about the difficulties of courses. Thank God I didn't face any such problem because my language, linguistics and literature were

all strong. The thing was that in Linguistics, like Phonetics and Phonology, and the second course, Morphology and Syntax, there were diagrammatic representations. The transcription in Phonetics and Phonology was inaccessible. So, these two areas bothered me a little. But in this, friends helped, they explained diagrams, class fellows were very helpful in this case. If I asked the teacher, he would give his time and tell me things. The transcription in Phonetics and Phonology was such that I had seen that the alternate symbols of IPA symbols. There was a website, www.antimoon.com, they had made a table of ASCII, American Standard Code for Information Interchange instead of IPA symbols. These symbols were given. So, I gave the list to my Phonetics and Phonology teacher. I showed that chart that we can type these symbols through the computer. The IPA symbols are not read by JAWS. Although I had learned all of them as I teach Phonetics and Phonology myself. So, it was that I knew all the symbols, but I used to type the ASCII code which was the alternate symbol of IPA in the MS Word for transcription. And if the transcription was written, I used to ask the invigilator how the symbols were made. So, because I knew the symbols, I did not have any problem in this. So, I used this method for transcription. IPA symbols are not read by JAWS, so we have to use the ASCII code to type them. It is similar to them.

Interviewer: That sounds interesting.

Participant: If you say, I will share the chart with you. But the symbols were taught to me

that I used to draw them with my finger. My class fellows used to draw each symbol with their finger, and tell me what kind of symbol it is. So there is some logic in it. I had learned all of them through that logic. So I did not have any problem.

Interviewer: Ok, tell me a little about your job.

Participant: I teach BS English courses in Government Colleges. I have three options available, but mostly I am teaching Language and Linguistics courses as I have the intention to work in these areas, and I have the grip on all three. I can teach Language, Linguistics and Literature, but mostly I am

teaching Language and Linguistics courses. After doing masters from NUML, I had the expectation that I will get a full job. And thank God, this happened. As soon as I completed my MA. English, I got a job as a lecturer in an affiliated college, Grafton College. So in 2014, I started my teaching career. In Grafton College, I had classes in MA English, BBA, BS and B.Com. I taught them Language, Linguistics and Literature courses. I spent 6 months with them. In the meantime, I applied to University of Guam in Kent. I got selected there. So I went there. I served with them for a year in University of Guam. I also studied Linguistics, Literature and Language courses in MA English, BBA and BS. And then I got selected in Government in 2016 through Public Service Commission.

Interviewer: How's your experience at your workplace considering your special situation and how do you manage paper checking and all that?

Participant: Now let's talk about the issues that we are facing in teaching. The issue of accessible study material in teaching is that we have to compile the material before going to the classroom. But now thank God, we get a lot of material from the internet. I have gathered some material myself during the study. So I have to compile it and sometimes if I get an inaccessible study material, I get it read by my students or colleagues. And then I keep the record of it with me. So I make notes like this. So then the problem does not come. So it happens that before giving a lecture in class, you have to do some preparation. This material has to be gathered by itself so that the problem does not come. After that, the exam does not have to be given to me; it has to be given to the student. So the problem is how to do paper marking. The problem for paper marking is that the students' papers are handwritten. They cannot be scanned and performed. There is not much time and the OCR cannot be performed well. So I need help in that. So I have a student who is a student and I have a colleague who is a student. So I give them the keys. If there are MCQs or objective types, then it works. And I make them a key in the subjective portion. Then through the key marking of the papers done, and they read it to me. So I do their paper marking like this. Here, we have a

present situation that we mark the Midterm Papers of the student., And the Final Term Papers are marked by Peshawar University. We make the paper but Peshawar University does the marking. So it was like this in the university when I was teaching at the University of Afghanistan and Grafton College. So there, whether it was Midterm or Final Term, we had to mark it ourselves. The other class evaluations, like quizzes, assignments, presentations, I conduct them myself.

Interviewer: And how do you do that?

Participant: I take their presentation live in class. I do not have any problem in that. I give them topics and then I do the marking myself. I take a soft copy from them through email. And I often make MCQs and then I make their key and give them. So my colleagues help me in checking. So this examination system is going on like this at the end of the teaching.

Interviewer: Is the environment inclusive and how do you play your part in making it so?

Participant: Let's talk about the inclusive environment. As I am visually impaired myself, so I have an idea of things. So including normal children in the class in front of me is not a problem for me because of course I have prepared things for myself, and I also bring material for them. So providing an inclusive environment for them is not a big challenge for me. I easily tackle it. So far, no visually impaired child has come to my class at BS level or masters level, but people keep taking advice from me at intermediate level. At BS level, students of other universities keep taking advice. So I provide them notes and give them guidance. But if there is a visually impaired child in my class, I can help him fully. No problem will be presented to him because I have also gone through these experiences. So helping him or giving him extra support is not a big problem for me. So this was about the inclusive environment.

Interviewer: How is the attitude of people at your workplace?

Participant: About the attitude of people. As I am at the teaching end and I keep my lectures fully prepared, I don't get such an objection that I go to the classroom with some preparation. So the satisfaction of my students is almost 100%. So that's why no one can have negative attitude with me.

There are some people who don't know, so sometimes they have to be guided. Sometimes they think that we can't work or we are like this. But then they have to be explained a little bit. Then things get better. Rest, the feedback of the student, I am thankful to Allah that no problem was presented. They are 100% satisfied.

Interviewer: So being a competent and well prepared teacher helps. Right.

Participant: Yes, yes. I forgot to tell you something but I think you should know about it and it might help you out in higher studies, MPhil and PhD. I had taken admission in Islamabad, NUML, in MPhil English. During the first semester, I was very sick and I was hospitalized because of which I couldn't continue my studies in MPhil English Linguistics, and then I got a job in Peshawar so continuing MPhil English from Peshawar in NUML from Islamabad was impossible so I left it in the first semester. But I saw some things in MPhil English Linguistics in NUML, and I will share it with you in those 4 areas if there is improvement in it or what were the issues. You are also doing MPhil English from there. You will also know about these things and you will be passing through these experiences, but my experience of 3-4 months was shared with you. In that, let's talk about accessible study material so during MPhil English, the problem was that here, reading material was always recommended. All the teachers of the first semester, they recommended most of the material for reading. Now, the material recommended for reading was not in the accessible form. They didn't have soft copies and since we didn't have soft copies, we had to get the book read by someone to get the time to read. Even the class fellows don't have enough time to give you extra time because they are mostly in the professional environment so at that time I requested the teacher to provide me some articles for reading, but the books recommended were mostly not available in the soft form, or if I had to purchase them, they were very expensive. So my suggestion is that at MPhil and PhD level, the study material recommended should be in the soft form so that we can study it and work with it. Alternative material is very much but the key material that they provide during their classroom and recommend so that material becomes very difficult for us as we have

to compile it and cope with it. So this was a big challenge for me. On the second number, inclusive environment. So at this stage, I had completed my English, and I had a lot of knowledge so participating in class, discussing and engaging the teacher in class since this level has matured so I didn't face any problem in this. But at one end, there was a problem. Sometimes they would bring an article in the classroom or there was a reading from the book, they would say to do it. So after doing that, discussing was a bit difficult because according to that, we have to discuss and during that time, your class fellows are not free to read it, and then you can read it and respond immediately. So for teachers, I have a suggestion that if the material you are bringing is planned then kindly provide it in soft form so that we can study it from the beginning, or if we have a laptop in the classroom so that we can read it, read it yourself, and then we can participate in that activity. After that, we have an accessible examination system. So I don't know how you give your exams at MPhil level at that time, I had applied for a computer, and they were saying that they will allow you to give your exams with JAWS. Since I was sick, I didn't explore this further. So please tell me about it and guide me as well, how they have taken your exams at MPhil level. Fourth thing is the attitude of people. People's attitude is better at MPhil level because all people are in chairs and understand each other's matters. Now, every person has some limits, and they can help you while living in those limits, they can't go out of those limits. What I mean by limits is that there are time constraints and also financial constraints so people are doing that. Most people are on the job and it becomes difficult to manage your studies and help you. So people's attitude is very good. They do what they can. I hope I have answered your questions.

Interviewer: Yes, thank you so very much for your time.

Participant: I will tell you one more thing. At the end of teaching, in ESL class or any other class, the first objection is made on us is how you will use the board. Most people think that you can't teach without using the board. So in that, I have taken my portable projector which I have. We don't always need a board in ESL class, but wherever we need a board, I use my portable

projector. When I was teaching in University of Iowa and Grafton College, the projector was installed in the classroom by the institute so I used that but if we talk about government colleges, the projector is easy here, but not in every classroom. So either we have to move the class to a place where the projector is installed, but I have found a solution. I have bought my portable projector. I attach it with my laptop, and if there is any diagrammatic representation, or any activity that I have to do live, I use my portable projector. In some government colleges, there is an issue of electricity. Where there is no electricity, I make notes and take them to those places. I have a diagram, and I ask a student to draw it on a whiteboard, and then I explain it to the students. So if we have to write on the board then we have the notes already then you can see any child or the class CR, and get it written on the board immediately. So that's why the board is Not such a big issue.

Interviewer: Yeah, right. Portable projectors are a good option.

Participant: Most people are in demos, or in interviews. So the first question is if you cannot use the board then how will you teach?

Interviewer: Please share your insights on the policies regarding persons with disabilities in universities and otherwise.

Participant: Ok, I will discuss with you about Persons with Disabilities, PWDs and policies of universities. Since universities are autonomous bodies, HEC plays the role of a mentor and gives guidelines to them. HEC has made a draft policy on their website, but it is still a draft policy. The policy is not finalized. Provincial and federal universities say that they are autonomous bodies, and they will make their own rules. There should be a department that deals with PWDs and registers them at every university level. The policy should be finalized as soon as possible so that PWDs do not have any problems.

Interviewer: Right. So, how can pedagogical methods be adapted to facilitate visually impaired students?

Participant: One suggestion is that during MPhil, PhD, when teachers write on the board, then these days' mobile phones are available, then if they do this, or make handouts beforehand, then it will be very good for us. Or if they

write on the board, then if they take pictures in the meantime, and then provide those pictures to us later so that we can transcribe it, then it will be very easy for us. I saw that when I took admission in MPhil, they used to write a lot of points on the board. At that time, it was not that time that they read each point and then I would take notes, or that class fellows would read it. The rest of the class fellows would take notes, but note taking is also a very important art. Not everyone has the ability to take notes in an organized manner. So those class fellows used to take notes haphazardly. They used to take those notes with them. Later, I used to request them, so getting those notes was also a big challenge. So the best way would be that either the teacher at MPhil or PhD level make handouts beforehand for those things that are going to be written on the board, and then give them to us, or if something is written impromptu, and it is not planned beforehand, then kindly take those pictures and share them with us so that we can compile the material. When I completed my MA in English, I immediately took NTS GAT test. I appeared in it and scored 69 marks in the first attempt. But my luck was good at that time because the helpers or writers I had given were able to read the paper properly and the reading speed was good. So the score was valid for 2 years but when 2 years were completed, I appeared in the test again and failed in the same test. I scored 49 out of 100. It was the same test but this time the helpers or writers I had, I faced attitude issues and I failed in GAT. Then I appeared in GAT again and passed the test but I got 54 marks. It was the same test. I scored 69 marks in the first attempt, I failed in the second attempt and in the third attempt, I got 54 marks. So what were the issues? The first issue was the study guide for NTS GAT. It was available in the market. If we are asked to sit on the side, the candidates start asking why we are sitting on the side. The examiners and superintendents say that the students are asking us to sit in front of them. They copy us. They take us back and sit with them. It happened to me that when I gave the test for the first time, I was seated at a distance. I could see everything. The test was done in Islamabad. The environment was comfortable. But when I was seated for the second time, I was seated in the middle of the

students. The helpers and the writers were also saying that there was a communication problem with them. So the matter could not be solved. When I gave the third time, the same problem came up. I was seated in a place that was not comfortable for me. In addition, they don't give extra time for the standardized tests. So the paper that has to be completed becomes a big problem. So this is the problem. I will also talk about the attitude of the people or especially of the people around them. The problem is that when these people provide us with helpers or writers, they randomly hire people from their staff. They pay them and show a lot of favors. They say that they have done good deeds with them. They have arranged helpers and writers for them. They will pay them. They bring any person, sometimes it happened that. I was applying for the HAT, Higher Education Aptitude Test, or something that conducts scholarship. They had a Class 4 sweeper with them. I didn't know that. He had done his BA. Later, I found out that the helpers or writers that they provided were class 4, and that test also failed because of this. So this is one thing. Now let's come to the major issues related to ESL. One is that if you get people to read in our society, then 6 out of 10 people are not fluent readers. They can't read. Now, when they can't read fluently, then speed doesn't develop, and we can't establish pace. The second thing is that they have pronunciation issues. They will spell each word especially when they come up with a big passage, they are very long, and if they are spelling each word or after reading 3 lines, they can't do anything, and then it is very frustrating. Other than this, the instructions on the test, once I had this too. I appeared for another scholarship for Higher Education Aptitude Test, and the writer or helper that I was given was overconfident. Now his communication skills were good, but what he did, as you said, the self-decision one, was a question related to synonyms. That was the first question. We had to tell synonyms in it. There were about 10-12 MCQs. So we were doing that. So after that, when it was completed, the next instruction was for antonyms. So he overlooked the instruction for antonyms, and after looking, the next 10 to 12, or it was 12 or 15 MCQs, he read them to me, and I solved them as

synonyms. So what happened later, when the test result came, I had 67 marks in it. If I had checked all the questions related to antonyms, I was able to do all of them correctly. If I had done it correctly, I would have scored around 78 to 80, and I would have come to merit for the scholarship. But unfortunately, that person did this and after that, he started crying in the hall. He said, “You can do whatever you want with me, but I have done this.” So this is also a big problem that these people overlook this thing when we solve this paper.

Interviewer: You are right, writers do pose such problems and make things complicated further than they already are.

Participant: Then the solution to all of these things is that this paper, these standardized test ones, should be offered to us on the computer so that we can solve them through JAWS and in an accessible format. Then these problems will be solved. Otherwise, it is very difficult that we can attempt these things through help or writer. Now unfortunately, when I was in the private sector, almost at that time, jobs were announced through NTS. I wrote and sent to NTS many times, but they did not give the response. Now this job problem used to happen. Many tests failed because of this, and I could not come on the merit list. So this problem, you should highlight it especially because it is related to recruitment, it is related to scholarship, it is related to basic things that we expect after getting our degree that we will get. That is why we are hit on this thing. So we need two things in this. One is an accessible paper which can be solved on the computer, and second, we need extra time in which we can solve that paper.

Interviewer: Thank you for the suggestions.

APPENDIX D

OBSERVATION SHEETS

Date: Duration:

Class/Course:

Number of Students in Class: Number of the VIS:

Level of Visual Impairment:

Student's participation in the classroom

- Active participation
- Passive participation
- Materials used by the student in the classroom
- Devices used by the student in the classroom
- Techniques used for participating in the classroom

Notes:

Student - Student Collaboration

- Assistance in taking notes
- Assistance in accessing written materials
- Translating the visual information into verbal information.
- Other techniques used by the students to help the visually challenged student
- Attitude of sighted students towards the visually challenged ESL student

Notes:

Student - Teacher Interaction

- Encouragement to participate in classroom activity
- Technique used by the teacher to ensure inclusion
- Provision of supplementary material
- Translation of visual information
- Medium selected for providing feedback
- Provision of e-notes
- Provision of Braille text
- Permission to record the lecture

- Provision of audio books
- Encouragement to use a laptop in the classroom
- Encouragement to use Braille in the classroom
- Encouragement to use mobile phone for typing in the classroom
- Encouragement to use other helpful materials.

Notes:

APPENDIX E

OBSERVATION SHEET - 1

Date: May 8, 2024

Duration:

01:00:29

Class/Course: Grammar and Syntax

Number of Students in Class: 26

Number of the

VIS: 1

Level of Visual Impairment: Complete blindness

Student's Participation in the Classroom

- Active participation
- Passive participation
- Materials used by the student in the classroom
- Devices used by the student in the classroom
- Techniques used for participating in the classroom

Notes:

The student is attentively listening to the lecture of his teacher. He is not using any reading material. His friend, sitting next to him, has his book open in front of him. The friend reads the material that the teacher assigns, and it is a single sentence. The student has Braille, but he is not using it. The student is not using any tool or technology; he is just listening to the lecture attentively.

Student - Student Collaboration

- Assistance in taking notes
- Assistance in accessing written materials
- Translating visual information into verbal information
- Other techniques used by the students to help the visually challenged student
- Attitude of sighted students towards the visually challenged ESL student

Notes:

The teacher gives an activity to the class to attempt in pairs. She assigns one sentence to every pair which they have to solve on the board after discussion. The visually challenged student and his partner start discussing the sentence as well. The fellow tells the student what the sentence is. Then, they discuss the sentence.

Then, it is the turn of the student and his partner. The visually challenged student along with his partner goes to the front and solves the sentence on the board. The fellow helps the student, holds his hand, and takes him to the board. The student just stands there, and the fellow solves the question on the board. After that the fellow takes the student back to his seat. While coming back, the student bumps into a chair, but he is very confident, and the fellow guides him as well.

During the class, the student wants to go outside the class to attend a phone call. He asks his friend to ask the teacher because he himself cannot see and is not sure when to raise his hand. So, his friend raises his hand. When the teacher is attentive towards his friend, his friend asks him to get permission from the teacher. So, he asks the teacher that he wants to go outside. The person who raises hand for him is sitting one row ahead of him. His friend who is sitting next to him gets up and goes outside with the student.

Student - Teacher Interaction

- Encouragement to participate in classroom activity
- Technique used by the teacher to ensure inclusion
- Provision of supplementary material
- Translation of visual information
- Medium selected for providing feedback
- Provision of e-notes
- Provision of Braille text
- Permission to record the lecture
- Provision of audio books
- Encouragement to use a laptop in the classroom
- Encouragement to use Braille in the classroom
- Encouragement to use mobile phone for typing in the classroom
- Encouragement to use other helpful materials

Notes:

The teacher assigns an activity to the class. The student is sitting at the back in the last row. He is sitting alone. Then, one of his class fellows comes and sits with him. The teacher assigns an activity to the whole class. In the exercise, there are some sentences. In those sentences, the students have to identify the italicized phrase. Each pair has to do one sentence. The teacher nominates first pair. Then, the teacher also

nominates the visually challenged student and his friend who is sitting next to him. The teacher knows the name of the special student, but she does not know the name of his friend. The teacher knows the names of some of the students and not of the whole class. She assigns sentence number 2 to the special student and his friend. She gives some time to the whole class to discuss the sentence with his partner. When the time is over, the teacher starts calling each pair one after the other. When the first pair solves the sentence, the student is attentively listening to it. Once they solve the sentence, the teacher discusses the sentence whatever the pair has written on the board about that sentence. The teacher keeps on discussing each sentence. However, a student makes some mistake. The teacher does not tell what he has written; she just says that it is not correct. Later, the teacher solves that question herself, and then discusses that sentence as well. Throughout the class, the student is listening. The teacher also uses 'demonstrative words' to explain one sentence. She uses 'this' again and again. She tells the class the grammatical functions. She is saying, "This is direct object. This is indirect object. This is a modifier, and this is complement."

The teacher starts the next chapter. She does not write the name on the board, but she announces the name which is 'Head Complements and Modifiers'. Afterwards, she writes the name on the board. While she is writing it, she is again verbalizing it. She discusses that the sentences must be understood in a linear fashion, and for it she draws a horizontal line on the board. Then, she gives an example of a sentence to the class, and the sentence is 'the teacher gave a test to the student.' She announces each word as she writes it on the board. Then, she discusses the sentence not with the help of 'demonstrative words' but announcing each word in this way, "the student is the subject, gave is a verb, a test is an object, and to the students is our indirect object." When she is discussing it, she takes a pause after announcing a constituent, so the students can give their input, and they can guess. So, two students answer her. When she takes a pause after announcing 'a test'; a student says that it is a noun phrase. The teacher corrects that it is a noun phrase, but it is an object. Then, the teacher is questions about the type of object, and the special student replies that it is a direct object, but the teacher does not hear it because the student is sitting at the back and his head is bent downwards because he is attentively listening to the lecture.

Then she discusses the relationship of chain between words in a sentence and for it, she used the board and does not announce it. She says that the relationship of

chain is the linear relationship of words. For that linear relationship, she draws a line and says that such a relationship would be called as syntagmatic relationship. The word 'syntagmatic' is difficult but she does not spell it. Then, she tells her class that the words also have a relationship of choice. For this also, she takes the same example, "The teacher gave a test to class." Then, she verbalizes that the phrase, 'the teacher' can be replaced by any other noun phrase. She says, " 'Gave' can be replaced by 'buy or bought'. A test can be replaced by a gift and 'to the students ' can be replaced by 'for my mother'." ”

She writes on the board that it is the relationship of choice. She repeats that syntagmatic would be linear sentences whereas this would be relationship of choice which is called paradigmatic that is related to the paradigm of words. She again does not spell the word 'paradigmatic'. Then, she writes the sentence, 'Mary left the house.' She asks the class pointing towards ' the house' that what it is. When she sees that the class has no answer to it, she herself tells the class that the verb is 'left', but 'the house' is not an object because 'the house' does not have any action performed on it.

Then, the teacher reads the first two sentences from the exercise and discusses them. The teacher asks a student to read out loud the other sentences. The teacher also asks about infinitive verbs. Then, she writes the verbs on the board and announces, "to work, to eat" and a student adds "to leave."

While discussing a sentence from this exercise, she also tells that which phrase is italicized after reading aloud the whole sentence.

She further discusses different sentences to make the students understand the concept of 'Modifiers' that it is an optional part in the sentence, and we can have multiple Modifiers in a sentence. She does not use any type of visual clue for it. She discusses all the sentences verbally.

The teacher also teaches 'minimal phrase and maximal phrase' and 'the difference between Complements and Modifiers'. She discusses all these concepts verbally. She mentions that she has already shared the slides with the class, and she is expecting that the students read the slides when she shared them. Though she does not use slides throughout the class.

OBSERVATION SHEET - 2

Date: May 9, 2024

Duration:

00:45:53

Class/Course: Semantics and Pragmatics

Number of Students in Class: 22

Number of the

VIS: 1

Level of Visual Impairment:

Student's Participation in the Classroom

- Active participation
- Passive participation
- Materials used by the student in the classroom
- Devices used by the student in the classroom
- Techniques used for participating in the classroom

Notes:

The student is attentively listening to the lecture. He is taking his notes on Braille. He is noting down the main points on Braille. He responds to the teacher once in a loud voice, but most of the time, he is listening to her silently. When she discusses the table about the components of Semantic Features, he remains completely focused and answers only once to the questions she asks. He just mutters to himself. He mutters thrice when she discusses about location, goal, and source. He understands it, and he answers the questions in a lower voice. The student is sitting in the last row, at quite a distance to the teacher so when he mutters, the teacher is unable to hear it.

Student - Student collaboration

- Assistance in taking notes
- Assistance in accessing written materials
- Translating the visual information verbally into verbal information
- Other techniques used by the students to help the visually challenged student
- Attitude of sighted students towards the visually challenged ESL learner

Notes:

The student is sitting with his friend, but he does not take help from his fellow. He is able to access all the written material with the help of his teacher. The student is taking notes himself on Braille. Other students are taking notes on registers and note

books. There is no activity done in the class that makes the student take help from his class fellows.

Student - Teacher Interaction

- Encouragement to participate in the activity
- Teacher's technique to ensure inclusion
- Provision of accessible material
- Translation of visual information
- Medium of feedback
- Provision of e-notes
- Provision of Braille text
- Permission of recording the lecture
- Provision of audio books
- Encouragement to use a laptop in the classroom
- Encouragement to use Braille in the classroom
- Encouragement to use mobile phone for typing in the classroom
- Encouragement to use other helpful materials

Notes:

The class is interactive. The teacher keeps the students engaged throughout the class as the teacher is posing different questions. Most of the time, the teacher would start a sentence, and would stop to let the students complete the sentence. The visually impaired student is sitting at the back. The teacher is speaking out whatever she is writing on the board. She tells the class that there are two types of meanings. First, literal meaning and the second is local or subjective meaning. She writes these two types of meanings on the board and she verbalizes it as well. The student is able to take his notes. For this purpose, he is using Braille. The teacher writes on the board 'objective meaning', 'general meaning', 'denotative meaning' below 'literal meaning'. Then she writes 'contextual meaning', 'subjective meaning', 'associative meaning', and 'connotative meaning' below 'local meaning'. It proves difficult for the student to understand which meaning belongs to which category. However, after writing it on the board, the teacher explains it that all the words like denotative meaning, objective meaning and general meaning are for literal meanings, and subjective meaning, associative meaning and connotative meaning are for local meanings.

She uses a 'demonstrative word' after it. She says, "In Semantics, we are looking at what? This, this part. This sense." However, after pointing towards that part, she announces all the words there and says, "Conceptual meaning, literal meaning, objective meaning, general sense." Again, she uses a 'demonstrative word' but she verbalizes the referent. The teacher gives an example of the marker that she is holding in her hand to make the students understand the difference between semantics and pragmatics. She does not use any 'demonstrative word' for it rather she says, "As it's a marker..."

Then, she starts the topic that is 'Semantic Features', and she asks the class to consider the examples first. She reads all the examples from the book out loud. "The hamburger ate the boy." "The table listens to the radio." "The horse is reading the newspaper." After it, she poses a question to the students, "Do you find oddness in these examples, in these sentences?" After having a discussion on them, she starts discussing a table given for Semantic Features. She says, "Okay, this table. Semantic Features. For example, there is a table. Alright? And you see the table. Table, the words which are given: table, horse, boy, man, girl and book. These are the examples given. Now, look at this. The other side of the table. Animate, table is animate?" Students reply, "No." The teacher says, "So minus. What features does it have? Minus inanimate. This is human?" Students say, "No." Teacher continues, "Table is human?" Students answer in negation. Teacher says, "No, so minus human feature. This is female? Maybe in some languages." Then, she discusses that maybe in some language in which there is grammatical gender, table could be a female. "But in English, it's neither female nor male. Adult? Again, we have no idea. Table is adult or young. Alright? So, it has this minus adult feature."

Then, she moves towards the second example. "Horse, is horse animate? Is horse an animate object? A student says, "No." The teacher says, "Is it human?" Students answer, "No." The teacher says, "Is it female? Horse is not a female. The female of the horse is what?" The students answer, "mare." The teacher asks the students, "Is it adult? Yes, horse is an adult." She discusses the third example in the same way, and then moves towards the topic that was containers of meaning. To explain the concept, she reads the explanation from the book to the whole class, and then explains it in Urdu in one line. Then, she starts discussing another topic that is semantic roles. To illustrate, she moves to examples. First, she reads the first example from the

book. "The boy kicked the ball." Subsequently, she writes the sentence on the board. She verbalizes it as she writes each word. Then she asks some questions about it from the class like 'Who is kicking the ball? Who is doing the action?' The students answer the boy. The teacher again asks questions like 'the boy kicked what? The action is performed on what?' The students reply that it's the ball. Then, she discusses the concept of Agent and patient, and she questions, "The sentence having no action verb would be what?" The student having visual impairment replies that it would be 'patient', but the teacher said that it would be 'theme'. The teacher mentions that in the sentence discussed above "the ball" would be theme. Then, she reads the remaining sentences, and keeps questioning the students to get answers from them.

She uses the same method to explain the concept of instrument and experience. For experience, she reads the definition from the book, and then writes some key words on the board like "feelings" and "perceptions." After it, she again reads those words out that she wrote on the board. While discussing the concepts like location, goal and source, the teacher goes on discussing in the same way. She reads all the sentences out and keeps explaining the sentences and phrases that what the location is, what the source is and what the goal is. She used to take a pause for some seconds to let the students answer.

She also discusses the next topic of 'Relationship between Words'. For which she gives some examples like the meaning of light could be understood in terms of darkness. Before saying "darkness", she wrote "light" on the board, then, wrote "darkness" and announced the word. She does the same for "healthy versus sick." She reads the examples from the book given for synonymy and antonym. Then, she also reads the example given to exemplify the sentences having same meaning but having a different level of formality. She reads both the sentences to the class.

1. " My father purchased a large automobile."
2. "My dad bought a big car."

Then, she contrasts both the examples by saying, "'My father' is replaced by 'my dad'. 'Purchased' is replaced by 'bought' and 'a large automobile' is replaced by 'a big car.'" After saying the part from the first sentence, she stops and waits for the students to answer. The students respond to her. She discusses more examples from the book given for synonymy and antonymy. She verbalizes all the examples and discusses each example verbally. She does not use board for them at all.

OBSERVATION SHEET - 3

Date: May 9, 2024

Duration:

01:08:40

Class/Course: Post-Colonial Literature

Number of Students in Class: 33

Number of the

VIS: 1

Level of Visual Impairment: Complete Blindness

Student's Participation in the Classroom

- Active participation
- Passive participation
- Materials used by the student in the classroom
- Devices used by the student in the classroom
- Techniques used for participating in the classroom

Notes:

He does not take notes. He does not record the lecture as he does not find it convenient to repeat the lengthy lectures for taking notes. He does not use Braille as he is late blind. He does not take notes on his mobile phone because the mobile with Talkback works slowly, and it takes time to type. He does not use laptop either in his class as his computer skills are not up to the mark. So, he only listens to his teacher.

Student - Student collaboration

- Assistance in taking notes
- Assistance in accessing written materials
- Translating the visual information into verbal information
- Other techniques used by the students to help the visually challenged student
- Attitude of sighted students towards the visually challenged ESL learner

Notes:

During the class, the student does not take help from any student. Afterwards, he requests his friends to share their notes with him. He states that he has a fellow who also reads his notes to him in a voice note.

Student - Teacher Interaction

- Encouragement to participate in activities
- Teacher's technique to ensure inclusion

- Provision of accessible material
- Translation of visual information
- Medium of feedback
- Provision of e-notes
- Provision of Braille text
- Permission of recording the lecture
- Provision of audio books
- Encouragement to use a laptop in the classroom
- Encouragement to use Braille in the classroom
- Encouragement to use mobile phone for typing in the classroom
- Encouragement to use other helpful materials.

Notes:

The teacher discusses a book. She begins with discussing the first chapter of the book. She explains the chapter to the students. She explains important points about the post-colonial writers whether the writer writes in regional language or he writes in lingua franca or local language. Then, she discusses a novel with the class from the perspective of post-colonialism. She takes some names which are difficult to spell. She uses only verbal description that is accessible for all the students in the class. She does not use any visual clue in the class. She does not use white board throughout her class. She does not even write the names of the characters on the board. The students keep on noting down important points of her lecture. However, the Participant only listens to the lecture. The teacher assigns the class to come having read the chapters, the next day to have a discussion on it.

OBSERVATION SHEET - 4

Date: May 14, 2024

Duration: 55:15

Class/Course: Introduction to Women Rights

Number of Students in Class: 34

Number of the

VIS: 1

Level of Visual Impairment: Complete Blindness

Student's Participation in the Classroom

- Active participation
- Passive participation
- Materials used by the student in the classroom
- Devices used by the student in the classroom
- Techniques used for participating in the classroom

Notes:

The student does not use any material in the class. He does not take notes. He does not use any device in his class. He attentively listens to the lecture. The student does not participate in the class either. The lecture is not interactive. However, four students raised their points that they have, and the teacher addresses them.

Student - Student Collaboration

- Assistance in taking notes
- Assistance in accessing written materials
- Translating the visual information into verbal information
- Other techniques used by the students to help the visually challenged student
- Attitude of sighted students towards the visually challenged ESL learner

Notes:

During the class, there is no collaboration noticed among the students. The students are directed towards their teacher. The other student notes down the important points and marks the important quotations on the book highlighted by the teacher, but the participant does not do anything. He relies on his fellows for sending him class notes. The students later on, send their notes to the visually challenged student when requested by the participant. The students send pictures of their hand written notes that are not compatible with reading applications and software. The student has a class fellow who sends him notes in the form of voice notes along with pictures. In the voice

notes, he reads his notes to the students and gives a recap of the lecture. However, it is like an overview of the lecture, and it lacks all the important quotations and points that the teacher asked the students to mark that can help them in the analysis which the students have to do while answering questions in the exams.

Student - Teacher interaction

- Encouragement to participate in activities
- Teacher's technique to ensure inclusion
- Provision of accessible material
- Translation of visual information
- Medium of feedback
- Provision of e-notes
- Provision of Braille text
- Permission of recording the lecture
- Provision of audio books
- Encouragement to use laptop in the classroom
- Encouragement to use Braille in the classroom
- Encouragement to use mobile phone for typing in the classroom
- Encouragement to use other helpful materials

Notes:

The teacher is teaching the story, “The Yellow Wall Paper.” The teacher discusses the short story in which she guides the class to open page number 6 and then she announces that she is at line 4. After that, she reads out the complete sentences and then discusses it with the class. Then, she guides the students to note down key words and lines, so the students mark them on the book. However, the Participant does not do anything. She writes the key words from the quotations on the board.

The teacher skips certain lines and goes to the next important line. She writes “light” on the board and then draws two lines and labels them as moonlight and sunlight. Then she tells the class verbally that this light is important because we are going to divide it into moonlight and sunlight. Then she discusses two concepts agency and authority, while she also writes on the board. The students also add their insights, and teacher listens to it and answers the queries. Overall, the teachers, lecture is verbal which is understandable for the students.

The visually challenged student states that the teacher does not allow the student to record the lecture. The teacher has already provided the soft copy of the text to the students. Most of the sighted students have the hard copy of it, and they are marking the important quotations whereas the visually impaired student is not doing anything. The teacher does not show any concern towards the matter that the student is not doing anything in the class.

OBSERVATION SHEET - 5

Date: November 14, 2024

Duration: 53:00

Class/Course: Phonetics and Phonology

Number of Students in Class: 24

Number of the

VIS: 1

Level of Visual Impairment: Complete Blindness

Student's Participation in the Classroom

- Active participation
- Passive participation
- Materials used by the student in the classroom
- Devices used by the student in the classroom
- Techniques used for participating in the classroom

Notes:

The student participates in the class when the teacher explains the concept of vowels and consonants. When the teacher explains the concept while producing a vowel sound, both the vocal cords are brought together, and the air passes through them. The vocal cords vibrate. That's why all the vowels are voiced. He repeats his sentence, and expects the class too complete the sentence. He says that that's how all the vowels are? The students complete the sentence by saying voiced. The visually challenged student also says voiced.

Student - Student Collaboration

- Assistance in taking notes
- Assistance in accessing written materials
- Translating the visual information into verbal information
- Other techniques used by the students to help the visually challenged student
- Attitude of sighted students towards the visually challenged ESL learner

Notes:

The students are friendly with the sightless student, but they do not help the student during the class because the teacher is explaining everything to the class, so there's no need. However, the teacher shows the diagram to the class which is not accessible for the student, and his fellows cannot help him with that as they are also listening to the lecture and understanding the lecture.

Student - Teacher Interaction

- Encouragement to participate in the activity
- Teacher's technique to ensure inclusion
- Provision of accessible material
- Translation of visual information
- Medium of feedback
- Provision of e-notes
- Provision of Braille text
- Permission of recording the lecture
- Provision of audio books
- Encouragement to use a laptop in the classroom
- Encouragement to use Braille in the classroom
- Encouragement to use mobile phone for typing in the classroom
- Encouragement to use other helpful materials.

Notes:

The lecture is explanatory. The teacher starts off with discussing the vowel sounds, and then compared them with consonants. The teacher refers to a diagram of articulatory system presented on the screen. The teacher explained how nasals are produced, and which speech organs are involved in the production of the sounds. The teacher refers to larynx that is there on the screen using demonstrative word 'this'. He describes the place of articulation on the diagram using demonstrative words. Then, he starts discussing vowels and how they are produced. He describes that the tongue is raised. He divides the tongue into three parts: front, center and middle, and states that one part of the three is raised while producing a vowel sound. Then he also discusses the position of the lips, and says that the lips can be neutral, rounded or stretched. Then, he gives the example of the sound /I:/. He asks the class to make the sound and feel where their tongue is and what the position of the lips is. The students articulate the sound, and the student with visual impairment also articulates the sound. The teacher later on explains the sound to the class. The teacher then moves to the next sound, and he refers to another diagram for it, and asks the class to see the diagram and answer the question. Next, he explains that when a sound is produced with the back of the tongue raised, the lips could be rounded. When the sound is produced with the centre of the tongue raised, the lips

could be neutral. When the sound is produced with the front of the tongue raised, the lips could be slightly spread or fully spread. He discusses all the sounds referring to the diagram, and tells the class whether a sound is half open or closed. The student practices the sound to feel how it is produced. The sighted students just look at the diagram. The sightless student tries to make the concept understandable by producing the sound after listening to the sound articulated by the teacher and by listening to the limited description given by the teacher. The student does not use any material to take notes. The teacher does not ask the student whether he is getting the lecture or not. The student is not recording the lecture either.

OBSERVATION SHEET - 6

Date: November 14, 2024

Duration: 57: 56

Class/Course: Classic and Romantic Poetry

Number of Students in Class: 24

Number of the

VIS: 1

Level of Visual Impairment: Complete Blindness

Student's Participation in the Classroom

- Active participation
- Passive participation
- Materials used by the student in the classroom
- Devices used by the students in the classroom
- Techniques used for participating in the classroom

Notes:

The student is just listening to the teacher, and he is nodding his head from time to time which suggests that he is attentively listening to the teacher. The student has Braille, but he is not noting down any point. The other students are taking notes but not frequently. They are also listening to the teacher, but they have printed copy of the text with them, and they are annotating. However, the participant is only listening, and he does not have any text with him.

Student - Student Collaboration

- Assistance in taking notes
- Assistance in accessing written materials
- Translating the visual information into verbal information
- Other techniques used by the students to help the visually challenged student
- Attitude of sighted students towards the visually challenged ESL student

Notes:

The lecture is primarily verbal, and all the students are attentive towards the teacher. There is no activity done in which the students could help the participant.

Student - Teacher Interaction

- Encouragement to participate in classroom activity
- Technique used by the teacher to ensure inclusion
- Provision of supplementary material

- Translation of visual information
- Medium selected for providing feedback
- Provision of e-notes
- Provision of Braille text
- Permission to record the lecture
- Provision of audio books
- Encouragement to use a laptop in the classroom
- Encouragement to use Braille in the classroom
- Encouragement to use mobile phone for typing in the classroom
- Encouragement to use other helpful materials.

Notes:

The teacher is teaching the poem, “The Rime of the Ancient Mariner.” The teacher verbalizes all the written material for the class, and discusses it with them. She reads the stanzas to the class, and then explains them. The students also listen to the teacher carefully. The teacher does not use white board in the class. She only uses printed copy of the text in the class. The teacher takes no account of the participant not having the text. The student is not recording the lecture as he does not feel the need of recording it since he considers it a time-consuming task to revise the lecture using the recordings.

The teacher reads out the stanza to the class like:

Her lips were red, her looks were free,

Her locks were yellow as gold:

Her skin was as white as leprosy,

The Night-mare LIFE-IN-DEATH was she,

Who thinks man’s blood with cold?

She explains the stanza to the class. Then, she asks the class to read the next lines. The students do it, but the participant does not participate in the activity as he does not have the embossed text.

