# STAKEHOLDERS' PERCEPTIONS ON ASSESSMENT PRACTICES FOR STUDENTS WITH VISUAL IMPAIRMENT: A CASE OF A PUBLIC UNIVERSITY IN TANZANIA

**BY**

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**A Dissertation Submitted to the University of Zambia in Partial Fulfilment of the Requirements for the Award of the Degree of Master of Education in Special Education**

**THE UNIVERSITY OF ZAMBIA**

**LUSAKA**

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## DECLARATION

I, **Chiza Lawi**, declare that this dissertation represents my own work, and it has not previously been submitted by any other person for a degree at the University of Zambia or any other University. Furthermore, it does not incorporate any published work or material from other researchers without being acknowledged.

Signature: 

Date: 28/12/2023

## CERTIFICATE OF APPROVAL

This dissertation of **Chiza Lawi** has been approved as a partial fulfilment of the requirements for the award of the Degree of Master of Education in Special Education by the University of Zambia.

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Date……

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## DEDICATIONS

To my parents, Mr and Mrs Lawi Enos, your collective efforts in prayers, moral support, and financial assistance since my childhood are what I attribute all this achievement to. Sometimes you restrained yourselves from having pleasant things for your son’s schooling expenses in both primary and secondary schools.

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## ABSTRACT

Both lecturers and students rely on educational assessment to reflect and adjust the progress of teaching and learning process, without it the process would never be complete. This study, being guided by the connectionism theory by Thorndike, sought to explore the stakeholders' perceptions on assessment practices for students with visual impairment (SwVI) in one Tanzanian Public University. The study was guided by three objectives: to explore methods used to assess learning of SwVI, interrogate the suitability of the assessment practices used by lecturers for SwVI and to establish lecturers' experiences of assessing learning of SwVI in higher learning institutions in Tanzania. Data was analysed qualitatively under an intrinsic case study design. The study sample comprised seven lecturers, one transcriber and twelve SwVI making up the total of twenty participants who were purposively sampled. Data were generated through interviews, focus group discussions and document analysis and analysed thematically.

The study revealed that SwVI undertook the same assessment tasks like their peers without visual impairment, although their tasks were subjected to adaptations where necessary to meet their educational needs. This enhanced equity and fairness in performing assessment tasks since SwVI had equal playing ground as their peers. Furthermore, the findings revealed mixed perceptions of participants on the suitability of assessment practices in that some were satisfied with assessment practices used while others expressed their dissatisfaction on the same. This suggests that SwVI are unique beings who deserve to be served in the assessment process based on their individual educational needs. Additionally, it was revealed that lecturers and braille transcribers used their own experiences to serve SwVI in the assessment process since the university had no policy or guidelines on disability which specifically described on how SwVI should be assessed. This resulted to many challenges and inconsistencies faced in the assessment process for SwVI.

It could equally be concluded that SwVI are not similar, each student with visual impairment is unique and different from the other, and thus a one-size-fits-all approach is not applicable when administering assessment tasks to them. Arising from the findings, it was recommended that the university under study should develop a policy on disability which should elaborately describe how SwVI should be assessed. Additionally, studies should be conducted to investigate further the stakeholders' perceptions on assessment practices for other categories of disability like hearing impairments, specific learning disabilities, autism and so forth in different levels of education.



**Key words**: Assessment practices, adaptation, impairment, inclusive education, visual impairment

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| | |
|---|---|
| **CRPD** | The convention on the rights of persons with disabilities |
| **CRs** | Class representatives |
| **FGDs** | Focus group discussions |
| **ICT** | Information and Communication Technology |
| **MoEVT** | Ministry of Education and Vocational Training |
| **MoEST** | Ministry of Education, Science and Technology |
| **NACTE** | National Council for Technical Education |
| **NECTA** | National Examinations Council Tanzanian |
| **PWDs** | People with Disabilities |
| **SWDs** | Students with Disabilities |
| **SwVI** | Students with Visual Impairment |
| **TIE** | Tanzania Institute of Education |
| **TCU** | Tanzania Commission for Universities |
| **UDSM** | University of Dar es Salaam |
| **UK** | United Kingdom |
| **UN** | United Nations |
| **URT** | United Republic of Tanzania |
| **VI** | Visual Impairment |

# CHAPTER ONE: INTRODUCTION

## 1.0 Overview

This chapter presents the background of the study, the statement of the problem, the purpose, research objectives and research questions. It further discusses the significance of the study, delimitation and limitations, conceptual framework, operational definition of key terms used in the study followed by the summary of the chapter.

## 1.1 Background to the Study

### 1.1.1 The concept of assessment

Assessment can be diagnostic or educational. It is diagnostic when used by medical doctors to identify faults with a patient for further medical treatment, and it is educational when used by educators to measure students' learning in the class. This study deals with educational assessment used for students with visual impairment (SwVI) in higher education in Tanzania. Educational assessment is a crucial facet in the teaching and learning process, without which the process cannot be complete (Acheampong et al., 2020). Assessment is defined as the educational process in which the educator collects, analyses, and interprets a student's performance against particular learning goals (Ghaicha, 2016). Educational assessment plays a significant role in the teaching and learning process as it is used for evaluating the effectiveness of the educational program, judging students' educational achievements, and their future career choices (Ghaicha, 2016; IBE & UNESCO, 2017; Black & William, 2018). Assessment, in its forms—formative and summative, is a key tool for improving students' learning and teachers' teaching techniques (Dixson and Worrell, 2016; Black and William, 2018), leading to competent students who can positively impact the world around them.

### 1.1.2 The concept of visual impairment

Visual impairment (VI) refers to "sensory problems involving difficulties in seeing objects" (Muzata, 2021: 37). VI emerges as a result of damage or loss of one or more anatomic structures that interfere with one's seeing mechanism. Heward (2013) defines VI from both legal and educational perspectives. In the legal perspective, legal blindness includes a person whose visual acuity is 20/200 or less in the better eye with

the use of corrective lenses, and partially sightedness includes a person whose visual acuity is 20/70 or less. This means that an object that a person who is legally blind can see at a distance of 20 feet can be seen by a person with a better eye from 200 feet. The legal perspective is used by the American government to recognise people who are identified as having VI by the law. In this study, the legal definition is not the focus, so the educational perspective is preferred as it relates directly to the study.

From an educational perspective, VI implies problems in vision that badly disturb the child's learning in school, leading to underachievement (Heward, 2013). In this perspective, VI is further divided into three: total blindness, functionally blind, and low vision. Total blindness includes students who primarily depend on braille prints and auditory information in learning, while functionally blind is a student who primarily learns through tactile and auditory senses, and they have little vision (residual vision) used to supplement information received from these primary senses. Due to advancements in technologies, students in the first and second categories can alternatively access educational materials using assistive devices like talking computers, talking calculators, and computerised software such as speech to text and text-to-speech synthesizers and braille refreshers (Hewett et al., 2015; Muzata, 2021). Although the added advantage for students who are functionally blind is that they have little vision, which, if provided with magnifiers, enlarged prints, and other assistive technologies, can help supplement tactile and auditory information.

The third category is low vision in which a student uses vision as the primary means of learning and uses tactile and auditory senses to supplement visual information (Heward, 2013). Students in this group are usually provided with educational materials in different font sizes depending on the individual degree of VI. Since they learn primarily using their residual vision, teachers/educators should understand that their degrees of seeing are varied (Hewett et al., 2015).

### 1.1.3 The influence of assessment practices on SwVI

Globally, students with disabilities (SWDs), including SwVI, are required to learn alongside their peers without disabilities at all levels of education (UNESCO, 1994). The educational well-being of SWDs has been a centre of debate among scholars today (Allman, 2009; Hewett et al., 2015; Johnson & Muzata, 2019; Acheampong et al.,

2020; Muzata, 2021). Johnson and Muzata (2019) highlighted that inclusive education could be a blessing to SWDs only when the educational system overcomes hindrances to inclusion. Furthermore, one of the barriers indicated by many scholars to the inclusion of SwVI is assessment practices that are exclusive in nature (Kisanga, 2018; Johnson and Muzata 2019; Simui et al. 2021; Simui et al. 2019; Muzata, 2021). Assessment practices that are not friendly to SwVI demote their learning by uplifting academic underachievement, low self-esteem, and insufficient competencies. This later negatively impacts their employability as they compete with their peers in the world of the market. It can be noted that challenges in assessment practices became worse once SwVI began to be included in inclusive classes where most of the time they were attended by non-specialised teachers in Special Needs Education. So far, the learning environments in which SwVI are included were then prepared for students without disabilities. Thus, SwVI find themselves in a world that is more responsive to the educational needs of their peers without disabilities.

It is stated in the Salamanca statement that "within inclusive schools, children with special educational needs should receive whatever extra support they may require to ensure their effective education" (UNESCO, 1994: 7). One of the extra supports for effectively educating the SwVI is assessment practices that respond to their educational needs. UNESCO (1994) added that these assessment practices should be adapted to contribute to barrier-free inclusion. Some of the adapted assessment practices advocated by many studies include examination scripts in large print and braille formats, extra time, rest breaks, computer-assisted modalities, using tape recorders, supporter worker during exams, and change to examination items (Allman, 2009; Hewett et al., 2015; Ndume, 2019; Muzata, 2021).

To make IE a reality for SwVI, assessment practices that respond to their educational needs are a must-do thing (Muzata, 2015; Ndume, 2019; Muzata, 2021). It is because they not only contribute to the academic achievement of SwVI but also promote the observance of human rights to people with disabilities (PWDs) (United Nations (UN), 2015). Moreover, they enhance equality among SwVI and those without by removing discriminations embedded in unmodified assessment practices. As a result, a sense of solidarity and unity between SwVI and those without is built as they are able to learn together in an inclusive setting. Therefore, it becomes easy to combat negative attitudes which for a long time have been a big barrier for PWDs, including those with

VI, from flourishing and enjoying lives like other people without disabilities in the society (UNESCO, 1994; UN, 2006). Cain & Fanshawe (2019) summarise that assessment practices which are user-friendly to SwVI are seen as another way of seeing since they remove barriers that limit their abilities and increase their inabilities.

### 1.1.4 Global view of assessment practices for SwVI

Despite the advancements made in developed countries in Special Education (SE), assessment practices for SwVI still pose a challenge in some countries. For example, the study conducted by Butler et al. (2016) in Australia found that graphics for university SwVI is a serious challenge since it substantially affects their studies and even their career choices. Furthermore, the findings by Hewett et al. (2015) revealed that some SwVI in United Kingdom Universities face challenges with the accessibility of assessment practices to the point that other SwVI had to resume their academic year. The situation in some African countries is even worse since a lot of efforts to inclusive education are made to lower classes, leaving education in Higher Learning Institutions disadvantaged to SwVI. In Rwanda, for instance, most of the lecturers do not adapt examinations to cater for the needs of SwVI (Nasiforo, 2015), and this practice surely affects SwVI performance. Similarly, in Zambian higher education, little is done to support SwVI to achieve effective education since their assessment practices are subject to minimal modifications, thus increasing failure rates for them (Muzata, 2015; Simui et al. 2019; Muzata, 2021; Simui et al. 2021). A study by Gitonga (2014) found that teachers in primary schools in Kenya demonstrated insufficient skills to test SWDs, thereby causing SWDs to suffer from assessment practices that were exclusive in nature. Findings by Gitonga (2014) resonate with what Asamoah et al. (2018) found in inclusive primary schools in Ghana. Teachers in Ghana lacked skills on how to handle SWDs in inclusive schools; this would have been a source of many exclusive practices to these students. This gap appears to be prevalent in Tanzanian schools and higher learning institutions as well.

### 1.1.5 Assessment practices for SwVI in Tanzania

#### a) Distribution of SwVI across education levels in Tanzania

The Tanzanian government has made significant achievements in promoting inclusive education. This is evident in its ratification of international conventions advocating for

inclusion in education. For instance, responding to the Salamanca statement of 1994, which emphasizes that all children, regardless of their differences, should learn in one school setting (UNESCO, 1994), the Tanzanian government, in its National Policy of Disability (2004), the Persons with Disability Act (2010), and the National Education and Training Policy (2014), articulates that Persons with Disabilities (PWDs), including people with VI, should have equal access to education in inclusive settings at all levels.

In 2016, a total of 37,034 Students with Disabilities (SWDs) were admitted to primary schools in Tanzania, with 5,899 being SwVI. In secondary schools, 7,512 SWDs were admitted, including 3,113 SwVI (the United Republic of Tanzania (URT), 2016). URT (2020) reported that in 2020, a total of 55,758 students were admitted to primary schools, with 7,919 being SwVI, and 10,325 SWDs were admitted to secondary schools, with 3,944 being SwVI. According to the Tanzania Commission for Universities (TCU) (2022), 1,037 students with disabilities were enrolled in higher learning institutions in Tanzania in the 2021/2022 academic year, with 517 of them being SwVI. This implies that SWDs, including people with VI, are granted equal access to education in inclusive settings at all levels.

### b) Assessment practices in Basic Education and Teacher Education in Tanzania

Educational assessment in Tanzania in Basic Education and Teacher Education (Teacher training colleges under the National Council for Technical Education (NACTE)) is conducted both formatively and summatively. Formative assessment in Basic Education is used to enhance teaching and learning, while in Teacher Education, it is used to determine students' progression to another year (Tanzania Institute of Education (TIE), 2019).

In Basic Education, there are two types of summative assessments: school-based summative assessments done at the end of each term and summative assessments done nationally by the National Examinations Council of Tanzania (NECTA). Summative assessments administered by NECTA are used for certification and selecting students to join other levels of education. For example, the final examinations at the end of the second year of the advanced level of secondary education cycle are used to select qualified students to join higher and tertiary education (TIE, 2019). Examples of

assessment modes used in Basic Education include written exercises, tests, examinations, oral presentations, portfolios, practicals, project works, and essay writing (TIE, 2019).

However, in Tanzania, SwVI in inclusive pre-primary, primary, and secondary schools (Basic Education) have faced environmental and curriculum challenges, such as inaccessible learning environments, inadequate specialist teachers, stigmatisation, lack of teaching and learning materials, and exclusive assessment practices (Tungaraza, 2012; Mwakyeja, 2013; Kiomoka, 2014; Kisanga & Richards, 2018; Nuru, 2019). Until 2009, the examination system for SWDs, including SwVI, in Tanzania was exclusive in nature, significantly affecting their completion rate and academic achievements (Ministry of Education and Vocational Training (MoEVT), 2009; Ministry of Education, Science, and Technology (MoEST), 2017). This may be attributed to the fact that the educational assessment practices were primarily paper and pen examinations designed for sighted students. Previously, students with VI used typewriters for examinations, and some were given oral-based exams where they were asked and responded orally in formative assessments (Kisanga, 2017). Currently, SwVI use typewriters and Braille in answering examinations, while others are provided with large font-examinations (Kisanga, 2017). However, a study by Nuru (2019) revealed that pupils with VI in some inclusive schools were not provided with tests in large fonts since teachers had negative perceptions, stating that printing separate papers in large prints for them was costly. This highlights how negative perceptions can endanger assessment practices for SwVI in schools.

Consequently, the government of Tanzania implemented two strategies: the National Strategy for Inclusive Education 2009-2017 and the National Strategy for Inclusive Education 2018-2022, dedicated to solving inclusive education challenges in Basic Education and Teacher Training Colleges (MoEVT, 2009; MoEST, 2017). Within these strategies, the government recognised the need to restructure the examination system to cater for the educational needs of SWDs. In the national curriculum framework for Basic Education and Teacher Education, the government officially ruled that assessment practice should be subject to adaptations, such as the use of assistive devices like Braille machines, computers, and other software; alternative locations for assessments; large fonts; and additional time for SWDs, including SwVI (TIE, 2019). However, both the national strategies for inclusive education and the

National Curriculum Framework apply mostly to Basic Education and Teacher Education only, leaving higher education unattended.

### c) Assessment practices in higher learning institutions in Tanzania

Regarding higher learning institutions, students pursuing certificates, diplomas, and bachelor degrees are assessed both formatively and summatively. Formative assessment is realised through continuous assessment, which includes tests, assignments, seminars, and practical sessions. Summative assessment is conducted through end-of-semester examinations (TCU, 2019). Educational assessments in higher learning institutions determine the progression from one year of study to another; those who fail to meet the qualifications are discontinued from studies. Students who complete their educational cycles, such as programmes lasting two, three years, or more, are awarded degrees, diplomas, or certificates (TCU, 2019). This indicates that educational assessments in higher education in Tanzania are crucial, as they are used for certification.

Previously, students with disabilities had limited access to higher education in Tanzania. In the 1970s, higher learning institutions began to enroll students with disabilities. Tungaraza (2012) and Possi & Milinga (2017) reveal that two male SwVI were enrolled in the 1978/1979 academic year at the University of Dar es Salaam (UDSM). Challenges began to emerge in assessment practices for SwVI, as the practices used at that time were designed only for students without disabilities. These SwVI admitted to UDSM mostly used typewriters for tests, assignments, end-of-semester examinations, and other tasks. Questions were read orally to them. Nowadays, many students with disabilities join higher education. For example, in the 2021/2022 academic year, 1,037 students with disabilities, including 517 SwVI, joined different universities in Tanzania. The advent of these SwVI in higher learning institutions necessitated changes in assessment practices, as they could not access the assessment practices designed for students with vision.

The University Act (2013), the Education and Training policy (2014), and the TCU guidelines for universities are silent on how assessment (both formative and summative) for SwVI in higher learning institutions should be conducted (TCU, 2013; URT, 2014; TCU, 2019). However, in Tanzanian higher learning institutions, some assessment practices have been in place for SwVI, such as the use of large fonts, braille

formats, typewriters, extra time, and the use of transcribers (Kisanga, 2017; Kisanga, 2019). Despite the efforts made by higher learning institutions to accommodate SwVI in educational assessment, Lyakurwa (2019) reveals that assessment practices in Tanzanian higher education still face challenges, such as delays in examinations, forcing SwVI to use typewriters in examinations, and inaccessible formats. Therefore, against this background, this study sought to explore the perceptions of stakeholders on assessment practices for SwVI in one public university in Tanzania.

## 1.2 Statement of the Problem

Currently, there is an increase in the number of students with disabilities joining higher learning institutions in Tanzania. For example, in the 2016/2017 academic year, 570 students with disabilities were enrolled in Tanzanian Universities (TCU, 2017 as cited in Komba et al., 2017), where the number rose to 1037, of which 517 were SwVI in the 2021/2022 academic year (TCU, 2022). This is in line with the demands of the Disability Act (2010), the University Act (2013), and Education and Training Policy (2014), which advocate for inclusive education for students with disabilities at all levels of education. Although educational assessment is part and parcel of the teaching and learning process (Ghaicha, 2016; Kanjee & Mthembu, 2015), the perceptions of stakeholders remain unknown regarding the assessment practices for SwVI in higher education in Tanzania. Perceptions, whether positive or negative, influence the way SwVI are assessed. This study sought to fill this knowledge gap on the perceptions of stakeholders regarding assessment practices for SwVI in a selected public university in Tanzania.

## 1.3 Purpose of the study

The purpose of this study was to explore the perceptions of stakeholders on assessment practices for students with visual impairment in a selected public university in Tanzania.

## 1.4 Research Objectives

The study was guided by the following research objectives:

i. To explore methods used to assess the learning of students with visual impairment in a selected public university in Tanzania.
ii. To establish the suitability of the assessment practices used for students with visual impairment in a selected public university in Tanzania.
iii. To establish lecturers' experiences of assessing learning of students with visual impairment in a selected public university in Tanzania.

## 1.5 Research Questions

The following research questions guided this study:

i. In which ways are students with visual impairment assessed in this public university found in Tanzania?
ii. How suitable are the assessment practices used for students with visual impairment in this public university found in Tanzania?
iii. What are the lecturers' experiences of assessing learning outcomes to students with visual impairment in this public university found in Tanzania?

## 1.6 Significance of the Study

The significance of this study lies in its potential to improve assessment practices for SwVI in the university under study. The findings may inform the university's management team about areas in assessment practices for SwVI that require improvement. Consequently, the university management may implement measures to enhance assessment practices for SwVI, promoting fairness and equal access to quality education for all students, including SwVI. Moreover, the findings of this study may foster a sense of belonging to SwVI in this university when their perceptions are acknowledged and addressed regarding assessment practices. Additionally, it is hoped that the study's findings may serve as a valuable resource for policy and curriculum planners of inclusive education in this institution, aiding in the development of educational policies and curricula that clearly elucidate how SwVI should be assessed.

## 1.7 Delimitation

The study was conducted at one public university in Tanzania, identified in this study as University X. This university enrolled its first batch of students with visual impairment in the 2009/2010 academic year. University X was purposively chosen, as it was the only public university in Tanzania offering both face-to-face degree programmes in special education and enrolling SwVI in different degree programmes. Given that this study aimed to establish perceptions of lecturers, SwVI, and transcribers on assessment practices used for SwVI in higher education, selecting this university facilitated the achievement of this goal. Additionally, interviews were conducted with lecturers, braille transcribers, and SwVI, as they were directly involved in the assessment process of SwVI at this university.

## 1.8 Limitations

At the start of data collection, the university under study was approaching the end of Semester One University Examinations, posing challenges in enrolling lecturers as participants before and after examinations due to their tight schedules. This challenge was resolved by scheduling appointments and arranging meetings at their convenience, even outside the university campus. Similarly, language barriers were encountered, especially with SwVI who were struggling to express their views comfortably in English. However, this did not compromise the quality of the findings, as all participants were allowed to express their views, even in Kiswahili, when English posed difficulties.

## 1.9 Theoretical Framework

This study was informed by Edward Lee Thorndike's connectionism theory within the behaviourism school of thought. Thorndike first proposed the connectionism theory in 1898 in his book titled ‘Animal Intelligence: An Experimental Study of Association Process in Animal’ (Islam, 2015). Like all theories under the behaviourism approach, connectionism theory emphasizes observable behaviours rather than mental processes (Islam, 2015). It stresses that what human beings know results from their interaction with the environment, making environmental influences central to learning (Ertmer & Newby, 2013; Islam, 2015). According to Thorndike, learning is equated with changes in behaviours that can be observed and measured concretely (Ertmer & Newby, 2013; Islam, 2015).

The main idea of the connectionism theory is its postulation that learning results from making connections between a stimulus and response (Islam, 2015; Mwakalinga & Leandry, 2021). Similarly, in the teaching and learning process, students play a passive role, while educators are regarded as competent participants in charge of determining which stimulus can produce the required response and arranging environmental conditions to enhance them (Islam, 2015; Al-Shammari et al., 2019). Further, this theory of connectionism posits three major laws which are very relevant in teaching and learning process, which include: the law of exercises, the law of effect and the law of readiness (Islam, 2015; Mwakalinga & Leandry, 2021). As explained by Islam (2015) and Mwakalinga & Leandry (2021), the law of exercises entail that, for what has been learned to be retained in a long lasting memory, practices are very crucial. This law insists that, the moment what is learnt is put in use, the behaviour is strengthened, and when what is learnt is not put in use, the behaviour diminishes. Whereas the law of effect asserts that responses to stimuli that are followed by satisfying feedback are developed and strengthened while those followed by unsatisfying feedback are likely to disappear. Finally, the law of readiness is concerned with students' physical and psychological preparedness to learning.

This theory was considered relevant to the study because lecturers, as competent participants in the teaching and learning process, are responsible for measuring the extent of learning in SwVI by administering various assessment tasks, both formative and summative. According to the law of exercises, practices in terms of assessment tasks like tests, quizzes, take-home assignments and final examinations promote the application of what SwVI have learnt, thus leading to strengthening of behaviours. However, lecturers in collaboration with braille transcribers are required to set assessment tasks (stimuli) which are well accessible by SwVI in order for them to demonstrate appropriately their understanding (responses). The assessment tasks, as argued in this theory, should bear the capacity of stimulating SwVI to supply relevant responses, whereas this is only possible when these tasks are accessible.

Similarly, according to the law of effect, assessment tasks done by SwVI would support learning to SwVI once they are followed by immediate feedback. When feedback is provided timely to SwVI helps them shape their learning properly. When the law of effect is not effected properly by lecturers, either by providing feedback late or not providing feedback at all, this may weaken how SwVI learn instead of

strengthening it. As posited in this law, behaviours are strengthened or diminished when followed by satisfying or unsatisfying feedback, respectively.

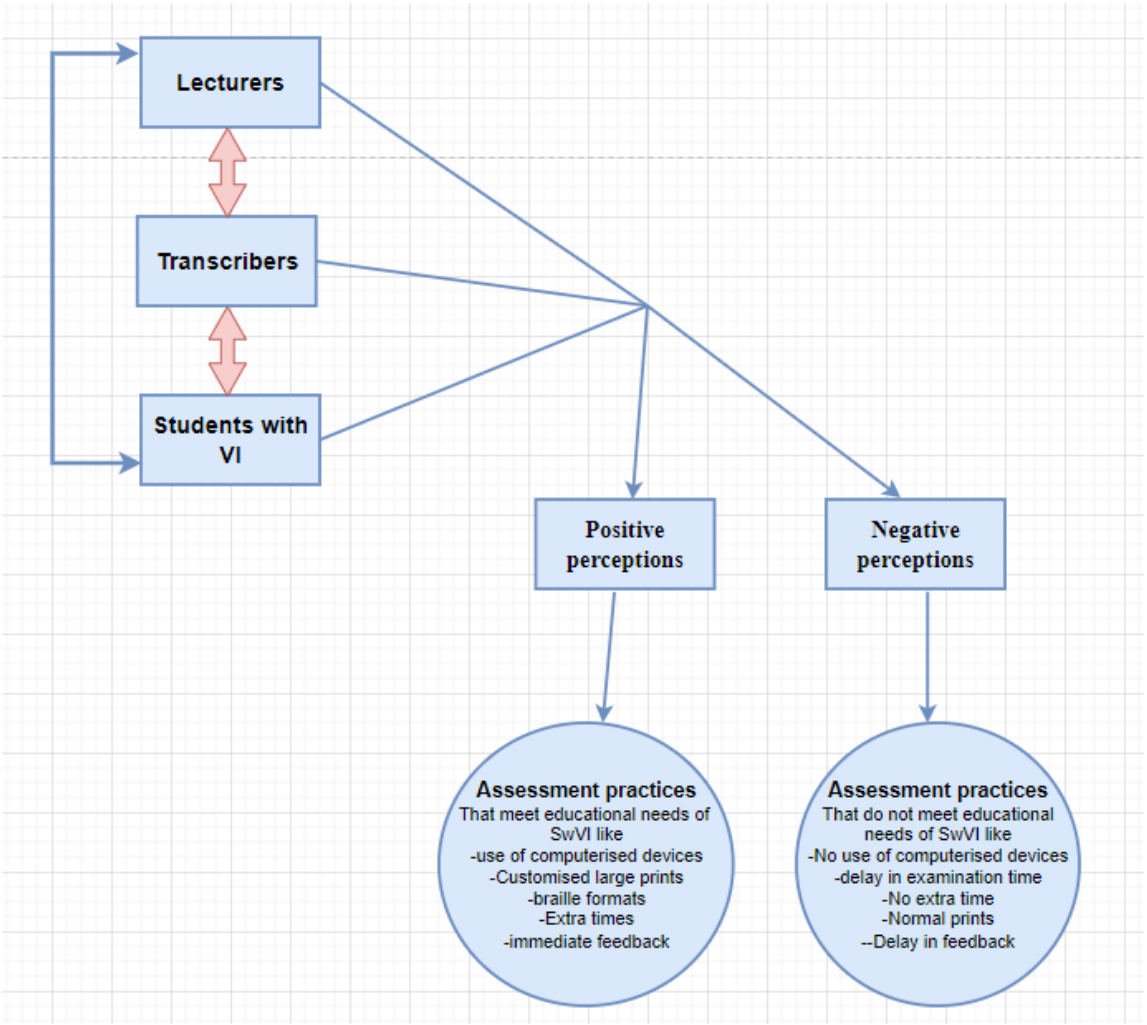
Furthermore, to abide by the law of readiness, it is the responsibility of lecturers, assisted by braille transcribers, to plan for a conducive environment where SwVI can undertake their assessments. Where technological devices like computers are to be used in doing assessment tasks, lecturers and braille transcribers should ensure that SwVI are ready to use them by providing them with proper training programmes in order to impart skills required when applying the device. When these are done properly, SwVI become psychologically healthy when undertaking these tasks, a thing which promises good academic performance for them.

## 1.10 Conceptual Framework

In this study, assessment practices for SwVI in higher learning institutions were hoped to be an interactive process involving mainly three elements: lecturers, SwVI, and transcribers. Any lack of cooperation among these three elements could produce assessment practices that would disadvantage the SwVI. Nonetheless, for such cooperation to be real, their perceptions toward assessment practices for SwVI are crucial. This is because perceptions, whether positive or negative, determine the quality of assessment practices. For example, when lecturers and braille transcribers had positive perceptions about the assessment for SwVI, they would enhance accessibility of whatever assessment practice for SwVI. However, when they had negative perceptions, they would administer inaccessible assessment practices to SwVI, such as question papers in normal prints and with no additional time.

The following diagram labelled fig. 1 indicates how these elements should work together.

**Figure 1:** Conceptual Framework




**Source:** Created by the researcher from different reviews

From the foregoing diagram, it was expected that assessment practices for SwVI in University X would require a synergy of lecturers, braille transcribers, and SwVI. These three elements need to interact iteratively with one another to identify the educational needs of SwVI, particularly in assessment practices. In this conceptual model, it was hoped that SwVI would enjoy fair and effective assessment practices when these three elements (lecturers, transcribers, and SwVI) had positive perceptions toward assessment practices for them. Conversely, it was anticipated that assessment for SwVI in this university would face different challenges when lecturers, braille transcribers, and SwVI had negative perceptions toward assessment practices for SwVI.

## 1.11 Operational Definition of Key Terms

**Assessment:** the term is defined as the educational process in which the educator collects, analyses and interprets a student's performance against particular learning goals (Ghaicha, 2016). In this study the same definition was adopted.

**Assessment practices:** in this study assessment practices encompass both all educational activities such as quizzes, group assignments, tests and of semester examinations that lecturers provide to SwVI and students without VI and the supports provided to allow SwVI access these educational activities as their peers like the additional time, questions in braille and large print formats and the adaptation of the assessment tasks among others.

**Adaptation:** in this study the term adaptation means all manner of alterations done to the assessment tools or modes which are responsive to the needs of SwVI without distorting their content.

**Disability:** this is defined as a condition in which a person is incapacitated to perform certain activities as the result of an impairment (Muzata, 2021). In this study the same definition was adopted.

**Impairment:** According to Muzata (2021:8) impairment is defined as "an abnormality which may be structural or psychological and caused by a disease, accident or injury." In this study the same definition was retained.

**Inclusive Education:** this refers to the act of educating students with disability in general education classrooms (Heward, 2013). In this study inclusive education is not only placing students with disability in a regular classroom with their peers without disabilities, but also involves adapting the education setting, teaching and learning methodologies and assessment modes in response to the individual educational needs of students with disabilities.

**People with disability:** this term is defined by the UN (2014) as those people who are limited to full participation in the society due to having long-term physical, mental, intellectual or sensory impairments. In this study, the same definition was retained.

**Lecturer:** academic staff in universities are titled differently such as tutorial assistants, assistant lecturers, regular lecturers, senior lecturers, associate professors and professors (Lyakurwa, 2019). However, the current study

consisted of assistant lecturers and regular lecturers in the sample, thus the term "lecturer" was used in this study as a generic title for both assistant and regular lecturers.

**Transcriber:** refers to a specialist in special needs education for VI who has skills in Braille prints. They know the educational needs of SwVI and how to meet them.

**Visual impairment:** according to Muzata (2021:37) visual impairment refers to "sensory problem involving difficulties in seeing objects." In this study VI is defined as damage in or loss of one or more anatomic structures which interferes with one's seeing mechanism. The definition includes both blind people and people with low vision.

## 1.12 Chapter summary

In conclusion, this chapter one brought forth the background to the study, statement of the problem, purpose and significance of the study, objectives of the study and research questions. The study presents also delimitation, limitation of the study, theoretical framework and operational definitions of terms as used in the study.

# CHAPTER TWO: LITERATURE REVIEW

## 2.0 Overview

The chapter presents a historical background of education for SwVI in Tanzania. Thereafter, the chapter presents available relevant literature on assessment practices and stakeholders' perceptions on assessment practices for SwVI in different levels of education. Lastly, the chapter ends with a summary.

## 2.1 Historical background of education for students with visual impairment in Tanzania

Special education in Tanzania can be traced as far back as the 1950s when the first school for the blind was built in Dodoma, the capital city, by the missionaries (Possi and Milinga, 2017; Kisanga, 2018). The Universal Declaration of Human Rights in 1948 became a blessing for PWDs in Tanzania, as formal education began to be offered to them from 1950 onwards (Possi & Milinga, 2017). Education for PWDs in Tanzania before independence and in the early years after independence was only offered by religious and charity organisations (Matonya, 2016; Possi and Milinga, 2017).

In 1963, the government joined efforts to offer education to PWDs when it first established an integrated school for children with VI called Uhuru Primary School (Possi and Milinga, 2017). From 1963 onwards, many integrated primary schools for SwVI were built by the government of Tanzania. For example, Ikungi Integrated Primary School in Singida region was built in 1968, Pongwe Integrated Primary School in Tanga region was built in 1968, Hombolo Integrated Primary School in Dodoma was built in 1970, and Mwanihala Integrated Primary School in Shinyanga region was built in 1973 (Tungaraza, 2012).

Furthermore, the first secondary school to admit SwVI in Tanzania was Mpwapwa Secondary School, situated in Dodoma region (Tungaraza, 2012). Therefore, some years after independence, the provision of education to people with VI was enabled by both the government and charitable organisations. All these efforts greatly contributed to opening up educational opportunities for PWDs, including people with VI, in Tanzania. Ultimately, two male SwVI joined higher education in the 1978/1979 academic year at UDSM (Possi & Milinga, 2017). In the history of education for

PWDs in Tanzania, people with VI are reported to be the first category of PWDs to join higher education.

### 2.1.1 History of inclusive education in Tanzania

Since the launch of formal education in the 1950s for PWDs, including people with VI, education was provided to them in special schools and integrated schools up to the late 1990s (Tungaraza, 2012; Possi & Milinga, 2017). During this period, the inclusion philosophy, which emphasized SWDs learning alongside their peers in all levels of education, had not yet gained momentum in the country. In the 1990s, there were worldwide mass campaigns on inclusive education. The Salamanca Statement of 1994 became the most compelling campaign, inspiring many countries worldwide to adopt the inclusion philosophy.

In 1998, the first inclusive education initiative in Tanzania was undertaken, testing its viability in the Tanzanian context (Matonya, 2016). In this year, a pilot was conducted in four primary schools in Temeke district in Dar-es-Salaam region (Tungaraza, 2012; Matonya, 2016). These efforts marked the official beginning of inclusive education implementation in Tanzania. However, up to 1998, no policies or laws had been put in place to legalise the provision of inclusive education in Tanzania. It was not until 2004 when the Tanzanian government enacted the first policy on disability, ruling that a conducive environment for SWDs would make inclusive education possible (URT, 2004). Currently, there are many people with disabilities, including people with VI, in all levels of education.

## 2.2 Assessment practices for students with visual impairment

Challenges to assessment practices for SwVI were not rampant when SwVI were educated in special schools. Scholars assert that in special schools, SwVI were taught by specialist educators/teachers who knew their educational needs well (Dreyer, 2017; Muzata, 2021). Since the world shifted from the medical approach of viewing disability to the social approach, emphatic campaigns and messages on inclusion philosophy swept the world. The medical approach demands that individuals with disabilities fit themselves into society without making any changes to the social system. On the contrary, the social approach calls for the restructuring of social systems so that PWDs could be accommodated fairly (UN, 2014).

Assessment for SwVI was a challenge in inclusive schools because, at times, they were forced to write their tests and examinations in the same way as their peers without disabilities. Consequently, different modalities emerged through which SwVI are assessed in inclusive settings to promote equity and equality in quality education. Among the assessment practices used for SwVI include, but are not limited to, the following.

### 2.2.1 Braille formats

According to Heward (2013), Braille is a system of raised dots used by people with VI to read and write. While the common way to read and write is through normal prints, students with vision challenges have a different experience. Those who are totally and functionally blind mainly rely on tactile and auditory senses in learning (Heward, 2013). For such cases, assessment tools (examinations, tests, quizzes, and take-home assignments) would be accessible if presented in Braille formats.

The study by Ndume (2019) on the ways SwVI in grade 12 are assessed reveals that Braille format is offered to those students who cannot access normal prints due to vision challenges. Muzata (2021) similarly suggests that SwVI should be offered examinations in Braille format to enhance fairness for them. Braille commonly exists in two forms: Braille grade I and Braille grade II. Braille grade I is free from contractions; words are written without using short forms and abbreviations, while Braille grade II involves contractions where words are written using short forms and abbreviations. Since the aim of assessment is to measure what the learner knows, it is advised that examination scripts are provided in the Braille form with which SwVI are well conversant (Allman, 2009). For those who are not much used to contracted Braille, examinations should be offered in uncontracted Braille form.

### 2.2.2 Large prints

Not all students with vision loss depend mainly on tactile and auditory systems; some of them use tactile and auditory senses only to supplement visual information (Heward, 2013). Students with low vision access information primarily using vision. For these students to be assessed fairly, enlargement of prints of their assessment tasks is inevitable. Muzata (2021) noted that SwVI must obtain necessary support depending

on the degree of VI. Thus, even the size of the font for SwVI should be dictated by the severity of VI in the students. Some SwVI may require a font size of 18, 20, or even 27, depending on their degree of vision loss. Sometimes, assistive devices like magnifiers, contact lenses, and handheld telescopes can be used by students with low vision to read normal prints (Heward, 2013).

### 2.2.3 Extra times

Nowadays, extended time during examinations, tests, and even assignments is reckoned as an important accommodation for SwVI. Allman (2009) noted that SwVI use a lot of time when using braille, large print, and audio formats during testing; hence, extending time for them is imperative. However, there have been many controversies among practitioners regarding the amount of time that should be added. For example, Frank et al. (2019) argued that SwVI pursuing physiotherapy programs at the university level in the United Kingdom (UK) received up to 50% extra time of the normal duration. In a longitudinal study by Hewett et al. (2015) on the exploration of the experiences of blind and partially sighted youth in higher institutions, it was revealed that SwVI were given extra time in assessment ranging from 20% to 100% of the normal duration, depending on the degree of VI. Furthermore, Wetzel & Knowlton (2000) concluded that time accommodation should be individualised according to the examination taker's reading rate and examination situations. Similarly, Ndume's (2019) study noted that time extension should not implement a one-size-fits-all approach but, rather, should be allocated depending on the degree of VI.

### 2.2.4 Rest break

Rest break is provided as an accommodation during examinations for SwVI who have to spend many hours in the examination room due to time extension. For example, in a study by Hewett et al. (2015), it was noted that SwVI who had to sit for six hours during one examination were provided with a rest break. During this break time, a student with VI is allowed to put the pen down and leave the room for short periods. Although this accommodation is not common, it is still recommended when a student with VI has other disabilities than visual impairment or when the student's degree of VI is very severe to the extent of limiting them to work effectively at a good speed

### 2.2.5 Changes to examination items

Examination items are subjected to changes if they comprise a component that is not easily accessed by SwVI. The common accommodation made to examination items that use diagrams, charts, or tables is omitting those diagrams and replacing them with descriptions (Hewett et al., 2015; Ndume, 2019). However, Allman (2009) suggested that diagrams that are not too complex could be presented using tactile graphics. Sometimes alternative questions are given to SwVI to suit their educational needs (Lyakurwa, 2019; Acheampong et al., (2020).

### 2.2.6 Oral testing

This practice of oral testing has been a common one, especially in institutions or schools where assistive technologies are scarce. Oral testing has been done in different ways. Among these ways include reading questions to SwVI, and then SwVI respond to them orally; reading questions to SwVI, and then they answer them in Braille; and another is reading questions to SwVI, and then they rewrite those questions in Braille and thereafter start answering them in Braille (Kisanga, 2017; Kisanga, 2019). Although the nature of readers and scribes used during oral testing varies from one institution to another, some institutions provide amanuenses (readers/scribes) who help SwVI during examinations (Morris, 2014; Hewett et al., 2015). The main function of amanuenses is to read questions for SwVI and write down their answers for marking if SwVI decide to answer orally. In other institutions, readers are the lecturers themselves for respective courses. However, Hewett et al. (2015) suggested that an amanuensis should demonstrate specialist knowledge upon selection. In the book authored by Muzata (2021), it is recommended that sometimes SwVI, during assessment, may be provided with tape recorders where they record their answers, and then the answers are transcribed into normal prints for marking.

### 2.2.7 Provision of alternative location

SwVI, during testing, are given examination rooms different from their peers. For example, one of the accommodations for SWDs, including SwVI, identified in the new revised curriculum of Tanzania, is the provision of separate rooms for them (TIE, 2019). Among the reasons behind this different arrangement in terms of the examination room include the noises produced by devices used by SwVI, like the

Perkins Brailler, during writing their examinations, which disturb others without disabilities (Matonya, 2016). Furthermore, the allocated room consists of services that meet the educational needs of SwVI, such as appropriate chairs and tables for them, and appropriate light contrast (Ndume, 2019). Although this is a good practice, some scholars deem it as another way of stigmatising SwVI because of labelling them as being different from their peers without disabilities (Liasidou, 2014). However, the Salamanca statement ruled out that SWDs in inclusive settings should be provided with extra support where possible in the course of implementing inclusion (UNESCO, 1994). Hence, providing a separate room to meet their educational needs has no problem in it.

### 2.2.8 Computer assisted modalities

The world is currently advancing fast in science and technologies; as a result, people's lives are also changing. Muzata (2021) noted that knowledge in computers would make SwVI independent learners, for they could apply computer-assisted software to do assessment tasks given by their lecturers. There are computer programs such as screen readers like Job Access with Speech (JAWS), Non-Visual Desktop Access (NVDA), refreshable Braille display, and magnifiers like ZoomText (Singh, 2012) which can be used during assessments and enhance easy access for SwVI. For example, using computer programmes, SwVI are able to customise the font size of the examination using magnification software. Nisbet (2020) revealed that SwVI used screen readers such as Job Access with Speech (JAWS) and VoiceOver in high-stakes assessments in the UK. Similarly, Kisanga (2019) and Ndume (2019) noted that SwVI strongly wished to use computers in their assessments; however, they opted for traditional ways like the use of large print and Braille formats and typewriters due to lack of computers with pertinent programmes for them. Computer-assisted assessment practices are widely used nowadays; however, SwVI should be trained in how to use computers in assessments for effective impacts (Allman, 2009).

## 2.3 Students with visual impairment perceptions on assessment practices

The way SwVI perceive the assessment practices done by lecturers in higher education is of paramount significance because of the following reasons. The study by Struyven et al. (2005) contends that the way students construct the reality about their schooling influences their learning. They further added that students' perceptions about their

assessment practices greatly impact the way they study. This position closely relates to what Redpath et al. (2013) revealed that SWDs choose courses to study in higher education based on how those courses are assessed. In this regard, this segment uncovers different ways SwVI perceive assessment practices in different parts of the world.

Reed & Curtis (2012) conducted a study to explore the experiences of SwVI in higher education in Canada. The findings from this study revealed that SwVI delayed completing their studies, and barriers to their full participation in higher education included heavy reading requirements, group work, and an inability to participate in some activities. Furthermore, SwVI opined that they had some examination accommodations like examination rooms, laptops installed with software like ZoomText, JAWS, and Kurzweil. However, some SwVI noted that they had difficulties obtaining access to training on adaptive technologies. Again, SwVI faced challenges in group work since sighted peers hesitated to include them in their groups, thinking that they could not contribute. Although this study revealed that SwVI were accorded examination accommodations, it is still silent on how SwVI perceived those examination accommodations. Additionally, the study used a survey study design, which is much more interested in breadth rather than depth (Gay et al., 2012). Thus, the current study deems it imperative to fill this gap by exploring the perceptions of SwVI, specifically on assessment practices, in higher learning institutions using a case study design.

Furthermore, a study by Morris (2014) adopted an ethnographic research design that included 6 SwVI and 14 staff members from three colleges in Wales, UK. The study mainly focused on investigating the effectiveness of inclusive education for visually impaired students in further education. The findings in this study revealed that participant SwVI perceived exams and coursework assessments as challenging in these colleges to the extent that it influenced their course choices. For example, in these colleges, SwVI chose non-examination courses more often than other courses with exams. Furthermore, participant SwVI opined that they were given extra time during exams and coursework assessments, up to 100% of the normal time provided to sighted students. Although they were provided with adaptive technologies such as Closed-Circuit Television (CCTV), some SwVI preferred amanuenses (scribe and readers) in examinations to adaptive technologies. Since this study was conducted in colleges and

not universities, and its focus was not primarily on assessment practices, there was a need to conduct a study at the university level primarily focusing on how SwVI perceive the assessment practices done to them. Thus, the current study.

From a Northern Ireland perspective, a study by Redpath et al. (2013) focused on the lived experience of disabled post-transition students in higher education institutions. The study employed in-depth interviews with 13 SWDs who shared barriers they experienced in participating in higher education. Regarding assessment practices, SWDs described that they were granted extra time in examinations, deadline extensions, scribes for those who were not able to write by themselves, and special training on how to use adaptive technologies was also provided to them. However, these students had no choices to make regarding their assessment modes; they had to use the options already set by the university. In this study, the authors suggested that SWDs should be part and parcel of whatever decisions are made regarding their educational needs. They further described that if SWDs were given the freedom to choose assessment methods that met their educational needs, some costs of running inclusive education could be dropped. The findings are in tandem with a pilot study carried out by Waterfield & West (2008), which revealed that SWDs were satisfied with the assessment practices as they were given opportunities by lecturers to make choices on assessment modes that fit them. The study by Waterfield & West (2008) further found that the academic performance of SWDs increased upon being assessed by assessment modes they chose. Since the studies by Redpath et al. (2013) and Waterfield & West (2008) involved students with disabilities in general without being specific only to one category of SwVI, there was a need to interrogate only SwVI on how they perceived assessment practices provided to them and how best they wished assessment practices should be handled for them.

From Ghana, Acheampong et al. (2020) conducted a study to explore how SwVI experienced assessment practices at the University of Education, Winneba. The phenomenological research design was used, in which data was generated through a focus group discussion method from 30 SwVI. The findings found that SwVI were fairly satisfied with assessment practices used by the lecturers at the institution. The SwVI commented that lecturers assessed them through different methods, which included individual assignments, group works, presentations, quizzes, and end-of-

university examinations. They further indicated that alternative assessments provided to them depended on prevailing situations. For example, where sighted students were given to answer a question in a class using the open-book approach, SwVI were given take-home assignments. Furthermore, the SwVI described that their assessment practices were void of diagrams, tables, and mathematical concepts, which were replaced with descriptions. They undertook their assessment tasks in a separate room where 50% extra time was given to exams and quizzes. Apart from the positive practices reported by Acheampong et al. (2020), participants resented the tendency of not being given time extension on assignment submission, while others felt unsatisfied with the extra time given during examinations. So far, the findings indicated that extra time for SwVI should not be a one-size-fits-all approach; instead, it should be allocated according to the educational needs of each student with VI. Similarly, SwVI described that the receipt of examination and quiz questions was delayed, causing anxiety and tension during undertaking them. In the study by Acheampong et al. (2020), only focus group discussions were used to generate data. From the point of view of Cohen et al. (2018), the focus group discussion method limits the number of topics to be discussed by the participants. Further, sometimes little information may be generated from focus group discussions when few members dominate the discussions. Therefore, for an in-depth understanding of the phenomenon, this study applied more than one data collection method to interrogate students with VI perceptions on assessment practices done to them in one Tanzanian public university."

Rodrick (2021) conducted a study in two colleges of education in Zambia to explore the academic experiences of students who are blind. The findings generated from semi-structured interview guides and observation checklists revealed that the two colleges of education offered two kinds of induction programs: awareness seminars provided blind students with information on academic experiences in the colleges, and blind students were oriented to the college environments. Moreover, various barriers regarding academic issues were reported by the participants, such as an inaccessible college environment, lack of assistive technology, and challenges related to assessment practices. Furthermore, students who were blind in Rodrick's (2021) study reported that enough extra time was given to them during undertaking academic activities such as assignments, tests, and examinations, although the amount of time provided was not stated. Besides, SwVI sometimes were subjected to having fellow students (readers)

who had to read questions for them when tests and examinations were in inaccessible formats. Similarly, it was noted that SwVI undertook the same assessment tasks (tests, assignments, and examinations) as their peers without VI, the only difference being that their assessment tasks had to be adapted.

Similarly, students who were blind in the study by Rodrick (2021) reported various challenging practices faced in the assessment, which, in one way or another, frustrated them. Some highlighted inaccessible assessment tasks that involved diagrams, charts, and normal prints, lack of a permanent room for examinations, and results of their assessment tasks were delayed due to a lack of transcribers since they only depended on one specialist lecturer in Special Needs Education. Furthermore, SwVI complained about the lack of assistive technologies like computers installed with Job Access with Speech (JAWS), a thing that forced them to rely wholly on their peers in doing assessment tasks. While other SwVI resented the intolerance of readers since they did not give SwVI ample time to respond to questions. Although this study establishes pertinent issues related to assessment practices for SwVI, there was a need to conduct the current study to establish the way SwVI perceive assessment practices in higher education because the study by Rodrick (2021) interrogated students who were blind in two colleges of education. Moreover, the study by Rodrick (2021) did not describe the assessment modes used for SwVI in those colleges, thus the imperative need for the current study.

Besides, Muzata et al. (2019) conducted a phenomenological study to establish perceptions of SwVI towards their inclusion in the faculty of education at the University of Zambia. Findings from the study revealed positive perceptions of SwVI towards their inclusion in the faculty of education since they experienced no discrimination from their fellow students during academic pursuits. However, SwVI reported that lecturers lacked the skills to accommodate their educational needs in an inclusive classroom. Further, the findings revealed that SwVI seemed to feel more included in academic activities. However, regarding challenges SwVI faced in the course of their learning, among others, SwVI had negative perceptions of assessment practices. They were not given extra time in examinations, tests, and assignments, and sometimes examinations and assignments were not accessible since they were not in Braille or large print. The minimal enforcement of these reasonable accommodations

was partly ascribed to the lack of institutional policy on disability. They further commented that their examinations were marked late, and sometimes got lost since the transcription was done late due to a lack of transcribers to do so. Some other SwVI had to carry over their courses due to missing results in their continuous assessment and university examinations.

Such challenges in assessment practices, as noted in Muzata et al. (2019), contributed to the academic failure of SwVI. Closely related to this was a study done by Simui et al. (2019) on disablers to academic success faced by SwVI at the University of Zambia. Seven (7) participants with VI were involved in this study, which was guided by the hermeneutic phenomenological design, and thirteen disablers that affected their academic success emerged. Among those disablers, exclusive examination in nature was perceived by the SwVI to be one; for example, one participant was forced to carry over the course after the examination result was lost. Although both the studies by Muzata, et al. (2019) and Simui et al. (2019) were conducted at universities and raised some issues related to assessment practices, their primary focus was not on establishing views of SwVI on assessment practices. Therefore, a lot of details about assessment practices could not be captured. Additionally, their sample consisted of SwVI alone, a thing that propelled the researcher's interest to conduct the current study engaging lecturers, transcribers, and SwVI themselves while focusing mainly on establishing their perceptions of assessment practices for SwVI in the university X.

In Rwanda, Nasiforo (2015) conducted a study on the academic impediments SwVI faced in the colleges of the University of Rwanda. Findings revealed that SwVI were impeded academically in the curriculum, learning resources, and examination system, which were exclusive in nature due to the fact that lecturers had no expertise in special needs education. For example, sometimes examinations had diagrams and tables. However, SwVI reported that they were given extra time to complete assessment tasks. Findings further revealed that although staff development was done, it was not specifically about inclusive education, thus making inclusive education low. Based on the findings, the author recommended that training programmes should be initiated for lecturers in order to upgrade their skills on how to help SwVI's learning. This study was limited to academic challenges in general faced by SwVI, since the focus was not on the assessment practices for SwVI; conducting a study that exclusively focuses on

the assessment practices for SwVI may help to come up with detailed insights about the phenomenon under study, thus the current study.

From the Tanzanian setting, a case study design under a qualitative approach was conducted by Kisanga (2017) to explore academic and social barriers faced by students with sensory impairment and coping strategies throughout their studies in higher learning institutions in Tanzania. The scope of this study was limited to two universities: the first was the oldest public university in the country that enrolled the first batch of SwVI in 1978, and the second was the privately-owned university. Findings of the study reported the academic and social barriers in the following clusters: scarcity in teaching and learning resources, exclusionary teachers/lecturers' practices, examination and information inaccessibility, curriculum challenges, environmental inaccessibility, and attitudinal barriers like negative attitudes towards students with sensory impairment. Regarding examination issues, participant students with sensory impairment raised five subthemes on examination and testing barriers they faced across all levels of education: inaccessible examination formats and administration procedures, lack of feedback from teachers, delays in examination time, inappropriate grading systems, and incompetence of the transcribers. Similarly, in the scholarly article by Kisanga (2019), the same findings were revealed on examination and testing.

Furthermore, SwVI in Kisanga's (2017) study noted that they prefer to use computers in exams, but owing to the lack of knowledge and skills on computer application, and lack of pertinent computer programmes to support their educational needs, they are forced to write their exams in other ways. This concurs with Rodrick's (2021) observation that SwVI had goodwill to use assistive technologies in their assessment tasks; unfortunately, computers in their colleges had no pertinent programs to support them. However, there is still a knowledge gap since studies by Kisanga (2017) and Kisanga (2019) were conducted across the education levels and involved the oldest public university in Tanzania. Currently, many public universities are enrolling SwVI, and stakeholders' perceptions on assessment practices for SwVI in these universities are not established; thus, the current study sought to fill this gap by exploring stakeholders' perceptions on assessment practices for SwVI from a public university that began to enrol SwVI in the 2009/2010 academic year.

The study by Lyakurwa (2019) was conducted in one public university found in Tanzania, with teachers, students who are blind, and special education unit staff included in the sample. In relation to assessment practices, Lyakurwa's study revealed that SwVI were assessed through various methods, mainly grouped into two categories: individual and group assignments. It was noted that SwVI were satisfied with group assignments (projects), but they had negative perceptions of individual assignments such as class quizzes, essays, tests, and examinations as they were associated with many challenges. Among the challenges narrated in his study include questions that had diagrams, charts, and tables like matching items questions, inaccessible instructions given to questions like encircling the correct answer in multiple-choice questions, and late marking and delay in results provision to SwVI. Furthermore, students who were blind noted that they faced challenges in some assessment tasks like quizzes, seminar presentations, tests, and examinations, and most of the challenges were due to the kind of tools they used in assessments. Devices that were present in this institution included Perkins Brailler, computers, and typewriters. Although it was reported that students who were blind were forced to use typewriters since typing enabled their works to be easily accessed by their lecturers. Computers were few; hence, they were only used by the staff, and this inflexible nature disadvantaged students with blindness who were inexperienced with typewriter usage. Again, students with blindness were not allowed to write their works in Braille because the university by then did not have specialists hired to transcribe their works into normal prints.

Despite the fact that Lyakurwa's study unearthed a lot about assessment practices for students who were blind, there were yet many gaps that culminated in the emergence of the current study. Firstly, the study by Lyakurwa excluded students with low vision in a sample, thereby leading to missing their voices about assessment practices. Secondly, his study was limited to only one public university which has a longer history of service to SwVI than any other public university in the country; thus, findings generated would not be transferable to public universities which started enrolling SwVI recently. Thirdly, the study did not describe in detail participants' views on how assessment tasks were undertaken. Therefore, arising from these gaps, the current study emerged to fill them.

Despite the fact that the reviewed studies in this part, in one way or another, have unearthed views of SwVI regarding the assessment practices done to them, a wide gap still exists since none of them focused exclusively on establishing stakeholders' perceptions on assessment practices in higher learning institutions. Many of the studies were focused on issues about inclusive education in general (Reed & Curtis, 2012; Morris, 2014; Lyakurwa, 2019; Muzata, et al., 2019), others on the lived experiences of SwVI in inclusive settings (Redpath, et al., 2013; Simui et al., 2019) and academic experiences/impediments (Nasiforo, 2015; Kisanga, 2017; Rodrick, 2021). Few studies (Acheampong et al., 2020; Kisanga, 2019) which were conducted on assessment practices involved only the voices of SwVI, while other stakeholders' views remain unestablished. Therefore, the current study sought to fill this knowledge gap.

## 2.4 Lecturers' perceptions on assessment practices for students with visual impairment

University lecturers are vested with authority over what and how assessment practices should be for their students. In most universities, lecturers are the ones who prepare assessment tasks for students, mark them, and provide results. Therefore, assessment practices for SwVI in higher education cannot be well understood if lecturers are left behind. In such a situation, this segment reviews different studies on lecturers'/teachers' perceptions on assessment practices for SwVI in schools.

Starting with Brazilian perceptions, a survey was conducted by Luque et al. (2018) with the aim of examining educators' practices and perceptions of visually impaired students regarding the inclusion of learners with VI in computing education programs in Brazil. Results obtained through questionnaires revealed that educators had limited access to knowledge related to the inclusion of SwVI in lectures and felt unprepared for that scenario, while SwVI felt excluded from the computing education programme. Further, the findings revealed mixed perceptions among educators regarding assessment practices for SwVI. For example, 47 educators out of 56 declared that they had included SwVI in group activities with other students, while 9 educators confirmed that they had not involved SwVI in group activities with others. Again, 27 educators out of 56 confirmed that they had assessed SwVI differently from sighted students, while 29 educators out of 56 declared that they had not assessed them differently from their sighted peers. Unsupportive practices reported by some educators are directly

linked to their lack of skills on how to deal with SWDs in inclusive settings. This is because 44 educators out of 56 reported that they had not received any training programmes organised by their institutions on how to handle SWDs in inclusive settings. Educators with inadequate skills on how to deal with SwVI in inclusive settings are likely to harbour negative perceptions about assessment practices for SwVI. In tandem with this view, Fraser & Maguvhe (2008) noted that educators' negative perceptions about SwVI stem from their inability to deal with SwVI. Thus, there is a great call for educators' sensitisation and capacity building on curriculum adaptation (Muzata et al., 2019), specifically on assessment practices for SwVI, to enhance their positive regard towards assessment issues for SwVI. Although Luque's et al. (2018) study has revealed some issues related to lecturers' views on assessment practices for SwVI, data were collected using questionnaires with closed questions. Thus, to capture the phenomenon in detail, a qualitative approach was needed. This culminated in the current study as it adopted a case study design to explore stakeholders' perceptions on assessment practices for SwVI in a public university in Tanzania. In data generation, three methods: semi-structured interviews, focus group discussions (FGDs), and document analysis were used to generate as much data as possible about the phenomenon.

Asamoah et al. (2018) conducted a phenomenological research design on the perception of visually impaired students, students without disabilities, and teachers on inclusive education in Ghana. The findings revealed that SwVI and some teachers had positive perceptions regarding inclusive education, while students without disabilities disliked the practice. However, some teachers espoused the opinion that SwVI should be educated in special schools since, in inclusive schools, they fail to move with the pace of their sighted peers, thus causing a delay in topics coverage. Asamoah et al. (2018) further recommended that teachers in Ghana should be provided with training to update their skills on how to handle SWDs. This study was silent on teachers' perceptions on assessment practices for SwVI in inclusive schools in Ghana; thus, the current study came to fill this gap.

Furthermore, a study by Ndume (2019) aimed at interrogating national examination assessment practices for learners with VI at grade 12 levels in Zambia. It was revealed that both Braille and large prints were used for SwVI. Moreover, teachers had mixed perceptions regarding assessment practices for learners with VI. Some teachers

supported the practice of adding time to learners with VI in examinations. These teachers noted that the amount of time added to SwVI should be determined by the degree of students' VI owing to the fact that some SwVI finished within the time added, while others with a severe degree of VI failed to finish within that time. In addition to that, these teachers supported the practice of providing examination papers in different formats such as Braille, large prints, and omitting diagrams depending on individual SwVI's educational needs. On the other hand, other teachers noted that no special training was given by the government on how to mark scripts of SwVI. While others perceived the practice of adding extra time to SwVI as favouring them, as a result, these teachers forced SwVI to finish the examination even before the time added ends. A similar result was revealed by Vasek (2005) where faculty educators refused to provide accommodations to SWDs believing that such practices would be unfair to their peer students without disabilities. The study by Ndume (2019) was conducted to explore national examination assessment practices for grade twelve SwVI in Zambia, but the current study sought to explore perceptions of stakeholders on assessment practices for SwVI in higher education in Tanzania. Besides, Ndume's study only depended on one research instrument (Semi-structured interview guides), a thing which could have limited the exploration of detailed information on the phenomenon under study. So, to fill this gap, the current study applied three different research instruments (Semi-structured, focus group discussion, and documentary review guides) to extend the range of insights on the phenomenon under study.

A mixed research approach was conducted in Kenya by Gitonga (2014) with the aim of determining the adequacy of assessment practices in inclusive primary schools. This study revealed numerous challenges related to testing in inclusive primary schools, including issues related to knowledge and skills, physical structures, school approach, behaviours of teachers and learners, and the national agenda for inclusivity in Kenya. Furthermore, teachers had mixed perceptions of testing SWDs. For instance, 65% of teachers believed that testing for SWDs in regular schools was not done fairly, and 100% of teachers agreed on the insufficient presence of assessment resources for SWDs. Additionally, some respondents (85%) noted that SWDs were not given extra time in class assessments. This may be attributed to the fact that some teachers had negative attitudes towards testing SWDs, as confirmed by 50% of the respondents, although 45% had a contrary view. Furthermore, 70% of respondents opined that

teachers in regular schools lacked the skills to test SWDs, while only 22.5% had a contrary view. Gitonga (2014) recommended that teachers in regular schools should be well-equipped with knowledge and skills on teaching and testing SWDs. While this study addressed testing issues for SWDs in general at the primary level, the current study explores lecturers' perceptions of assessment practices specifically for one disability category—SwVI in higher education. It is assumed that the experiences of teachers at the primary level might differ from those of lecturers at higher education

Nuru (2019) conducted a study to assess testing practices for SWDs in inclusive primary schools in Tanzania. The findings highlighted mixed perceptions among teachers regarding testing practices for SWDs in inclusive primary schools. Teachers perceived extra time as important for SWDs during testing. The added time ranged from 5 minutes to 20 minutes, depending on the subject under testing; for example, some students were provided an additional 20 minutes for subjects like Mathematics and English due to the higher number of items. Additionally, teachers placed SWDs in front seats to help them see questions clearly on the blackboard, which was beneficial since most tests were written on the blackboard. However, some teachers provided the same tests to students regardless of their differences. For instance, one participant teacher mentioned that printing two categories of tests (one for normal prints and the other for large prints) was a waste of money and time. Teachers perceived that testing for SWDs should be conducted by respective specialist teachers, as they considered the practice to be too challenging for them. Other teachers argued that testing practices faced many challenges, such as the lack of testing resources for SWDs, insufficient motivation and testing skills for SWDs among teachers, and a curriculum that did not provide appropriate guidance for testing SWDs.

Although some participant teachers in Nuru's (2019) study commented on the silence of the previous curriculum regarding assessments for SWDs, the new revised curriculum of Tanzania, in effect from 2019, describes ways through which SWDs should be assessed. These include the addition of extra time, the use of alternative assessments, braille formats, large prints, and accommodations tailored to individual students' educational needs (TIE, 2019). Unlike Nuru's (2019) study, which primarily focused on assessing testing practices for SWDs in inclusive primary schools, the

current study explores lecturers' perceptions of assessment practices for only one category of disability—SwVI—in higher learning institutions in Tanzania.

The study conducted in the Tanzanian context by Kimaro & Kapinga (2020) aimed to examine instructors' assessment practices in two universities and one college through a mixed research approach. The results of the study indicated that most instructors used written tests, final examinations, seminar presentations, group assignments, individual assignments, and quizzes to assess students' learning. However, the results further revealed that lecturers frequently favoured written tests over other assessment methods, citing their validity, objectivity, and fairness, as well as their ability to assess a large number of students in one shot. This implies that instructors' preference for one method of assessment over others limited the wide range of gathering diversity of information on students' learning. The results also showed that many instructors (88.5%) did not provide each student with assessment written feedback, 67.7% of instructors never returned assignments and tests with marks and comments, while 76% of instructors did not provide students with suggestions on ways to improve their performance. Similarly, the results indicated that the majority of instructors (79.1%) did not give students opportunities to choose assessment activities they wanted to work on in the class.

Although this study provides many insights into instructors' assessment practices, it was silent on the instructors' assessment practices in relation to SwVI. The focus of the study was on students in general, regardless of their categorisations. Besides, the study did not describe in detail the way assessment methods were conducted by these instructors. This can be attributed to the fact that the study applied a more quantitative approach than a qualitative one. Thus, the current study aims to fill these gaps by exploring lecturers' assessment practices in relation to SwVI through the adoption of a qualitative research approach in which assessment tasks are described in detail.

## 2.5 Braille transcribers' perceptions on assessment practices for students with visual impairment

Due to the fact that inclusive schools, including universities, have large numbers of academic staff not specialized in Special Needs Education, special education units have been a resort for many educational institutions. The special education unit includes varied staff with skills and knowledge pertinent to different categories of

disabilities, such as VI, and hearing impairment, just to mention a few. In this study, braille transcribers (specialist staff in VI) will be the target since they are the ones who help SwVI in schools and cooperate with lecturers/teachers in dealing with SwVI.

Morris & Sharma (2011) conducted a study to examine barriers itinerant support teachers for VI faced in their role and the coping strategies for the same in Victoria, Australia. Focus group interviews were used to generate data from seven participant itinerant support teachers. Findings revealed a lack of awareness among regular school educators of the needs of children with VI, insufficient educational resources for children with VI, such as computer-assisted screen readers, inadequate training, and a lack of awareness among regular school educators regarding the role of itinerant support teachers for VI. The participants further explained that regular teachers did everything for children with VI, failing to encourage them to develop independent living skills. However, participants echoed the unawareness of regular educators of their roles in mainstream schools as itinerant support teachers. This was attributed to a lack of training in inclusive education during teacher-trainee training. Lynch & McCall (2007) explained the roles of itinerant support teachers for VI as working with teachers and children with VI at mainstream schools, transcribing class works and examinations to and from Braille for both teachers and children, and advising teachers on how to meet the educational needs of children with VI. Moreover, itinerant support teachers for VI identify and assess children with VI, refer them where necessary, and also work with preschool children with disabilities at home.

The collaboration of special education unit staff and other teachers or lecturers in inclusive schools promises effective services, including assessment practices, provided to SwVI. However, collaboration becomes real when special education unit staff and lecturers/teachers maintain constant working relationships and communications on how best they could provide services to SwVI (Morris & Sharma, 2011). The study by Morris & Sharma (2011) did not establish views of itinerant support teachers on assessment practices for SwVI in mainstream schools but rather focused on barriers they faced when working in those schools. Therefore, the current study was imperative as it explored braille transcribers' perceptions on assessment practices in higher education in Tanzania.

In the study by Kisanga (2017) conducted in Tanzania on academic and social barriers faced by students with sensory impairments and their coping strategies throughout their studies, participant SwVI opined that in some inclusive secondary schools in Tanzania, they were given inaccessible formats because schools had no special education staff for VI (Braille transcribers) to help them. The absence of specialist staff for VI necessitated general school teachers to read out questions for SwVI; then students were required to write questions into braille and answer them. This experience was reported as tiresome by SwVI. Similarly, Rodrick (2021) noted the same in his exploration of the academic experiences of students who were blind in two colleges of education in Zambia. Participant students who were blind in Rodrick's study expressed sentiments that the delay of feedback to their academic activities (examinations, tests, and assignments) compared to their sighted peers was due to the fact that their colleges had no braille transcribers. Special unit staff play a very crucial role in assessment practices for SwVI since most lecturers lack skills in handling SWDs.

Furthermore, the study by Ndume (2019) demonstrated that examination scripts of grade 12 SwVI had to be transcribed into normal prints before they could be marked at the Examination Council of Zambia. Although findings further revealed that some Braille transcribers did not have adequate expertise in transcribing braille codes because there were so many irregularities in the transcribed scripts. This resonated with the findings from Kisanga (2017) and Kisanga (2019) where participant SwVI doubted the competence of special education unit staff (braille transcribers) who graded their examination scripts and transcribed their works into normal prints. Moreover, studies by Kisanga (2017) and Kisanga (2019) conducted in Tanzania indicated that the delay in examination time for SwVI in higher education was due to a lack of cooperation between lecturers and special education unit staff. Some participant SwVI commented that some lecturers deliberately delayed sending examinations to the special education unit with the fear that their examinations could leak. Despite the fact that studies by Kisanga (2017), Ndume (2019), and Kisanga (2019) have discussed issues about assessment practices for SwVI in relation to special education unit staff, views from special education unit staff were missing, hence the current study.

From Lesotho, Mosia & Phasha (2017) conducted a qualitative study to examine SWDs' access to curricula at a higher education institution. Findings of the study demonstrated inconsistencies between the institution's admission policy of non-discrimination according to disability status and its practices. These inconsistencies were discussed through eight (8) themes: access at the admission level, management of disability data, support by the special education unit, teaching strategies, support by lecturers, and availability of assistive technology, special concessions, and students' coping strategies. Further, findings revealed that the special education unit staff for VI were in charge of braille transcriptions of SwVI's examinations and tests. Also, they were involved in the supervision of tests and examinations for SwVI, especially students with blindness. Despite the fact that Mosia & Phasha's (2017) study slightly discussed issues relating to special education unit staff for VI, their perceptions regarding the assessment practices for SwVI in that university under study were not explored, hence the current study.

## 2.6 Chapter summary

This chapter has discussed the historical background of education for SwVI in Tanzania. This chapter has also reviewed relevant literature on different assessment practices for SwVI. Further, the chapter has reviewed different studies on various perceptions held by stakeholders (SwVI, lecturers, and special education unit staff) on different assessment practices for SwVI in all levels of education. It was expected by the researcher that this chapter would act as a guide and justification to many findings about to be unearthed in this study. The following Chapter Three presents a research methodology.

# CHAPTER THREE: METHODOLOGY

## 3.0 Overview

This chapter discusses the research methodology used to explore the perceptions of stakeholders on assessment practices for SwVI in a selected public university in Tanzania. Furthermore, the researcher illuminates the research approach, research design, population, sample size, sampling procedures, research instruments, and data collection procedures employed to facilitate obtaining pertinent data to answer the research questions. Lastly, the chapter presents the trustworthiness of data, data analysis, ethical considerations, and the summary of the chapter.

## 3.1 Research Approach

This study was guided by the qualitative research approach. Qualitative research is described by scholars as an approach that entails the exploration of meanings attached to a phenomenon by individuals (Creswell, 2014; Linake et al., 2022). This approach was useful in this study as it helped generate detailed data about stakeholders' perceptions of assessment practices for SwVI in a selected public university in Tanzania (Creswell, 2012; Creswell, 2014; Linake et al., 2022). This approach was adopted because it was suitable to answer the "how" research questions that guided this study. By virtue of the usefulness of this approach, the researcher was able to investigate in-depth various ways through which stakeholders perceived assessment practices for SwVI. Besides, under this approach, the researcher relied on the constructivist paradigm in which participants' views and subjective meanings attached to the phenomenon were studied (Creswell 2014; Linake et al., 2022).

## 3.2 Research Design

In Ugwuanyi (2022) and Pandey & Pandey (2015), a research design is defined as the layout for conducting the research in which data collection methods and data analysis are clearly identified. So it acts as the roadmap that specifies ways through which pertinent data to answer the research questions would be collected and analysed. This study, therefore, adopted the case study research design because it focused on "a single unit" from which the researcher generated in-depth information that was "rich and holistic" about the phenomenon under study (Ary et al., 2010, p. 454). A single unit could mean an individual, a group, a site, a class, an institution, a company, a process, a program, an event, an activity, a policy, or a community (Ary et al., 2010; Creswell,

2014). In this study, the single unit was one public university selected purposefully by the researcher where data was generated (See sections 1.8 and 3.3.2 on the criteria used for selection). More particularly, this study applied an intrinsic case study, one of the types of case study designs, because it allowed the researcher to study a single public university found in Tanzania (Fraenkel et al., 2012). With this design, participants were able to express their views freely on how they perceived assessment practices used for SwVI in their natural setting from a selected public university in Tanzania.

## 3.3 Population

Population is defined as a group of elements such as people, events, objects, and so forth that constitute the researcher's interest (Ary et al., 2010; Fraenkel et al., 2012). In research, two concepts are mostly used referring to the term 'population'. These are the target population and accessible population.

### 3.3.1 Target Population

The target population is the actual and large group of elements to whom the researcher would like to generalize the findings of the study (Ary et al., 2010; Fraenkel et al., 2012). This is an 'ideal choice' of the researcher (Fraenkel et al., 2012: 92), though it is not always easily attainable during the study. In this study, the target population will be all public universities in Tanzania where SwVI are enrolled.

### 3.3.2 Accessible Population

The accessible population is the population elements that are easily reached by the researcher for choosing a sample (Ary et al., 2010). This population is a 'realistic choice' of the researcher (Fraenkel et al., 2012: 92). In this study, the accessible population from which the researcher drew a sample was one public university in Tanzania. This university, University X, was purposively selected by the researcher because it was the only public university in Tanzania that offered face-to-face degree programs in Special Needs Education and enrolled SWDs, including SwVI, in different degree programs. Additionally, University X enrolled the first batch of SwVI in the 2009/2010 academic year, hence representing many other public universities that did not have a long history of service to SWDs. In this university, three colleges were sampled: the College of Education, College of Informatics and Virtual Education, and the College of Business Studies and Law. These colleges were selected because

the participants of this study were found there. Thus, the accessible population constituted all SwVI, lecturers, and transcribers present at University X.

### 3.4 Sample Size

A sample is a small group of elements selected from the accessible population that the researcher would study (Ary et al., 2010; Fraenkel et al., 2012; Gay et al., 2012). Since the qualitative research approach is much interested in generating detailed information about the phenomenon (Creswell, 2012; Creswell, 2014; Linake et al., 2022), a small sample size is recommended (Creswell, 2012; Ary et al., 2010; Gay et al., 2012). In this study, the sample size was 20, comprising 12 SwVI, 7 lecturers, and 1 transcriber. This sample size was obtained when the researcher reached a saturation point during data generation from the participants. This is consistent with the argument from Ary et al. (2010), Cohen et al. (2018), and Gay et al. (2012) that there is no fixed rule upon the sufficient number of the sample in qualitative research but, instead, the size should be dictated by the redundancy of information and representativeness of the sample itself. For ethical reasons, pseudonyms were applied for all participants as follows: SwVI were recorded as FGDA1-7 and FGDB1-5, lecturers as LR1-7, and a transcriber as TR1. Therefore, the following tables show the characteristics of the participants from the study university.

**Table 1*: Characteristics of participant SwVI***

| Pseudonym | Sex | Age | Type of VI | Year of study | Programme of study |
|---|---|---|---|---|---|
| FGDA1 | M | 20-25 | Blind | 2 | Special Education |
| FGDA2 | F | 20-25 | Blind | 2 | Special Education |
| FGDA3 | F | 20-25 | Low Vision (Albinism) | 2 | Special Education |
| FGDA4 | F | 26-30 | Low Vision | 2 | Special Education |
| FGDA5 | M | 26-30 | Low Vision (Albinism) | 2 | Special Education |
| FGDA6 | M | 26-30 | Low Vision | 2 | Special Education |
| FGDA7 | M | 26-30 | Low Vision | 2 | Counselling in Education |
| FGDB1 | F | 20-25 | Blind | 3 | Bachelor of law |
| FGDB2 | M | 20-25 | Blind | 3 | Special Education |
| FGDB3 | M | 20-25 | Blind | 3 | Special Education |
| FGDB4 | F | 20-25 | Low Vision | 3 | Special Education |
| FGDB5 | M | 26-30 | Low Vision (Albinism) | 3 | Special Education |

**Table 2*: Characteristics of participant lecturers and transcribers***

| Pseudonym | Sex | Age | Years of assessing SwVI | Knowledge in Special Needs Education |
|---|---|---|---|---|
| LR1 | M | 26-31 | 5 | Non-specialist |
| LR2 | M | 38-48 | 8 | Specialist |
| LR3 | M | 38-43 | 2 | Non-specialist |
| LR4 | F | 44-49 | 12 | Specialist |
| LR5 | M | 44-49 | 12 | Non-specialist |
| LR6 | F | 44-49 | 12 | Specialist |
| LR7 | F | 32-37 | 3 | Non-specialist |
| TR1 | M | 32-37 | 9 | Specialist |

## 3.5 Sampling Techniques

Sampling refers to the process of selecting a small group of elements from a larger population for study (Gay et al., 2012; Cohen et al., 2018). Gay et al. (2012) recommend that a researcher should be careful enough in selecting sampling techniques that will yield participants knowledgeable about the phenomenon under study. Owing to this recommendation, this study adopted the purposive sampling technique because it allowed the researcher an opportunity to select participants who could provide detailed information about the phenomenon under study (Fraenkel et al., 2012). Under purposive sampling, the researcher applied the criterion sampling technique to select a sample from SwVI, lecturers, and transcribers. Lecturers who were selected as part of the sample included those who had taken a course(s) that consisted of SwVI, with a minimum of two years of assessing the learning of SwVI in higher education, and a transcriber was selected based on their working experience in issues related to assessment practices for SwVI in higher education of at least 2 years. Whereas SwVI who were selected in the sample were supposed to demonstrate the experience of being assessed educationally in higher education for at least one semester.

## 3.6 Research instruments

Mash & Eze (2022) define research instruments as tools used by the researcher to collect data from research subjects. For the successful collection of qualitative data, research instruments must have the power to capture participants' multiple perspectives, opinions, and views in their own words about the phenomenon. This study, therefore, opted for three research instruments: semi-structured interview guide,

focus group discussion guide, and document analysis protocol. Gay et al. (2012) and Ary et al. (2010) recommend the use of different research instruments in the case study design for the sake of triangulation purposes. Triangulation in this study helped avoid potential biases arising from a single data collection method, hence enhancing the credibility of the study. Similarly, triangulation equally strengthened the trustworthiness of data, specifically regarding the reliability of data, since the data was generated from different participants as well as different instruments.

### 3.6.1 Semi-structured Interview Protocols

In an interview, the researcher generates data from research subjects through conversations held between them (the researcher and the research subjects) (Mash & Eze, 2022). In this study, semi-structured interview guides were administered to 7 lecturers and 1 transcriber (See Appendices II & III respectively). This research instrument was very useful as it helped the researcher generate extensive data about the phenomenon that could not be generated from other methods. For example, some individuals in a focus group discussion may inhibit themselves from airing out their views freely, especially about something sensitive (Cohen et al., 2018), something that is not the case with semi-structured interviews. Therefore, semi-structured interviews allowed participants to express themselves freely, even on personal issues related to the phenomenon. The time spent during interviews ranged from 20 minutes to 48 minutes. As a result, the researcher obtained detailed information about the participants' perceptions on assessment practices used for SwVI in a public university under study.

### 3.6.2 Focus Group Discussion protocol

In a focus group discussion, a small number of people are asked by the researcher to share their knowledge about a particular phenomenon (Dawson, 2009). This study adopted this method because it is very effective in motivating participants to form their own opinions about the phenomenon as they listen to others' varying perspectives on the same (Ary et al., 2010). Further, the interactions between the participants provided a lot of information about the phenomenon under study (Ary et al., 2010). As a result, the researcher obtained holistic views about the stakeholders' perceptions of assessment practices used for SwVI in the selected university under study, something that could be impossible from an individual semi-structured interview. On the other hand, the focus group discussion method has some challenges, such as some

participants dominating the conversations, making others silent, and some participants inhibiting information that is sensitive (Cohen et al., 2018). However, to mitigate these challenges raised by Cohen et al. (2018), firstly, the researcher motivated all members to provide their opinions, specifically encouraging those participants who were silent to contribute. Secondly, the researcher chose participants with homogeneous characteristics to be in one group. As a result, participants in FGDs felt free and were motivated to express their views with no fear of the unknown after their contributions.

Scholars like Ary et al. (2010), Fraenkel et al. (2012), and Mash & Eze (2022) have varying views about the feasible number of people that should be involved in focus group discussions. Mash & Eze (2022) suggests that the number of individuals in a group should be less than 10, while Ary et al. (2010) comments on a range of 6-12 individuals. Meanwhile, Fraenkel et al. (2012) recommends a range of 4 to 8 individuals be consisted of in a focus group. In the light of these recommendations, this study administered two FGDs: group A consisted of 7 second-year SwVI, and group B consisted of 5 third-year SwVI. Discussions in both group A and group B lasted for 2 hours and 3 minutes, and 1 hour and 47 minutes, respectively.

### 3.6.3 Document Analysis Protocol

Document analysis is a data collection tool in which the researcher collects relevant data for the study at hand through examining different documents about the research subjects, such as diaries, meeting minutes, examination papers, biographies, review medical reports of the participants, and so forth (Creswell, 2014; Mash & Eze, 2022). In this study, the researcher reviewed the following university documents: examination scripts, test papers, regulations for undergraduate programs of 2019, revised 3rd Edition, undergraduate curriculum guidebook of 2022, the Information and Communication Technology (ICT) policy of 2018, and the quality assurance policy of 2020 to check how SwVI were assessed in the selected public university. Thus the researcher was able to analyse assessment practices that were used for SwVI in relation to these documents. Document analysis protocol consisted of two parts: the first part was for the university-published documents which the researcher reviewed and observed all assessment practices advocated therein for SwVI, and the second part was for examination scripts, test papers, and assignments to check whether they bore considerations for SwVI (See Appendix IV).

**Table 3*: A sampling of documents and data analysed***

| **Documented selected** | **Data analysed** |
|---|---|
| Examination and test papers used for SwVI from the university X | -Practices involved in these papers for SwVI i.e. the use of large/braille prints, additional time indicated on the question paper, |
| Regulations for undergraduate programmes of 2019, revised 3rd Edition | -Any provisions or statements specifically which guide assessment practices for SwVI |
| -Undergraduate curriculum guidebook of 2022 | -Methods/modes of assessment used as described in the document |
| The ICT policy of 2018 | - Any provisions or statements specifically which guide assessment practices for SwVI |
| The quality assurance policy of 2020 | - Any provisions or statements specifically which guide assessment practices for SwVI |

### 3.7 Data Collection Procedures

Before the commencement of data collection at the research site, the researcher sought permission from the respective university administration boards who provided a go-ahead notice for the researcher to interact with the research subjects. The researcher first of all started with FGDs with SwVI in order to capture their views and opinions regarding the assessment practices done to them. Thereafter, interviews with lecturers and transcribers followed later. At last, the researcher reviewed different documents: examination scripts, test papers, regulations for undergraduate programmes, undergraduate curriculum guidebook, and postgraduate studies regulations and guidelines to check and validate the assessment practices emerged during the interviews and FGDs.

During the process of data collection, the researcher called each participant via mobile phones to secure an appointment for interviews. Discussions in groups with SwVI were held on campus since it was easy to get them there. But few interviews with lecturers and transcribers were held on campus because during working hours the staff were held up by many duties. So, the researcher and participant lecturers agreed on a conducive place to meet after working hours for interviews. Meanwhile, the researcher

used notebooks and tape recorders to take notes and record relevant data of the research during interviews, FGDs, and document analysis.

## 3.8 Trustworthiness of the Data

Trustworthiness in research is described as a set of principles used by researchers to determine the quality of a qualitative study (Bryman, 2012). Trustworthiness in qualitative research provides an alternative measure to reliability and validity commonly used in quantitative research (Bryman, 2012). The quality of this study was determined by four criteria of trustworthiness as proposed by Guba and Lincoln (1994) cited in Bryman (2012).

### 3.8.1 Credibility

This criterion deals with the truthfulness of the findings or data in relation to the participants who are involved in a study with their social context (Bryman, 2012; Connolly, 2016). To ensure the confidence of truth to the data that was generated, the researcher applied a member validation technique where each participant was given back an account (transcript) of what they had said to the researcher in an interview. Furthermore, the researcher generated data using three methods: semi-structured interviews, FGDs, and document analysis for triangulation purposes, whereby triangulation of the data was made possible. In addition, the researcher reported all information that was provided by participants, including those discrepant cases.

### 3.8.2 Dependability

Dependability criterion looks at the consistency of the research findings over time (Bryman, 2012; Connolly, 2016). In this study, this criterion was implemented by clearly showing the procedures that the researcher used during the study, for example, techniques used in participants' selection were well elaborated. Moreover, the researcher kept safe records of the whole process of research like interview transcripts, fieldwork notes, and tape recordings.

### 3.8.3 Transferability

This refers to the degree to which the research findings can be used in other contexts or subjects (Bryman, 2012; Connolly, 2016). This study was not for generalization because it applied the qualitative research approach. However, readers are not restricted to applying the findings of this research to contexts they deem similar to the study (Ary et al., 2010). Therefore, to enable transferability, the researcher provided

thick descriptions about the phenomenon by generating data through different methods, and also the researcher used enough time during interviews and FGDs to ensure that detailed information about the phenomenon was generated.

### 3.8.4 Confirmability

Confirmability measures the degree to which the findings of the study emanate from participants' views rather than the researcher's biases (Bryman, 2012; Connolly, 2016). To abide by this criterion, the researcher ensured a clear connectivity between the research findings, recommendations, and conclusions. Besides, the researcher included verbatim excerpts at the presentation of the study findings to indicate the authenticity of findings.

## 3.9 Data Analysis

Data analysis involves summarizing the huge data generated from the participants by organizing, reducing, and synthesizing them to come up with meaningful explanations that answer the research questions (Ary et al., 2010). In this process, the researcher reads the transcripts while searching for similarities and differences to come up with themes and subthemes. In this study, the researcher applied thematic analysis techniques to extract meaningful insights from the generated data from the participants. Analysing the data thematically enabled the researcher to make sense of the shared experiences and meanings of the participants from the data generated (Braun & Clarke, 2012). Data generated in this study were analysed thematically following the six steps proposed by Braun & Clarke (2012) as explained in the following paragraphs.

### 3.9.1 Familiarisation of Data

In this phase, the researcher reads and rereads the textual data generated to gain a deep understanding of it. The researcher only reads or listens to the audio or looks at the video carefully. So in this study, the researcher made sure that he familiarized himself with the data while making notes of it. Furthermore, in familiarization of data, after conducting interviews and FGDs the researcher immediately listened carefully to audios recorded and transcribed them thoroughly. Thereafter, the researcher read and reread the transcripts. This process expanded the researcher's understanding of the participants' perceptions on assessment practices for SwVI.

### 3.9.2 Generating Initial Codes

Coding involves “developing concepts from the raw data" (Ary et al., 2010: 483). This is conducted after familiarization with the body of data has been done. The researcher in this study analysed systematically the data to identify concepts that were relevant to research questions. The researcher continued to refine codes and generate more codes as possible to capture the entire data set. Creswell & Creswell (2018) argue that it is the researcher’s responsibility to protect the privacy of participants. In line with this position, the researcher identified the participants with pseudonyms that concealed their identities. The participant SwVI who were involved in the FGDs were identified with the word “FGDA” or “FGDB” which stood for “Focus Group Discussion for group A” or “Focus Group Discussion for group B” respectively which were then followed by numbers starting from 1 to 7 for group A and 1 to 5 for group B depending on their number (See Table 1). For seven participant lecturers who were involved in this study the word “LR” followed with number 1 to 7 according to their number was used. Whereas for transcribers the word “TR” followed by number 1 was used (See Table 2) and the research site was identified as the University X (See section 1.8 and 3.3.2).

### 3.9.3 Searching for Themes

A theme is a category built on codes developed from the data which relates to the research questions (Bryman, 2012). In this phase, the researcher reviewed the coded data to see similarities and differences so that to generate themes and subthemes from them. Themes were arrived at by combining codes which seemed to share common elements in relation to the research objectives (Braun & Clarke, 2012). It was by doing this, the data was coherently and meaningfully patterned. For example, codes that explained about time given for tests and quizzes, format used for their submission, assistance received from peers without VI in doing individual or group assignments, and submission deadlines to group/individual assignments were described under one theme, “formative assessment”. Again, the same theme was further divided into subthemes by putting codes that were closely related together, for example, codes which communicated about individual assignments, group assignments, project works, presentation works and microteaching which were done in groups were grouped under the subtheme called “take-home assignments.”

Furthermore, in this phase the researcher explored the relationship between themes and organized them in a way that they worked together in answering the research questions. According to Creswell (2014) and Creswell & Creswell (2018), a researcher in a qualitative research approach should not only present findings that are in favor of their feelings or participants' feelings, rather, they are supposed to present each and everything including findings that are contradictory to the themes. In this study, the researcher complied with the foregoing argument by ensuring that findings which described both positive and negative side views of the phenomenon under study were presented fully with regard to participants' views about it.

### 3.9.4 Reviewing Themes

This phase involves an activity of measuring the themes at hand against the codes and the entire body of data. In this stage, the research rechecked the themes to find if they captured the coded data and whether they were relevant to the entire body of data. The researcher read and reread the transcripts and the codes in relation to themes. In this stage, some themes were collapsed or enriched, for example, in the first draft "individual assignments, group related activities, microteaching and moot court" were in separate themes, after reviewing them they were merged into one big theme "take-home assignments."

### 3.9.5 Defining and Naming Themes

This step requires the researcher to generate unique themes that work coherently to one another to answer the research questions without overlapping. Thereby the researcher selects suitable names for each theme. To comply with this, the researcher of this study ensured that a clear boundary from one theme to another was given. Each theme consisted of enough excerpts to support it, with clear interpretation focused on answering the research questions.

### 3.9.6 Producing the Report

Braun & Clarke (2012) insist that data analysis and report writing are two inseparable processes which are done simultaneously. This step requires a researcher to organize themes logically but meaningfully in recounting a coherent story about the data analyzed. In line with the demand of this step, narrations of the participants on the phenomenon under study were relied on by the researcher to generate and organize the emerging themes from the data coherently in response to the research questions.

Findings were presented and discussed thoroughly by the researcher, thereby ending up with recommendations for implementations and areas for further studies.

### 3.10 Ethical Consideration

In acknowledging the importance of research ethics in the research process, the researcher sought ethical permission and clearance from the University of Zambia Research Ethics Committee before the commencement of the research. Ethical permission was very important since without it, a researcher would be denied access to a research site and the suggested participants (Okeke et al., 2022). Bryman (2012) underscored that harm-free research conduct should take the utmost care in addressing the issue of confidentiality. The researcher used pseudonyms (See Table 1 & 2) to refer to research participants and the research site. Again, the researcher protected all research records like interview transcripts, field notes, and tape recordings from unauthorized people in a safe place. Similarly, to ensure the privacy of participants, the researcher used their pseudonyms in both the hard copy transcripts and the files of transcripts and tape recordings stored on his computer. Passwords were initiated for a person to open the files of transcripts and tape recordings stored on the computer. So, even if an unauthorized person accidentally gains access to the files and transcripts, they will not be able to relate the information there to anyone because participants' real identities are concealed (Creswell & Creswell, 2018). Creswell & Creswell (2018) and Bryman (2012) note that transcripts, audio files, and other related materials from the field should not be kept longer than is necessary. In compliance with this, after the report of this study was successfully defended and submitted, the researcher discarded transcripts and tape-recording files.

Furthermore, the researcher explained the purpose of this study to all participants to promote voluntary participation and informed consent. Again, the researcher ensured that participants understood the purpose of the study and its benefits, then required them to sign an informed consent form confirming their total acceptance to participate (Gay et al., 2018). The researcher ensured confidentiality at the utmost since breaching it would cause undue harm to participants such as embarrassment, conflicts, and even torture, among other potential consequences (Creswell & Creswell, 2018; Gay et al., 2018).

## 3.11 Chapter summary

This chapter presented the research methodology that the researcher adopted to explore stakeholders' perceptions of assessment practices for SwVI in a selected public university in Tanzania. The chapter also discussed the type of research approach and research designs, population, sample size, sampling techniques, and the research instrument used in this study. Finally, the chapter discussed data collection procedures, data analysis, as well as ethical considerations.

# CHAPTER FOUR: PRESENTATION OF FINDINGS

## 4.0 Overview

This chapter presents findings generated from one public university found in Tanzania on stakeholders' perceptions on assessment practices for SwVI. The exploration of the phenomenon under study was conducted by interviewing participants through semi-structured interviews and focus group discussions, and the conduct of document analysis which led to the emergence of themes from the data that answered the following research questions which guided this study:

i. In which ways are students with visual impairment assessed in this public university found in Tanzania?
ii. How suitable are these assessment practices used to students with visual impairment in this public university found in Tanzania?
iii. What are the lecturers' experiences of assessing learning outcomes to students with visual impairment in this public university found in Tanzania?

## 4.1 Assessment methods used by lecturers to SwVI in the university X found in Tanzania

Participants interviewed on this objective described different methods that were involved in assessment of learning outcomes of SwVI in this selected public university. It was further found that assessment for SwVI was done both formatively and summatively in each semester. Formative assessment was obtained through different tasks which were done in respective courses during the teaching and learning process which formed the continuous assessment like quizzes, tests and take-home assignments and summative assessment was achieved through final examinations that were held at the end of each semester. The course work consisted of 40% while the final examinations consisted of 60% of respective courses. Thus, exploration on this objective culminated into the emergence of three major themes: formative assessment, summative assessment and barriers in the execution of assessment tasks.

### 4.1.1 Formative assessment

This type of assessment consisted of activities that were done continuously in the course of teaching and learning process. From the narrations of the participants, these activities included classroom activities (tests and quizzes) and take-home assignments

(project works, individual/group works, seminar presentations, microteaching and moot court). This was confirmed by one participant who said:

> In the class or during the teaching and learning process we use formative assessment. In formative assessment we use both individual and group assignments, and sometimes we use tests. (LR2, male, March 2023)

The same perception was revealed by FGDA6 who noted:

> Firstly, in course work assessment we have been given different take-home assignments including group-related and individually done assignments. We have also been given quizzes. (FGDA6, male, January 2023)

From the document analysis the same was found in a review of the undergraduate curriculum guidebook for the 2022/2023 academic year of the university X in the degree programme of Bachelor of Education in Arts (B.E.d Arts):

> Continuous assessment will include a variety of activities, such as written tests, classroom assignments, seminar presentations, quizzes, project work and portfolio assessment. (Undergraduate curriculum guidebook, p. 81)

It was further observed from the undergraduate curriculum guidebook that activities done in formative assessment varied depending on the nature of the courses offered in each degree programme. Some courses consisted of quizzes, microteaching and portfolios while others not.

**a) Classroom activities**

Tests and quizzes were among the activities conducted within a fixed time, in the range of a few minutes to one hour and a half, in the classrooms. All students including SwVI attempted the same tests and quizzes. This was noted by a lecturer who explained:

> But usually tests…..are done on an individual basis where every student writes…other individually performed tasks like tests and quizzes, all students attempt the same questions... (LR4, female, March 2023)

The same sentiments were noted from participant SwVI when they were asked if they undertook the same classroom activities as their fellows without VI, one participant opined that, “In addition, questions that are provided to us in these tests, most of them correspond to those questions provided also to our fellow students without VI” (FGDA2, female, May 2023).

SwVI further noted that classroom activities, especially quizzes, were offered also via the internet. Questions were prepared by lecturers whereby students, including SwVI, attempted them online. As it was opined by one student that, "sometimes online quizzes are provided where everything is done on the internet" (FGDA2, female, January 2023). This narration by FGDA2 implies that there is a move to involve technology advancements in educational activities, something that, if enough support is given, promises positive revolutions in education.

Although both students without VI and SwVI attempted the same classroom activities, lecturers in cooperation with the transcribers prepared tests for SwVI in ways that were easily accessed. It was revealed that Braille and large print formats were commonly used to allow accessibility for SwVI to these tasks. Besides, participants noted that SwVI were also given some positive discrimination which helped them do these assessment tasks on an equal playing ground as their fellows without VI like additional times, special room, question adaptations and specialist invigilators. As narrated in LR3's remark:

> Since tests are done individually, so we consider their educational needs…we consider that, we know they are slow, even those with low vision, during their tests we add some more time. (LR3, male, March 2023).

Also, LR2 on the same issue commented that:

> So when I announce a quiz in the class, I sometimes prepare papers for SwVI which have already been prepared from the resource room for them…. we tend to provide extra time to them too. (LR2, male, March 2023).

This further resonated with views from participant SwVI who commented:

> One of the assessment tasks provided to us are tests. When undertaking these tests, we are invigilated by specialists who are able to provide pertinent assistance in the room whenever a challenge occurs. (FGDB3, male, February 2023)

> We undertake similar tests like our fellows without VI, unless those questions that are not accessible to us using Braille like those which involve drawings, those which require labelling diagrams and calculations, adaptation has to take place. (FGDA1, male, May 2023)

In the documents reviewed from university X, regarding the support services the following was written from the policy of quality assurance:

> Universities must establish systems to facilitate staff and students with significant special needs to equally benefit in education services. (The policy of quality assurance, p. 15).

Revelations from the participant lecturers and SwVI report the way the university X ensures to align with its policy on quality assurance. However, the policy is vague as it does not stipulate the kinds of positive discrimination that should be provided to SwVI, short of this, some services may not be provided since lecturers lack a point of reference.

However, participants had different opinions when they were asked on ways the dates for tests and quizzes were communicated to SwVI. It was narrated by participants that information about these classroom activities reached SwVI in three ways: by lecturers announcing them during lecture sessions, lecturers giving information to class representatives (CRs) who then shared it on social media like WhatsApp platforms, and timetable for large class' tests were prepared centrally by the university and published on the university website. This was claimed by LR2:

> We use the assistance from their fellows, because when you announce to students that today we are going to have a test, obviously in our university social media is used. So it's hard for SwVI to access such information on social media, that's where their fellow students come in to assist them know about the exact day and time the test is going to be done. (LR2, male, April 2023)

Similarly, another participant lecturer reported that:

> We usually announce to all students on the date when a test would be held during a lecture session. Sometimes we use their CRs to inform them when the timetable for tests which is prepared centrally by the university is published. (LR7, female, May 2023)

Further, opinions from SwVI corroborated with what their lecturers revealed. For example, one participant from group A noted that:

> I usually receive the timetable for a test either from my fellow students or when lecturers announce the date of it during a lecture session. There are tests especially for large classes whose timetables are centrally prepared by the university administration, in that case when the timetable is published online by the university, my fellow students without VI inform

> me about it and tell me the exact date and time when my courses will be taking place. (FGDA2, female, May 2023)

From the narrations of the aforementioned participants, it is revealed that in some cases SwVI depend on their peers without VI to be notified of dates on which tests would be conducted. These descriptions imply that SwVI are likely to miss these tests when these students without VI are not cooperative to them due to negative attitudes.

**b) Take-home assignments**

Participants had also descriptions about take-home assignments. From their expressions it was revealed three kinds of tasks in this category: individually done take-home assignments, take-home assignments done in groups and take-home assignments that had to be presented before submission. The assignments done in groups included project works, microteaching, moot court, and other activities done in groups. Furthermore, both individually done assignments and those done in groups were subjected to presentation before submission as deemed necessary by the respective lecturers. For those take-home assignments done in groups, participants noted, students were divided into groups of five students and above depending on the size of the class. Whereas, SwVI were mixed up in groups of students without visual impairment. As it was explained by the participant lecturer:

> Okay, sometimes we provide group assessments to SwVI. They can do either in groups of five to ten students, it differs from one course to another depending on the size of the class. During group assignments SwVI usually mix with other students… (LR4, female, March 2023)

Participant SwVI said the same regarding the mixing up with their peers without VI during conducting tasks in groups. This was confirmed by FGDB3 who, in a group discussion, noted that:

> In addition to what my fellows have said, project works are conducted in groups too. We are divided into groups of a manageable number of students where we cooperate with our peers without VI in doing the work. Sometimes in a group, we are further divided either into two or three, then portions of the work are divided to these subgroups to search for materials and organise ideas. It goes this way because the project work is bigger than other group related activities. (FGDB3, male, March 2023)

Mingling SwVI in groups with their peers is a good practice to realising inclusion and combating negative perceptions which for many decades have been a stumbling block

to the well-being of PWDs, including SwVI, in the society. Moreover, participants commented that the mixture of SwVI with their peers enhanced learning among themselves than when these take-home assignments were done on an individual basis. One participant lecturer commented that:

> However, we also believe in peer learning, since we know there is a test which is closed, we have to allow other types of assessment like learning between themselves. So assignments are in groups. (LR3, male, March 2023)

It was also voiced by LR7:

> We have been mingling SwVI with their peers in group assignments as one way of realising inclusion because giving them a task for themselves only in a group would mean extending discrimination and negative attitudes against them. (LR7, female, April 2023)

Revelations from LR3 and LR7 emphasise on the importance of group related activities in this era in which societal attitudes are being edited to enhance total acceptance and inclusion of PWDs, including SwVI. Although, other revelations indicated that challenges associated with handling individually done take-home assignments were another thrust to preferring group related activities to individual ones. As it was revealed by LR4, "because of the large number of students in my course, I almost prefer to provide group assignments to individual ones" (LR4, female, March 2023).

This was further echoed by a student who explained:

> Due to these challenges tagged to individual assignments I am of the opinion that our lecturers should use more of group assignments to assess our learning because working in groups while mixed up with our peers without VI promises much to our learning than we do alone. (FGDA2, female, May 2023)

Narration from LR4 implies that lecturers preferred using group related activities because it was easy in marking if the class size was very big. Similarly, SwVI preferred group related take-home assignments to individually done ones because they faced a lot of challenges when conducting these individually done assignments than those done in groups.

**Submission formats and deadline**

On issues about submission deadlines, it was noted that in take-home assignments which were both done in groups and individually, submission deadlines were the same to all students. The timeframe for submissions ranged from three days to one month. As LR2 noted:

> No, when you talk about the issue of group assignments, no addition of time as they are participating and doing everything in that group in cooperation with their peers. So the time allocated to group assignments is just the same for all. (LR2, male, March 2023)

This was also echoed by students in group discussions who said:

> When the assignment is issued, the submission deadline is the same to both SwVI and our fellow students without VI. We always submit these individual assignments after some weeks, a minimum of one week. (FDA1, female, May 2023)

> These individual assignments are conducted per instructions provided by lecturers. Sometimes the timeframe given for their submission ranges from some days to one month. (FDBA4, female, May 2023)

Similarly, regarding the submission formats, assignments done in groups were submitted in normal prints, while for those individual assignments, only Braille users were allowed to submit in braille format. This was claimed by LR5 who noted:

> Yeah, in project works...usually the final print out is in normal prints because these SwVI in their respective groups are working with their peers without VI. (LR5, male, March 2023)

Concerning individually done take-home assignments, a participant student who used Braille commented:

> We are allowed to write our works in Braille and submit them in this format. Furthermore, a student who is blind that is competent in using computers, he/she is too allowed to do their work by typing in normal prints. However, most of us lag behind on how to use these computers, thus, we prefer to use Braille Perkins to computers. (FGDB2, male, March 2023)

While another student with low vision commented on the same that:

> Our lecturers do not allow us to submit our works in our font sizes that we are convenient with, instead, they force us to strictly submit in 12 font size

> which is a common size for other students without VI. (FGDB4, female, March 2023)

As it is unearthed by FGDB2 in his narration it is evident that lack of skills in using assistive technologies by SwVI is a great hindrance for them to enjoy their limitless independence in doing school activities. Moreover, sentiments from FGDB4 reveal that sometimes independence of SwVI is not only limited by their inadequacy in using assistive technologies but also by lecturers' lack of awareness about their educational needs.

**Assistance of students without VI**

It was also evident that SwVI not only depended on their peers without VI to get information about questions of take-home assignments given by their lecturers, but also, they received some assistance from them in conducting the assignments. Most of the materials useful for answering assignments were found on the internet, so SwVI had to ask their peers to search for them since they were unable to search these materials due to inadequacy in skills about assistive technologies application. Moreover, students with low vision who were supposed to type their works, due to lack of skills in using assistive technologies like computers, were forced to ask assistance from their peers. In support to this, one participant had the following to say:

> In group assignments because we need them to have peer learning, so they have to collaborate with others. For that case in group assignments, we don't consider any special needs. (LR3, male, March 2023)

Concerning individually done take-home assignments, participant SwVI noted:

> We face a lot of challenges in conducting these individual assignments, specifically with regard to searching for pertinent materials for references. Most of these materials are on the internet, thus, due to lack of knowledge on how to apply these advanced technologies, we are subjected to ask our fellows to download and then read for us. (FGDB2, male, March 2023)

> Information about these individual assignments is mostly available on whatsApp platforms. So if a student is blind, fellow students without VI are relied upon to read for him or her…During these individual assignments we normally depend on our fellow students to assist us in searching for materials on the internet since those materials are much more accessible using vision. We also seek their assistance if the task involves diagrams. (FGDA6, male, May 2023)

A comment from LR3 indicates that in assignments done in groups no educational needs were adhered to by lecturers for SwVI. This means SwVI in these assignments had to depend totally on their peers for their effective participation in conducting the works. Similarly, it appears that individual assignments were no longer done individually by SwVI since their peers' assistance was indispensable for them to obtain materials on the internet and do some questions involving diagrams. Hence, the aforementioned descriptions denote that performance of SwVI in take-home assignments depended on the level of support they received from their peers without VI. So it is the implication that the level of awareness of students without VI about SWDs, including SwVI, could influence SwVI's performance in these tasks.

### 4.1.2 Summative assessment

Analysis of the data established that the university end of semester examinations were the common assessment method administered in the University X. Participants reported that this assessment method was highly official and involved many organs from the university administration. It was further narrated that SwVI did the same examinations as their peers without VI, except for some rare cases where their examination papers had to undergo some adaptations in order to meet their educational needs. There were other services which were made available to SwVI during these examinations like specialist invigilators, additional time and special rooms which enhanced equity to SwVI. This was claimed by LR2 who said:

> In case of summative assessment, this assessment is too official, and has many organs which are engaged in it. So we do the same by setting questions that will fit for all the class, and for SwVI we find a means like using the braille and those with low vision we use large prints and sometimes they have special invigilators to invigilate them in the university examinations... (LR2, male, March 2023)

This view was supported by LR4 who note:

> On these final examinations, SwVI attempt the same examinations as others, although they are given some other support as compensation for the lost ability due to their disability like being put in a special room, and additional time is secured. (LR4, female, May 2023)

Statements from LR2 and LR4 suggest that university X regards final examinations with utmost care for SWDs, SwVI included, by ensuring that all necessary supports are available to promote equal playing ground to all students when doing these

examinations. Participant SwVI were in agreement with the foregoing views narrated by lecturers. This is substantiated by FGDB1 who noted that:

> Final examinations were taken to specialists where they were converted into Braille format, something which was not often with other tasks done in continuous assessment. (FGDB1, female, February 2023)

Revelation from FGDB1 highlights that during undertaking tests, quizzes and other tasks under continuous assessment the university administration involvement is not notable as it is to final examinations, something which attracts many challenges to SwVI in the course of undertaking them.

### 4.1.3 Barriers associated with execution of assessment methods

There were five barriers related to assessment methods, both formative and summative, that participants brought out. These were delays in assessment tasks, examination timetabling inaccessibility of the assessment tasks, setbacks associated with individually done take-home assignments and negative attitudes.

#### a) Delays in assessment tasks

Participants in both groups of discussions unanimously expressed having challenges with most quizzes, tests and examinations starting time. They explained that many times they started them late behind their peers. This is confirmed by participant SwVI in their own expressions:

> It happened to me once, I waited for an examination for more than thirty minutes while other students had already started. They told me that the exam was late as it was being adapted. (FGDA5, male, January 2023)

> There are cases where lecturers provide quizzes in the class while those students who use Braille do not have their machines, as a result, they fail to conduct these quizzes. After the class SwVI struggled to find a lecturer in order to be provided a task to do equivalent to the quiz done in the class. (FGDB2, male, February 2023)

> However, you know, challenges are there, challenges like delay of these tests, challenges with adaptation of questions and sometimes Braille contractions produced by embossers are challenging. (FGDA6, male, May 2023)

Starting late of SwVI in different assessment tasks was associated to two factors: firstly, a tendency by lecturers to send these tasks late to transcribers for both

adaptations and converting them into either braille or large print formats. Secondly, the presence of non-specialist lecturers in Special Needs Education who did not understand how to positively support SwVI in assessment tasks. This was claimed by the transcriber who explained:

> For those lecturers who bring their examinations on time, we make those modifications earlier. But for those who bring their assessment tasks late, it means SwVI has to wait for them until modification is accomplished, thus starting late as compared to their peers. (TR1, male, March 2023)

Regarding lack of knowledge to some lecturers as the contributing factor, one participant said:

> For example, one day examination papers were not in Braille format, so I informed the course instructor of it, but surprisingly he asked me, "How can I produce those braille prints? Where can I get them, or what am I required to do?" (FGDB4, female, February 2023)

In support of this view, another echoed:

> You know, that great emphasis, let's say…..that's it, there is no great emphasis from specialist lecturers in Special Needs Education to their fellows who are not specialised in this field about how to handle SwVI. So that's why these lecturers forget to include our educational needs in examinations. (FGDA6, male, January 2023)

**b) Examination timetabling**

Narrations from the participant SwVI noted that starting late in different assessment tasks had not only adverse impacts on psychological aspects of SwVI but also on both examinations/test timetable and invigilation cycle. This condition was very devastating academically as it forced SwVI to do two to three examinations non-stopping on one day, and those invigilators who had two consecutive invigilation sessions forced SwVI to complete their tests/examinations before time. This was affirmed by FGDA2:

> We are used to it, since it has been registered in our day-to-day life. Because I have been exposed to this often, you finish one exam and you are given another, and after it another is put on your desk. (FGDA2, female, January 2023)

Similarly, FGDB5 commented that:

> I am affected psychologically when I look at my fellow students doing examinations while I am just waiting for mine. You know, there is a way the morale of doing examinations fades away when I start them way back later than my peers. (FGDB5, male, February 2023)

It was established that SwVI were not comfortable with doing examinations consecutively without break, however, they had nothing to do than conforming to the status quo. This is confirmed by SwVI who said:

> This practice is not fair at all, it's that there is no way we can do it, we just consent to do the examination. However, I believe it's not fair because even our mental functioning needs rest. Sometimes doing consecutive examinations without rest you find mixing concepts from the preceded examination to the current one. (FGDA5, male, January 2023)

Narration from FGDA5 alludes to the condition of giving up after many attempts done to resolve the condition fail. There appears to be limited efforts from the university management on the matter because students who are affected make a small number of students.

**c) Inaccessibility of the assessment tasks**

Participant SwVI expressed that they were exposed to assessment tasks that did not meet their educational needs like diagrams and mathematical calculations, and questions papers which were not in braille, large prints or audio formats. It was claimed by FGDB5 that:

> However, undertaking these tests are very challenging to me since some lecturers do not consider my educational needs when preparing them. (FGDB5, male, May 2023)

About educational needs which were not met by lecturers, other participant SwVI recounted the following:

> But another challenge is that sometimes we are given tests that are not printed in a format accessible to us. This has happened twice to me, something which necessitated lecturers to read questions to me. It's really challenging. (FGDA2, female, May 2023)

> Also not all students are able to access online quizzes, especially those who are blind, because online questions are in print only and not in audio format...Assessment tasks which require to be done in groups are usually prepared in normal prints which are accessible only to students without VI. (FGDA4, female, January 2023)

> Although sometimes lecturers have been giving us tests with questions that are not friendly to us like calculations. Such questions enhance our failure in those courses. (FGDA1, male, May 2023)

As it was observed by FGDA1, poor academic performance of SwVI in University X to some extent was attributed to negligence of some lecturers to prepare assessment tasks in accessible formats. This situation may have been caused by the fact that lecturers who are not specialised in Special Needs Education face challenges in assessing SwVI in accessible ways. Moreover, this implies that sometimes lecturers and transcribers at some points do not cooperate effectively, which is why these challenges happened.

**d) Setbacks associated with individually done take-home assignments**

Since most of the time these SwVI relied on the assistance from their fellow students who were as busy as they were in conducting individual assignments, SwVI claimed that availability of these students without VI was a challenge due to the university schedules which were strict. One student had this perception:

> We encounter many challenges in this course of doing individual assignments. Firstly, doing these tasks successfully depend on the availability status of our fellow students who help us to search for materials. Thus, this is very challenging because as it is said time is money, so waiting for their availability in time when they are free is disadvantageous to our side. (FGDA1, male, May 2023)

In support of the view, another student explained:

> Reliance on our peers without VI in performing these tasks is a great challenge, I see because their availability is limited due to many activities they have. (FGDA2, female, May 2023)

Thus, to mitigate challenges associated with individual assignments as narrated by FGDA1 and FGDA2, SwVI recommended that the university should think of hiring academic guides who would be assisting them during these individual assignments like in searching online materials. In his own words the student said:

> Concerning individual assignments, I am of the opinion that the university should employ sighted guides who will be by our side to assist us in some areas when doing these tasks. You know, there are some courses in which we get lower marks because we have no quotations in their works…. (FGDB2, male, March 2023)

Besides, students with low vision narrated that lecturers required their individually done assignments to be submitted in 12 font size, the font size which hindered them from proofreading their works after printing them. Further, since students with low vision could not access prints in 12 font size, it affected them much when making revisions of what they wrote in their assignments during preparing for tests and final examinations. FGDB5 noted:

> You know, you find that lecturers are aware that this student with low vision is comfortable with the font size of either 16 or 18, still they force this student to submit their individual assignments using 12 font size. (FGDB5, male, February 2023)

SwVI opined that it is worthwhile for lecturers to allow them submit their assignments in font sizes which they are comfortable with so that to help them refer to these works in future when preparing for other assessment tasks: As FGDB4 commented:

> On my side I suggest that lecturers should allow students with low vision to submit their works in the font sizes that sit well with them. If submitting using 12 font size is the university standard, it should be better if it is stipulated that the minimum font size should be 12 onward so as to accommodate other students with educational needs. (FGDB4, female, March 2023)

It is very crucial to respond to educational needs of SwVI sufficiently since it promotes high self-esteem and motivations when performing assessment tasks in modes which suit them.

**e) Negative attitudes**

It was revealed that negative attitudes elicited by both non-specialised lecturers in Special Needs Education and students without VI evoked challenges to SwVI in undertaking different assessment tasks effectively. Students without VI perceived SwVI as non-intelligent who could contribute nothing worthwhile in assignments done in groups. In addition, students without VI avoided registering SwVI in their groups because they were avoiding disturbances of taking SwVI from hostels to where group discussions for questions were held and returning them back upon group discussion completion. FGDB1 noted:

> At the beginning it was very difficult to be understood by my fellow students without VI in group assignments since they didn't know my

> learning style. Thus, they knew I couldn't contribute anything to the works provided by our lecturers. (FGDB1, female, February 2023)

Another participant student voiced:

> Sometimes we face challenges during formation of groups for assignments, some students without VI avoid including us in their groups with the knowledge that we cannot contribute anything to the assignment. Other students without VI feel inconvenienced to come to pick us from our rooms to where discussions take place, as you know, moving from our hostels to the library or lecture rooms for discussions of these assignments is not easy due to inaccessible pavements. (FGDB2, male, February 2023)

Similarly, some lecturers perceived helping SwVI in accessing assessment tasks as not their responsibility, they left it exclusively to experts like transcribers. Other lecturers put much attention to preparing assessment tasks for students without VI first, and ignored SwVI because they were small in number. They believed that since SwVI were few, they could do assessment tasks at any time. This was described by students in both groups during the discussions:

> I think we start late because of the perception of some lecturers that we have special people to attend to us. So, lecturers do not assume their responsibility of meeting our educational needs with such a notion. (FGDA1, male, January 2023)

> You know, most of the time we are very few, as it is normal for people to pay attention to many people rather than too few people. So, this notion that SwVI are very few and they can do examinations anytime is what delays us to start examinations on time. Lecturers prepare examination papers for many students and forget us who are few. (FGDB5, male, February 2023)

Consequently, negative perceptions demonstrated by both lecturers and students without VI towards SwVI counted more to demotivation in their pursuance of studies since they increased challenges on their path.

**Table 4: The summary of the findings of objective one**

| Themes | Findings |
|---|---|
| Classroom activities & Final examinations done by SwVI | -They did same tasks as their peers<br>-Provided with positive discriminatory measures like special rooms, additional time, and specialist invigilators |
| Take-home assignments | -No positive discriminatory measures offered to SwVI<br>-SwVI were mingled with their peers in group related activities |
| Communication of dates about assessment tasks for classroom activities, final examination and take-home assignments | -By lecturers in lecture sessions, through social media like whatsApp platforms and published on the system |
| Submission formats and deadline in take-home assignments | -SwVI met the same deadline as their peers<br>-SwVI who used braille submitted in Braille prints, while works in groups submitted in normal prints |
| Assistance of students without VI | -SwVI relied on their peers for searching materials on the internet, performing inaccessible questions like those with diagrams, and notifying them of dates for tests and exams |
| Barriers faced by SwVI in undertaking different assessment tasks | -Delays of assessment tasks, inaccessibility of assessment tasks, negative attitudes from their peers and lecturers, and absence of their peers to assist in individual take-home assignments |

## 4.2 The suitability of the assessment practices used by lecturers for students with visual impairment in the university X found in Tanzania

Analysis done to responses from the participants and the documents reviewed found a myriad of assessment practices pertained to SwVI in the selected university. Perceptions of participants regarding the suitability of these practices to SwVI were two-sided since some felt satisfied with them while others not. Under this objective, the study came up with the following themes: examination formats, additional time, allocation of special room, invigilation of assessment tasks, assistive devices, transcription process and fairness in adaptation process.

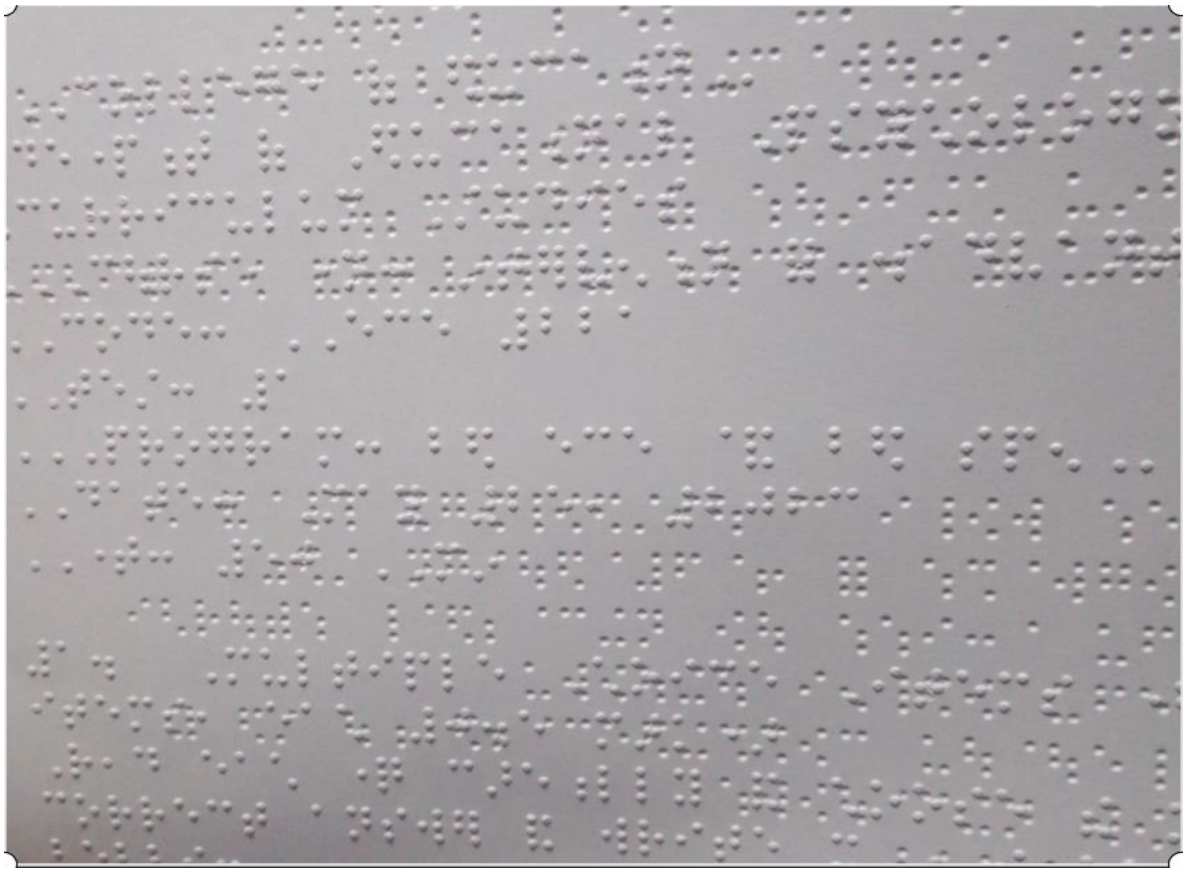
### 4.2.1 Examination formats

Findings from this theme revealed three formats used in administering assessment tasks to SwVI: braille format, large prints and oral testing. These formats were used depending on the nature of VI a student had, although oral testing came into existence due to failures of lecturers to provide accessible formats to SwVI.

**a) Braille format**

It was revealed that there were students who totally depended on touch sense to navigate different teaching and learning materials. Therefore, braille prints were the right format which facilitated them to access teaching and learning materials and questions in different assessment tasks. Narrations from the participants revealed that braille grade two (contracted braille) is commonly used for these SwVI, whereby question papers are printed in braille on both sides. This was confirmed by one participant who noted, "Tests and examinations here are made in Braille grade two" (TR1, male, March 2023). The same was observed in the reviewed question paper in braille:

**Figure 2:** Question paper Brailled on both side



**Source:** From the field (2023)

While some participant SwVI and lecturers affirmed to be comfortable with the use of Braille grade two and the printing of it on both sides of the paper, others discouraged the practice and suggested the use of braille grade one and printing of question papers in braille on one side only in order to enable them grasp the questions easily. This was noted since some SwVI who joined higher education grew from inclusive schools

where specialists to teach them Braille were claimed to be inadequate. Similarly, other SwVI acquired the impairment in their adulthood, something which incapacitated them to master braille prints fluently. As explained by LR2:

> Others think that all students who are blind know well Braille, but I have come to discover that some of them do not know well, be it braille grade two or one, or whatever, because if you ask them they say that, "when I completed form six was the time when my eyes got complications and became blind." (LR2, male, March 2013)

From the focus group discussion, another participant commented:

> It's challenging to master braille grade two for SwVI from inclusive schools since to them braille prints are taught only in lower levels. They don't have a subject which is exclusively for teaching and learning Braille. Courses pertaining to Braille are only found in universities where programmes in Special Needs Education are hosted. Thus it takes their efforts to master it, otherwise they reach higher education without having required mastery in Braille grade two. (FGDA5, male, January 2023)

It was further established that question papers in braille were patterned with errors like mixture of contractions of Kiswahili Braille into English Braille and vice versa, and arrangements of papers were sometimes not sequentially done. This was claimed by a participant:

> As the embossing machine is always set in English Braille grade two, this increases confusion when the converted passage is in Kiswahili language. As a result, we fail to understand questions since contractions in Kiswahili braille have different meanings from that of English Braille. (FGDA1, male, January 2023)

Statements from FGDA5 and FGDA1 allude to the fact that sometimes SwVI experience poor performance due to challenges they face in Braille formats. Thus, participants suggested that to enhance the suitability of braille formats, only specialists in Braille prints should be responsible with all conversions of normal prints to Braille prints and a review should be initiated to proofread the converted versions.

**b) Large prints**

Findings indicated that students with low vision were provided with question papers in large format. However, it was narrated by almost all of the participants that one font size was provided for all. Font sizes commonly used ranged from 16 to 18. Statement from TR1 revealed that:

> Yeah, we normally used to give them 14 font size, but we noticed that some were still facing difficulties. Then we moved to 16 font size, still we saw some SwVI, specifically those with albinism, were facing challenges. But 18 font size was seen as comfortable almost for many of them. (TR1, male, March 2023)

The same perception was commented by a participant lecturer:

> So far we just give them either 16 or 18 font sizes for all of them. Because this course is studied by all first year students, for easy preparations, we just produce one size for all. (LR3, male, March 2023)

The foregoing revelations by TR1 and LR3 highlight the fact that lecturers usually produce one font size that fits many of the students with low vision, while leaving some of them suffering.

However, some lecturers confirmed using varying font sizes to cater for individual educational needs. LR1 said, "…we just provide the large prints regarding the individual needs" (LR1, male, March 2023). This was supported by another lecturer who noted, "…I actually provide students with low vision varying sizes depending on their educational needs" (LR6, female, March 2023). In support of these views, another participant student in a focus group discussion added:

> Regarding the font sizes for students with low vision depends on the nature of the respective lecturer of the course. Those who are aware of Special Needs Education do ask us about the font size with which we are comfortable, while their counterparts do provide a font size which is general to all students regardless of their individual differences. (FGDA7, male, January 2023)

This comment from FGDA7 cements the dire need for mass awareness campaigns to all university populace on Special Needs Education and how to support SWDs, including SwVI.

**c) Oral testing**

Participants identified oral testing as another format used for SwVI. This practice was done in different ways: sometimes respective course lecturers read out questions to SwVI who answered them orally, and then the lecturer marked them right away, while there were cases where a respective course lecturer/transcriber read out questions for SwVI who then wrote the questions in braille and answered the same in braille too. As TR1 noted:

> But this is also common for SwVI in other colleges where transcribers are not present. So they find themselves inconvenienced taking their assessment tasks to the College of […hidden] where transcribers are. As a result, they opt to read questions for SwVI, and sometimes SwVI are subjected to provide oral answers. (TR1, male, March 2023)

The same view was echoed by a student in a focus group discussion who explained:

> On my side, when I was in my first year of studies, lecturers tended to read test questions for me where I answered orally in turn. But in the second and third year improvement was made as lecturers read out questions, and then I wrote those questions in braille and answered the same in Braille too. (FGDB1, female, February 2023)

Findings ascertained that preparation of inaccessible formats, lack of knowledge to lecturers on how to handle SwVI in assessment and loss of students' answer scripts were among the factors which contributed to the existence of this modality. Additionally, the majority of students who participated in FGDs were not comfortable with this modality, although a transcriber noted that there was one student who loved the practice. Some lamented that oral testing is no different from interviews where thinking is not given enough time, while others opined that answering questions orally in front of their lecturers interfered with their confidence, a thing which contributed to providing poor answers. Moreover, this practice was reported to be ineffective when the readers were non-specialist lecturers, since some of them were intolerable with SwVI. This was claimed by participants who said:

> Oral examinations are bound with many challenges: firstly, they are offered as an interview... So, as the respective course lecturer reads out the questions, a student needs to think quickly to cope with the speed of the reader. Sometimes students lack confidence to ask the lecturer to reread a question…. (FGDA7, male, January 2023)

> The lecturer is who reads for the SwVI. Actually, this practice has a challenge because some lecturers are not tolerant, if you are reading a question to that student, and the student keeps on asking, "please may you read again, may you read again," some lecturers feel like disturbance because not everyone has been trained to be tolerant to these persons. (LR1, male, March 2023)

Statements from FGDA7 and LR1 call for the improvement of this practice if SwVI would benefit from it, thereby amanuenses should be employed for them, and lecturers should be retired from reading questions for SwVI.

### 4.2.2 Additional time

In interviews and FGDs, participants unanimously noted that 10 minutes are added to every one hour of normal duration of tests/examinations. So 30 minutes are added to examinations of three hours. It was also highlighted that additional time to tests were not done consistently as it depended on the nature of the invigilator. One participant lecturer observed that, "…for instance, a test for one hour, ten minutes are added to SwVI. But most university examinations are done within three hours. So, we add thirty minutes to them" (LR6, female, March 2023). Concerning additional time in tests, one student insisted that:

> Time addition to tests is dictated to the nature of an invigilator. Lecturers who are aware of Special Needs Education do add that time, but their counterparts do not add any time for SwVI. (FGDA7, male, February 2023)

Some participants thanked the university management for the additional time as it enabled them to finish their tests and examinations comfortably. As noted by one lecturer that:

> However, at our school we have a different experience for these SwVI as they normally finish their examinations very early. So they may even finish within two hours and thirty minutes, we don't know why. (LR1, male, March 2023)

This was supported by a student in a focus group discussion who expressed that, "I am very grateful that the additional time is sufficient for me to complete tests and examinations like others" (FGDB1, female, February 2023). On the contrary, other participants expressed their concerns that the time added was still not enough as it was attested by FGDA2 that:

> To be honest, the time added is not enough for me since I struggle to complete tests and examinations within the time provided. Sometimes I keep writing even when the invigilator has already alarmed us that the time is no more. (FGDA2, female, January 2023)

From the narrations of LR1, FGDB1 and FGDA2, it is rightly to conclude that adding of the time should observe the individual needs and the nature of the course as suggested by FGDA3 in the following narration:

> Additionally, I commend that addition of time should consider the individual needs of SwVI, not otherwise. For example, there students,

> especially those who use braille, some of them are sometimes not used to using Braille Perkins. So, the time added to them should be more than others. (FGDA3, female, January 2023)

This statement by FGDA3 alludes to the flexibility required regarding the allocation of time to SwVI since they have different challenges. Some SwVI, due to the severity of VI, need time to rest when doing examinations. This was supported by a transcriber who stated:

> There are others who have different problems, for example, in the previous years we received a student with glaucoma disease, and this student needed time to rest when they were doing their exams. So we experienced that the additional 30 minutes were not enough. Thus, regarding time added there should be flexibility to SwVI. (TR1, male, April 2023)

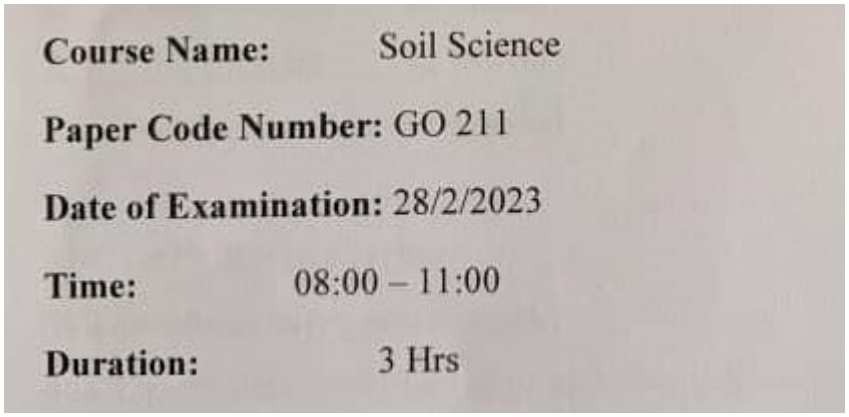
It was further established by TR1 that this student was given permission by the university administration to have break time during examinations after showing medical proof of his condition. Although the time given for resting was not specified since it was not consistent. The participant noted that sometimes this student had more than one break time during the same examination. The number of resting time per examination was dictated with the conditions of his eyes.

In addition to that, it is true that if the additional time to SwVI is given due attention as their right, it should be shown even on their question papers. However, it was revealed that this time added is not indicated on the question papers of SwVI, a thing that would lessen its enforcement for invigilators who strictly implement the time as indicated on the question papers. A student in a group discussion commented that:

> The additional time is not indicated on our question papers, it is only declared to us orally…you know, additional time is regarded as a reward to us not as our fundamental right. (FGDA5, male, January 2023)

This resonates with what was observed on question papers for students with low vision:

**Figure 3:** Time on the question paper




**Source:** From the field (2023**)**

Leaving extra time unindicated on the question papers as per the narration of FGDA5 and Figure 4.2 arouses queries on its enforcement, because it seems additional time is not legally bound since it appears nowhere on the paper. So, invigilators who are not aware of Special Needs Education would not add any time to SwVI since they do not see it on the paper.

### 4.2.3 Allocation of special room

From the analysis of the data generated it was revealed that SwVI and other students with disabilities were provided with special rooms for tests and examinations. It was further reported by all participants that educational needs like additional time and other support services were guaranteed when SWDs, including SwVI, were in the allocated room for them. It was stated in an interview by one lecturer that:

> Yeah, in our college there is a special room allocated for them where there are specialists. Therefore, we live each and everything to specialists. And usually there is an allowance of some more extra time for them. (LR5, male, March 2023)

The transcriber with his own words added:

> But also some of them when they stay in the general examination rooms with their peers, once they face any challenge relating to their educational needs it becomes so difficult to help them there. (TR1, male, March 2023)

Forgoing views slightly match with what was observed in the document reviewed, “Examination room, centre, or venue shall mean any area with its associated facilities and surroundings, as approved by the Senate…” (Regulations for Undergraduate

Programmes, p. 18). Although, the regulation is ruled generally without any mention of SWDs, and the support services that would be provided in their room.

There were participants who praised this practice of having a separate examination room for SwVI. Their praises were based on the common happiness gained between both students without disabilities and their counterparts. Firstly, facilitation of educational needs was made easy and effective while SwVI were in separate rooms from their peers. Secondly, machines used by SwVI during examinations and tests were very noisy, thus a separate room was a possible remedy. Thirdly, allocation of separate rooms prevented emotional or psychological disturbances that SwVI would incur as the result of their peers' movements outside the examination room when their duration was over. This was supported by the narration of LR4 who pointed that:

> Yeah, in this room they can be free because if you mix them in the same room with others it becomes also a challenge. For instance, when informing students the time remaining for their exams, it will be very difficult to say the time remaining for this group of students and the other group. But also that movement of their peers going out of examination rooms after their time is over can disturb SwVI. (LR4, female, March 2023)

The foregoing view was in tandem with views of participant SwVI as one student in a discussion added, "It's useful to be in a separate room to avoid disturbing our peers with noises produced by our machines" (FGDB1, female, February 2023).

On the other side of the coin, discontentment was reported by some participants who claimed that the separate room did not reflect the educational needs of SwVI. Further, other participants resented the tendency of mixing SWDs in the same room since noises produced by Braille machines greatly affected those who did not use Braille. Other participant students aspired to be mixed with their peers since being in a special room increased chances of being forgotten. A student with low vision had the following to comment:

> Though we are of different degrees of VI, we are mixed in the same room during examinations. For example, I have low vision, I only use large prints in all my examinations, but noises from Braille users disturb me a lot. (FGDB4, female, February 2023)

Another participant lecturer in his own words said, "not really, these rooms we call special, they are not so special because they are normal rooms which even other

students without VI can use…" (LR7, female, March 2023). This implies that though separate rooms are there for SwVI, much needs to be done to validate the usefulness of them to their educational needs.

### 4.2.4 Invigilation of assessment tasks

Another assessment practice reported by all participants is invigilation. It was ascertained that at the college of education where transcribers are present, SwVI were invigilated by specialists in VI or sometimes specialist lecturers in Special Needs Education, while in other colleges any lecturers regardless of the expertise invigilated them. It was claimed by a participant student that, "We are always invigilated by specialists whenever we do tests and final examinations" (FGDB3, male, February 2023). On the contrary, a lecturer from other colleges outside the college of education explained:

> To date we do not have specified people to invigilate these SwVI. So we use the same lecturers who invigilate other students without disabilities. This is the case as far as tests are concerned, or course work assessment, but also the same applies to final examinations. (LR1, male, March 2023)

Narrations by FGDB3 and LR1 reveal disparities in implementation among colleges of the same university. This is because in examination guidelines, invigilation is explained generally without paying attention to SWDs. This is confirmed from a document reviewed:

> The Departmental Examination and Timetable Officer under the supervision of the Head of Department shall ensure that each University Examination in the Department has been scheduled in the University Examination invigilation timetable and has allocated at least two invigilators for each examination room depending on the size of the venue. (Regulations for Undergraduate Programmes, p. 18)

Participant SwVI commented on the importance of being invigilated by a specialist and the plight of being invigilated by non-specialists. They enjoyed being invigilated by specialists since they were able to receive technical assistance from them when doing tests/examinations. More so, specialist invigilators were reported to be considerate to educational needs of SwVI in examination rooms. Conversely, SwVI resented their educational needs being ignored under the invigilation of non-specialists. Furthermore, it was revealed that cases of loss of answer scripts of SwVI were common when invigilation was handed over to a non-specialist. In a focus group

discussion one student stated, “being invigilated by specialists is more expedient as they are aware of our educational needs and attend to them effectively” (FGDA5, male, January 2023). Concerning non-specialist invigilators, another student said:

> Tests in which specialists are not invigilating us are vulnerable to loss since those non-specialist invigilators do not regard our answer scripts with utmost care as how the specialist invigilators do. (FGDB2, male, February 2023)

All participants in group discussions admired to being invigilated by specialists in all examinations, but due to limited number of specialists compared to the number of SwVI in different colleges of the university, some of them noted that all lecturers can invigilate provided that they are imparted with awareness about their educational needs. As stated by FGDA3:

> It’s my opinion that any lecturer regardless of their expertise can invigilate us when they possess appropriate awareness about us and our educational needs during tests and examinations such as additional time and so forth. (FGDA3, female, January 2023)

From the foregoing narration, emphasis is made on raising awareness to lecturers about Special Needs Education for the invigilation process to be a blessing to SWDs, including SwVI.

### 4.2.5 Assistive technologies

Revelations from the study show that some SwVI were provided with assistive devices to help them in doing assessment tasks. Perkins Braillers and slate and styluses were dispensed to students who were blind while computers also were made available for all SwVI who wished to use them. It was reported that half of the computers were installed with talking programmes for the students who were blind. However, students with low vision were unhappy because most of the devices pertinent to their needs like hand-lenses and other magnifiers were not available. In a focus group discussion, one student with low vision noted:

> Some devices are made available, especially for our fellow who are blind like Perkins Braillers and cardstock papers, but no assistive devices are provided to students with low vision. (FGDA7, male, February 2023)

Regarding provision of computers, a transcriber explained:

> We received this aid in two phases, in the first phase all computers had been installed with talking programmes, but those in the second phase were not installed with these programmes for SwVI, however, the university administration is in the process of making sure that these programmes are installed. (TR1, male, March 2023)

All participants unanimously acknowledged the great contributions of assistive technologies in facilitating effective assessment to SwVI. It was reported that inclusion of advanced technologies in assessment for SwVI would enhance accessibility of tasks and high speed and accuracy in doing them, thus, dispensing with challenges associated with the transcription process. As commented by one lecturer:

> We need to move to special technologies like computers so that when I give them some tests, maybe they can write directly to me. Or maybe they can have visual assistive devices so that they can listen to different writings, like converting written into voices. So by using these devices SwVI can write my tasks and print them out for me without taking to transcribers. Because involving third party, though there is no problem so far, but dilution of information no way we can avoid it…(LR5, male, March 2023)

On the same issue, the student had this to say:

> For example, for me if questions are put in those ways we have discussed like tape recorders and talking machines, my speed will be higher than now, and within three hours I will be done doing my examinations. But now I am limited to that extent because my reading is at a slow pace. (FGDA2, female, January 2023)

Responses of LR5 and FGDA2 imply that the distribution of these advanced technologies would make even other support services like additional time and transcriptions provided to SwVI unneeded anymore. Although SwVI are free to use whichever assistive devices at their disposal as noted by LR4, "…SwVI are allowed to use computers if they are able to do that" (LR4, female, March 2023), and they are also much willing to use these technologies, yet, SwVI are reluctant to use advanced technologies available to them like computers due to lack of knowledge to apply them. One student stated that:

> Assistive technologies are very essential, though sometimes their essence to us fades away when it comes we don't know how to use them. Further, it's also challenging to accept using these devices while even when you face difficulties in the use, there is no clear plan put forward by the administration to help. (FGDB2, male, February 2023)

Although it is stated in the Information and communication technology (ICT) policy that, "the directorate of ICT shall provide the provision of staff & end user training" (ICT policy, p. 18), still, participants resent the absence of training programmes for them.

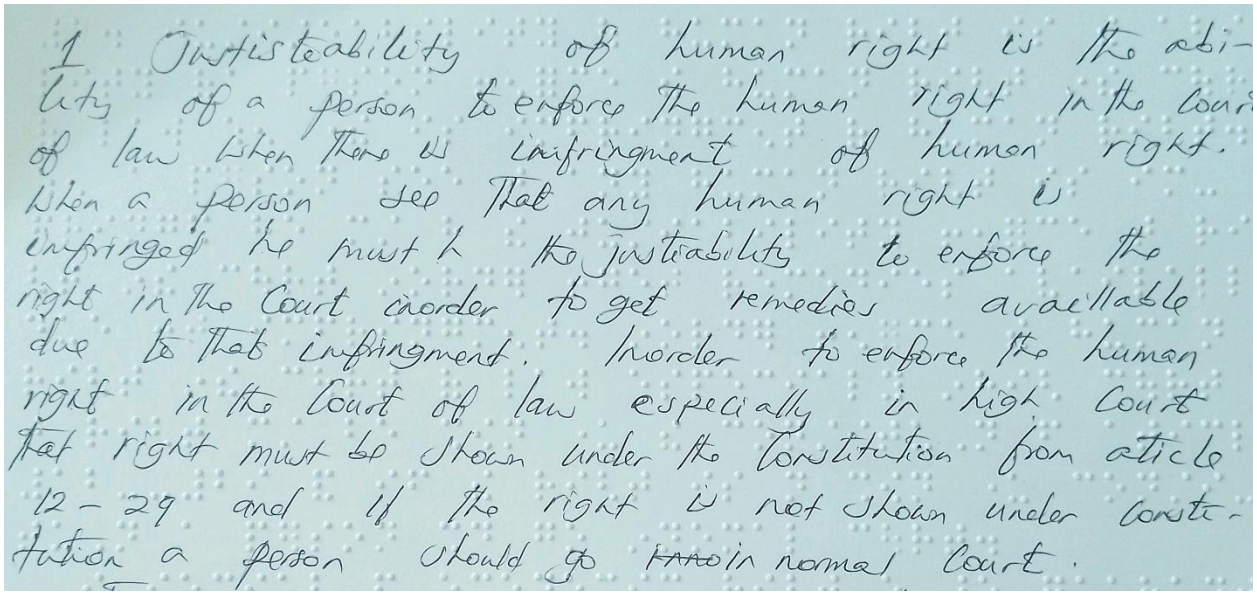
### 4.2.6 Transcription process

Findings from the study ascertained the prominence of transcribers in facilitating SwVI access the assessment tasks as equally as their peers without VI. Transcribers were responsible among others to convert questions in normal prints into braille prints, and vice versa for both SwVI and lecturers to communicate easily. In many universities where specialist lecturers in Special Needs Education, especially in its practical part, are not enough; employing competent transcribers is a great remedy which promises effective placing of SwVI in such institutions. LR7 in her own words said that:

> Transcription is always done by specialists who have been employed by the university to do that job. Transcription is done in two ways: first these specialists help us to convert our tests and exams into Braille format, and after the SwVI have answered the questions using Braille prints their answer scripts are taken back to transcribers who translate them into normal prints for us to mark. (LR7, female, March 2023)

Similarly, what was observed in the document reviewed corroborated the statement by LR4:

**Figure 4:** Braille answer script translated into normal prints




**Source:** From the field (2023)

Participants further revealed that in some colleges lecturers sent their assessment tasks in person to the transcribers for transcribing them into braille, and after students had written, their answer scripts in braille remained in the transcribers' office for translation from where the respective lecturers came to collect them back for marking. But in other colleges, the exchange of both questions for embossing and translated answer scripts for marking were through the office of transcribers and the respective head of department. This was stated by the TR1 who noted:

> Some of the heads of department are cooperative, for instance when transcribing scripts from other colleges, but here in this college of […hidden], heads of department just tell us to find these lecturers directly by ourselves. (TR1, male, March 2023)

Regarding the procedure involved, LR3 added:

> Mmmh so far, because all exams are done to the room that is also close to the transcribers' office, once SwVI are done, we just leave students' answer scripts there for transcription, then we collect them later when the transcriptions are done, so to shorten, if there is any procedure to follow I personally don't know. (LR3, male, March 2023)

Discontentment was reported by participants relating poor procedures involved in the process and carelessness of transcribers in executing conversion from braille prints to normal prints. It was reported that there was no officialised procedure which guided the exchange of questions papers and translated students' answer scripts to and from the transcribers' office between lecturers and transcribers. Though some colleges' heads of department were cooperative, the procedure used was not official. This was asserted by FGDA5 that:

> You know, the issue of transcription looks like it's not recognised by the university management, there is no provision anywhere that describes the responsibilities assumed by lecturers and transcribers in the process. (FGDA5, male, January 2023)

Similarly, FGDA2 noted that, "it is not clearly known who is to take translated answer scripts from transcribers' office to lecturers between the transcribers and lecturers" (FGDA2, female, January 2023).

Additionally, concerning carelessness of transcribers during transcription one student exemplified:

> To supplement what others have said, for example, in my course I sometimes use Latin words in my works. So, those who transcribe usually mislead the translation in normal prints for they think I have erred writing properly the word in English, while it's not, the word is a Latin one. (FGDB1, February 2023)

Thus, poor performance of SwVI, loss of answer scripts and unrealistic marks are attributed to poor procedure implied in the transcription process and transcribers' carelessness in translating students' works into normal prints. This was confirmed by a student who explained that, "it also happened to me more than once, one day my test got lost…" (FGDA2, female, January 2023). Another student echoed, "my test got lost one day, the lecturer gave me unrealistic marks for that lost one instead" (FGDA5, male, January 2023).

Arising from these challenges, participants suggested for the transcription to be conducive, proofreading should be done to transcribed works before any further process is issued to them. Also, official procedure for transcription should be established and transcribers should be considerate and competent enough to the course related language during transcription.

### 4.2.7 Fairness in adaptation process

Findings of the study also revealed that transcribers were at the core to ensure that all kinds of adaptations are effected properly. Fairness in adaptations was regarded when educational needs of SwVI were met. It was reported that content of some questions were not changed in adaptations, only the form of the questions were altered to allow accessibility to SwVI. Thus, for questions with diagrams, graphs and drawings were turned into descriptions to allow SwVI answer them. Nonetheless, some questions like practicals and calculations were exchanged with alternative questions since it was difficult to turn them into descriptions. LR4 narrated that, "Some questions are adapted first for SwVI to easily access them, though during adaptations, the content of the question is retained" (LR4, female, May 2023). But for questions which needed alternative questions, another lecturer added, "I can develop a question, even three different questions which at the end assess one construct" (LR5, male, March 2023), this implies that alternative questions composed still measured the intended construct.

Furthermore, participants, particularly SwVI, expressed disapproving sentiments on some adaptations done as they did not reassure them to access the assessment tasks. They resented over adaptations done on matching item questions and puzzle questions

which were not supportive. They reported these adaptations were not fair to them since they increased inaccessibility than helping them access the questions. Similarly, SwVI expressed their unhappiness to adaptations that altered the content of the questions far from their peers which also did not consider the content covered by students in the class. This was said by FGDA6:

> I feel bad when the alternative questions given to us, as the result of adapted questions with diagrams, its content matches not with that of our fellows without VI. Worse enough, sometimes you find even the adapted questions are from things we didn't cover in the class. I see it as our fundamental rights being flouted. (FGDA6, male, January 2023)

Another student in a focus group discussion narrated:

> Concerning adaptation, I remember there were questions of puzzles, of course lecturers tried to find a way out to modify them for us. But they put those questions in short answers form with a long dash without signalling to us the number of letters needed for the word required. You know, in puzzle questions our puzzles know the number of letters of the correct words by counting the boxes involved. So, to us with a sentence followed by a dash, you may think what is required is a statement because you don't know the number of letters consisting of the correct word, thus ending in failures. (FGDA5, male, January 2023)

Some participants ascribed the unsupportive adaptations as the result of exclusion of transcribers in the process of adapting questions, while others reported that limited time allocated for imposing adaptations to questions brought to the transcribers' office was another factor which weakened the effectiveness of those adaptations. Regarding the adaptation of tasks in the formative assessment, TR1 commented:

> Yeah, they are not brought to me for moderations, in terms of brailling or making modifications to some questions, because most of them are given directly to SwVI in their lecture rooms. So, just a few of them are brought to me but many of them are not. (TR1, male, March 2023)

Similarly, limited time used in adaptation was reported by participant SwVI who explained:

> Lecturers are normally expected to have effected adaptations before bringing an examination in an examination room. But we normally notice them doing adaptations while question papers of the same examination are already in the examination room. We have discovered that adaptations effected in a rush usually do not accord with our educational needs. (FGDB3, male, February 2023)

Quotations from TR1 and FGDB3 suggest that when lecturers and transcribers miss collaboration in the assessment process, inaccessibility and discrimination of SwVI in the process is the consequence.

**Table 5: The summary of findings of objective two**

| Themes | Findings |
|---|---|
| Examination formats | -Braille format: Grade two braille was used<br>-Large print format: 16-18 font sizes were commonly used<br>-Oral formats |
| Additional time | -10 minutes per one hour was added (16.6% of the duration time)<br>-Time added did not reflect individual educational needs |
| Special room | -Support services for SwVI only found in a special room<br>-Overcrowded<br>-Noises from braille machines disturbing others |
| Invigilators | -Specialist invigilators used in the college of education while in other colleges non-specialists invigilated SwVI |
| Assistive technologies | -Slate stylus, Perkins Braillers and computers<br>-SwVI's reluctance to use computers due to lack of skills |
| Transcription process | -Poor procedures involved<br>-Carelessness of transcribers |
| Fairness in adaptions | -Replacement of diagrams and drawings with descriptions<br>-Removal of practicals and calculations<br>-Adapted questions which increased inaccessibility |

## 4.3 Lecturers' experiences of assessing learning of students with visual impairment in the university X found in Tanzania

Lecturers had varying experiences regarding the assessment process for SwVI in this university X. Generally, the majority of the lecturers had positive minds on their experiences towards assessing SwVI in the university under study. Revelations under this objective yielded to five themes: students' engagement in decision making, cooperation of lecturers and transcribers, university management engagement in the assessment of SwVI, lecturers' explanations in assessing of SwVI and feedback provision by lecturers to SwVI.

### 4.3.1 Students' engagement in decision making

From the findings it was revealed that lecturers, transcribers and SwVI did not meet in unison to agree on how SwVI should best be assessed. However, transcribers acted in the middle between SwVI and lecturers. As confirmed by TR1 during the interview:

> No, most of the time I observe difficulties from SwVI during taking these assessment tasks, and sometimes I listen to their complaints. Then after that I communicate to lecturers what SwVI wish to see happening in their assessment tasks. So, I am like an intermediate person who collects information from SwVI and passes them to respective lecturers. (TR1, male, March 2023)

It was further noted that some lecturers depended on CRs to receive information on how assessment should be like to SwVI, while others met and discussed with SwVI after lecture sessions on ways they would wish to be assessed. This was narrated by LR5 who said:

> Therefore, from lecture series I usually identify them, then we talk and discuss. The challenge is with those who use large prints as it is very difficult to know them. So, that's why during lecture sessions I usually ask them. …I have to enlarge the print size. (LR5, male, March 2023)

This was supported by LR7 who noted:

> Most of the time we use their CRs, we ask them whether there are students who use large prints or Braille formats. So as they furnish us with that information, we then prepare assessment tasks for them. (LR7, female, March 2023)

The quotation from LR5 reveals discussion meetings being held between lecturers and SwVI on assessment practices to be used, something which is good. But narration from LR7 suggests that lecturers just find the number from the CRs of SwVI who use braille and those who use large prints. Using CRs might be the source which made SwVI to report that they are not involved in deciding on the assessment practices to be used for them as noted by FGDB1 that, "on my side, I have never been engaged by my lecturers to decide on assessment practices" (FGDB1, female, February 2023). Sometimes, SwVI decided to follow the lecturers and informed them of ways they wished to be assessed after noticing that they were not involved by them to decide on assessment practices suitable for them. This was claimed by FGDB2:

> Since we have already noticed that there is a challenge in involvement, we always follow lecturers at the beginning of the semester informing our educational needs that should be considered in assessment. (FGDB2, male, February 2023)

This view corroborated with the lecturer's view who noted, "Mmm, my students always report before the lecture. … So, they come to me and report how they wish they could be assessed..." (LR6, female, March 2023). So, these quotations verify that

SwVI are not always involved in deciding the fate of their assessment, a thing which usually leads to inaccessibility.

### 4.3.2 University management engagement in assessment of SwVI

Under this theme, participant lecturers shared their experiences with regard to guidelines established exclusively for SwVI in assessment and capacity building workshops provided to them on how to support SwVI in the assessment process.

#### a) Guidelines for SwVI in assessment

Participants in all interviews and FGDs attested the absence of any guideline or policy in the university which exclusively dealt with SWDs, including SwVI. Participant lecturers commented that they depended on general regulations for undergraduate programmes which had no any provision exclusively stipulated for SWDs, including SwVI. This was claimed by LR4 who explained that, "we use only examination guidelines… in our university we don't have the disability policy though it is now in the process" (LR4, female, March 2023). Similar opinion was narrated by LR3 that, "Mmmh, on my side I have never read that, so to say the university has or has not a policy, I can't say" (LR3, male, March 2023). On the contrary, it was stated in the policy of quality assurance on strategies for improving environment for teaching and learning process for both students and staff with disability that:

> Developing guidelines that spell out the University's commitment to providing and supporting equalisation of opportunities for students and staff with disability and other special needs; Developing a plan that recognises the needs of students and staff with disabilities or other special needs. (The quality assurance policy, p. 15)

Apart from these good provisions about developing a guideline and a plan which would recognise educational needs of PWDs, including SwVI, and articulate ways to support them, upon the time of data collection no guideline or policy had been put in place for them. Thus, lecturers narrated that they used their experiences when supporting SwVI in different assessment tasks. This was claimed by LR5 who said, "I don't know any document in the university that talks about assessment practices for SwVI. We are only using our own experiences and our wisdom" (LR5, male, March 2023).

Lack of policy or guidelines to guide the practices of assessment for SwVI led to emergence of variations in practices among colleges. Further, students reported that it became hard for them to advocate for their rights in assessment since they had no document to which they could make reference about assessment practices for them. This was verified by LR1 who noted:

> Firstly, we must have a policy which is active and operational. The policy is very important as it harmonises practices throughout the university in order to avoid variations of practices between unit and anther, or between one college and another. (LR1, male, March 2023)

Another student in a focus group discussion stated:

> It's difficult to advocate for our rights regarding assessment because there is no document. So, a document should be published which would be used as a reference when challenges happen to assessment practices for us. (FGDA1, male, January 2023)

Statements of the participants on the absence of a guideline or policy on PWDs, including SwVI, which describes clearly support services that should be provided to SwVI during assessment suggest this as the major cause for some challenges in assessment for SwVI.

**b) Capacity building workshops on SwVI**

The university X was established especially for students without disabilities, even the degree programme in Special Needs Education was launched in the university for teacher trainees without disabilities who would be trained how to help SWDs in lower classes. This was claimed by LR4 who narrated that:

> By the time when this degree programme of special needs education was initiated in this university, the intention of its initiation was not for SwVI, but rather it was just to prepare teachers who can help SwVI in schools. So maybe this was overlooked that even among these people with VI would be registered in this university…I remember in either 2008 or 2009, one student who was blind was enrolled in the university. At that time there was not even a single Braille machine nor braille papers… (LR4, female, March 2023)

Narration from LR4 indicates the majority of lecturers in the university are not aware of how to handle educational needs of SwVI since they are not specialised in Special Needs Education. So, when lecturers were interrogated to find out whether the university management prepared capacity building workshops to update its lecturers,

especially non-specialist ones in Special Needs Education on how to handle educational needs of SwVI in assessment, it was ascertained that there were no such endeavours. LR3 had the following to share about this, "I would like to attend if it happens I see such adverts about workshops, however, I haven't seen any in this university" (LR3, male, March 2023). The same was echoed by LR1:

> Of course, this has been a debate for a long period of time on how to educate lecturers so that they can know how to handle issues related to educational needs of SwVI. Currently, we have already talked with the head of department to initiate programmes which will be used to raise awareness to lecturers from different colleges on how they can cooperate with us in serving these SwVI. However, nothing up-to-date has been implemented so far. (TR1, male, March 2023)

These explanations from LR3 and TR1 show eagerness and readiness lecturers and other staff have about training on how to serve SwVI appropriately in the assessment process. Lack of such training increases chances of discrimination for SwVI in the assessment process.

### 4.3.3 Lecturers' explanations on assessing SwVI

Findings under this theme revealed various perceptions of lecturers in relation to difficulties they encountered when assessing SwVI compared to their peers without VI. Again, lecturers exposed how they perceived adaptations done to assessment tasks for SwVI.

#### a) Lecturers' comments on assessment of SwVI

Findings of the study ascertained that non-specialist lecturers perceived assessing SwVI as an easy task when transcribers were there to help them. They reported that unless the transcribers were provided to them, the assessment process could be impossible for them to do for SwVI. This was verified by LR7 who said, "It is not challenging anymore because we have transcribers who help us in the process" (LR7, female, March 2023). In support of this view, LR5 added:

> Of course, it is not a challenge so far to me because we have experts (transcribers). If you remove those experts, it will then be challenging because I don't have any expertise in transcribing and so forth… (LR5, male, March 2023)

Comments from LR7 and LR5 allude to the fact that transcribers' role in inclusive universities which host SwVI provide a great remedy to inaccessibility of assessment tasks for them.

Moreover, specialist lecturers in Special Needs Education perceived assessing SwVI as an easy process due to the presence of assistive technologies. They narrated that without these assistive technologies like embossing machines and other braille machines, assessing SwVI could become a difficult ride to take. This was narrated by LR2:

> For me, I can say that nowadays it is simple to assess these SwVI because of the advancement of technology. But in the previous years it was too hard to prepare assessment tasks for them, for example, when you wanted to prepare a test, the lecturer was required to make that test in Braille by themselves, something which consumed a lot of time… (LR2, male, March 2023)

A quotation from LR2 suggests the importance of advancements in technologies and its inclusion in the assessment process for SwVI.

**b) Lecturers' perspectives on adaptations**

All participant lecturers had positive perceptions towards adaptations done to assessment tasks for SwVI. With one voice, lecturers narrated that effecting adaptations that are meant to enhance accessibility of assessment tasks for SwVI is one of students' rights and not a favour. This was explained by LR6:

> You know, it's their right to have these adaptations because as their fellows just access the assessment task without problem, to SwVI require adaptations to the same assessment tasks to compensate for the lost ability due to disability. So adaptations made to their assessment tasks are not for favouring, rather, they enhance an equal playing ground with their peers without VI. (LR6, female, March 2023)

Similar opinion was narrated by another lecturer who noted:

> Normally they do not favour them, these persons are disadvantaged due to the disability they have, so you cannot force them to take the same assessment tasks as those students without VI. (LR1, male, March 2023)

Statements from LR6 and LR1 proves the diligence and love of serving SwVI these lecturers at university X have regardless of the absence of a guideline or policy. This

further attests to the statement which states, “When one’s perception is positive, even their actions will be positive too”.

### 4.3.4 Cooperation of lecturers and transcribers

It was reported that transcribers were very cooperative and helpful to lecturers in the whole process of assessment for SwVI. This was stated by LR6 who said that, “They are very good and cooperative, I have never found any challenge working with them” (LR6, female, March 2023). Another lecturer added:

> In most cases they respond positively, and we usually interact in a friendly way with all aspects of handling serving SwVI. They are very cooperative, and sometimes they remind me what I am supposed to do for SwVI. (LR5, male, March 2023)

On the other hand, transcribers explained their concerns that not all lecturers, especially those with limited awareness of Special Needs Education, are cooperative with them in ensuring that assessment tasks are accessible to SwVI. As TR1 claimed that:

> Yeah, lecturers are very supportive, but sometimes, maybe, they are not well informed [of Special Needs Education]. For those who are well informed are cooperative, while those who are less informed are seen as not cooperative. (TR1, male, March 2023)

Some of the participants ascribed this lack of cooperation from lecturers as being contributed by doubts elicited by lecturers concerning engaging transcribers as third parties in the assessment process which is always perceived confidential. Some lecturers deemed involving transcribers in examinations and tests as risky for they can lead to leakages. This was stated by TR1 who clarified:

> This notion has been there, particularly for lecturers from other colleges other than the college of education. These lecturers claimed that their exams had been leaking at the college of education, and they associated this leakage as the result of transcribers who were involved during transcription. Moreover, this notion has led lecturers to become reluctant to bring their exams and tests for transcription earlier, as the result SwVI suffers from examinations delay… (TR1, male, April 2023)

Although some lecturers noted that they had never witnessed any examination leakage associated with transcribers as LR7 said, “I have never from the time I was employed in this university witnessed transcribers leaking exams” (LR7, female, March 2023).

Thus, the presence of a policy which describes clearly the duties and responsibilities of both lecturers and transcribers in the process of assessment for SwVI would be a solution to this dilemma. This was supported by a lecturer who said during the interview that:

> Honestly, I should not lie but speak the truth, since we do not have any policy that has been a very big challenge even on determining our professional relationship with that person. So, normally our relationship is just informal, there is no formal mechanism to trail the professional relationship between us and that transcriber at the College of Education. (LR1, male, March 2023)

This statement by LR1 indicates that the lack of policy or guidelines which exclusively deal with issues of SWDs, including SwVI, is a dire challenge which calls for immediate action.

### 4.3.5 Provision of Feedback by lecturers to SwVI

It was found that results during formative assessment were given to SwVI at the same time as their peers without VI. Participants further narrated that sometimes lecturers called SwVI, especially those who are blind, to give them feedback where they were supposed to improve since they could not read the comments, while others did not call them assuming that transcribers and their fellow students would help them know their results and areas of improvement. As LR2 noted that:

> First of all, I return their marked papers like other students, and then if there is a concern in their papers as the result of their disability I call them and discuss with them. (LR2, male, March 2023)

On the same issue, another lecturer narrated:

> But we used to give them feedback by returning their works like tests and assignments to them, then their fellows just read them what is written there on their papers. (LR6, female, March 2023)

The statement from LR6 where SwVI received assistance from their peers to know the marks and comments of their tasks equally tallied with the narrations of SwVI who explained concerning their course works and final examination results which were directly uploaded on the web system. Due to the fact that most SwVI lacked skills to operate with assistive technologies, they failed to look at their results from the system, so, students without VI were relied on. However, SwVI narrated their discontentment

on being helped by their fellows to know their results since results are confidential. In their own words SwVI in FGDs explained:

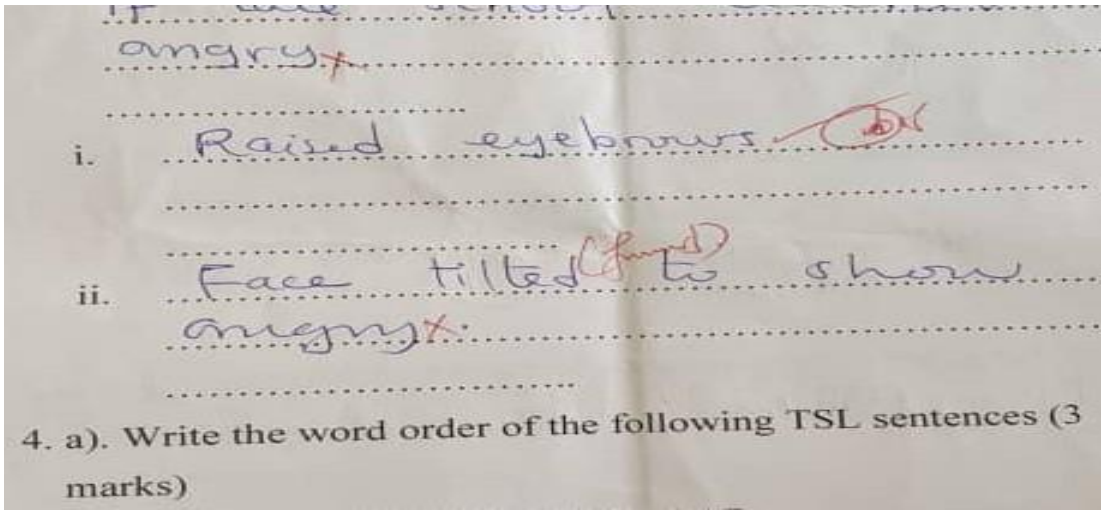
> In our university it has been a challenge for us concerning the modalities used to publish our results, however, I believe if we are provided with enough training on how to use advanced technologies; we will be able to check our results on the system without engaging in third parties because results are confidential. (FGDA1, male, May 2023)

> The system where results are uploaded is not user-friendly to us with low vision since it does not consist of options where we can enlarge what is printed on it. The system is easily accessed by our fellows without VI. (FGDB5, male, March 2023)

The narration from FGDB5 on inaccessibility of the system where results are uploaded challenges a statement found in the ICT policy on ensuring equal access on information and technology among students in the university, "…ensure that the University provides the appropriate access for special user groups for all University web-based systems" (ICT policy, p. 18). This indicates this strategy by the university is not yet realised since SwVI struggle to look at their results on the system.

Concerning the comments for improvement given by lecturers on the answer scripts of SwVI, students with low vision revealed that some lecturers did not use enlarged handwriting for them to see. This was claimed by FGDB5 who said, "We face challenges to read comments from our lecturers about areas we should improve because their handwriting is not big enough for us to read" (FGDB5, male, March 2023). This was also supported by what was observed from the answer script of the student with low vision:

**Figure 5:** Lecturer's comment on the answer script of SwVI




**Source:** From the field (2023)

The display from Figure 4.4 proves the fact that students with low vision are vulnerable to illegible comments from their lecturers as lecturers use the same handwritings they use to students without VI. So, this might be the source of poor performance of SwVI because they are likely to repeat the same mistakes due to failure to capture corrections given by their lecturers.

Apart from the narration that results were given to all students at the same time, participants described that sometimes SwVI suffered from delays of results compared to their peers. These delays were attributed to the presence of a few transcribers who could not translate all students' works quickly. Further, some lecturers delayed to take back answer scripts from transcribers for marking. This was narrated by LR3 who noted, "But whenever delay [of results] happens we just inform SwVI through their class CRs that their scripts are being transcribed, that's why."

Additionally, regarding the results delay TR1 mentioned that:

> …for instance, some of their tests or exams are taken from transcribers by their lecturers for marking late because sometimes they forget students who did their tasks in the special room. So there is some kind of delay which later influences the early provision of results to SwVI. (TR1, male, March 2023)

Quotation from LR3 suggests adverse effects to the assessment process when the number of transcribers in the university is not enough, at the same time TR1's comment exposes how lecturers' carelessness could endanger the same process.

**Table 6: The summary of findings of objective three**

| Themes | Findings |
|---|---|
| SwVI's involvement in decision making | -Lecturers, transcribers and SwVI did not meet in unison to decide on assessment practices<br>-Transcribers acting as a middle person between SwVI and lecturers |
| Guidelines for SwVI in assessment | -No policy on disability, and no guideline exclusively for SwVI on assessment |
| Capacity building workshops on how to handle issues of SwVI | -No workshops |
| Lecturers' explanations on assessing SwVI | -Simple and easy when transcribers and advanced technologies are present<br>-Adaptations as fundamental rights of SwVI in assessment |
| Cooperation between transcribers and lecturers | -Specialist lecturers are more cooperative with transcribers than non-specialist lecturers<br>-Flouting of examinations' confidentialities |
| Provision of results to SwVI | -SwVI being called by lecturers to receive feedback<br>-Infringing of privacy of results for SwVI<br>-Delays in results |

## 4.4 Chapter summary

This chapter presented findings established from the participants and document reviews on stakeholders' perceptions on assessment practices for SwVI in Tanzanian higher education. The presentation was premised on the emerging themes which answered the three research questions which guided this study. Themes were presented according to the data generated from the participants through three research instruments: semi-structured interviews, FGDs and document review protocols, whereas each theme was supported by a number of verbatim accounts. From the first objective on ways lecturers used to assess SwVI, it was discovered that SwVI did the same assessment tasks as their fellows without VI. Assessment tasks which were not accessible to them were subject to adaptations so as to enhance accessibility. Meanwhile, findings from the second objective about the suitability assessment practices for SwVI in Tanzanian public universities found that many practices were involved for assessing SwVI. Participants showed mixed perceptions on the suitability of these practices for SwVI since some seemed to be satisfied while others described their concerns over the same. Lastly, the third objective unearthed experiences lecturers shared on the course of assessing SwVI in their courses. Among others, lecturers narrated that the presence of specialist staff who helped them in the

assessment process for SwVI made it easy and simple. The next chapter discusses the findings of the study.

# CHAPTER FIVE: DISCUSSION OF FINDINGS

## 5.0 Overview

This chapter discusses the key findings of the study as presented in the foregoing chapter. The discussion is conducted based on the findings as they were ascertained in each theme in relation to the research objectives. Additionally, the discussion of findings is conducted in relation to the existing literature reviewed, theoretical and conceptual frameworks of this study in order to furnish the reader with a deep and clear understanding of the findings.

## 5.1 Assessment methods used by lecturers to SwVI in the university X found in Tanzania

The key finding on this theme showed that SwVI undertook the same final examinations, quizzes, and tests accompanied by reasonable support services like additional time and a special examination room. This finding is consistent with Redpath et al. (2013) and Rodrick (2021) studies, which established that SWDs, including SwVI, did the same assessment tasks as their peers, though with reasonable accommodations. This is also supported by the connectionism theory adopted in this study, which posits that educators are required to be competent enough to ensure proper responses against specific stimuli (assessment tasks) are produced by SwVI (Ertmer & Newby, 2013; Islam, 2015). Therefore, providing reasonable accommodations is a means to help SwVI demonstrate what they know properly. Conversely, other studies reported that SwVI received no reasonable support like additional time in the assessment process (Gitonga, 2014; Muzata et al., 2019). This was due to the fact that many educators lacked skills on how to support SwVI. According to UNESCO (1994) and UN (2006), extra support is mandated to be given to SWDs on demand to ensure their effective learning with their peers in regular schools. As SwVI may face limitations in undertaking the assessment tasks as their peers due to their disability, reasonable accommodations which compensate for their lost abilities due to disability are very crucial. In fact, reasonable accommodations for SwVI in the assessment process should be regarded as their fundamental right as they promote fairness and equity to learning. Equally, providing the same assessment tasks to SwVI is a good practice for it helps to sweep away notions that SwVI's curriculum is compromised, a thing that would affect them in the world of the market.

Similarly, the finding that dates for quizzes and tests were not communicated appropriately to SwVI shows one of the factors for the presence of incomplete cases in the assessment process for SwVI. The inadequacies in the use of technologies this study found forced SwVI to entirely rely on their peers to get information through social media and the university website. The finding slightly resonates with what Rodrick (2021) found that students who were blind in two colleges in Zambia depend completely on their peers to do assignments due to a lack of assistive technologies. This implies that SwVI are likely to miss out on tests and quizzes when their peers fail to inform them due to negative attitudes. Arising from the conceptual framework, SwVI are expected to find no challenges in the assessment process when there is a strong tie among them, lecturers, and transcribers. Since transcribers are specialists, it is worthwhile that information about these activities is channeled to them by lecturers so that they inform SwVI directly rather than depending only on peers who may not be reliable at some points.

On the finding that SwVI were mixed with their peers in doing their group-related activities, the practice seemed to be effective in enhancing peer learning and combating negative perceptions extended towards SwVI by their peers without VI. This confirms the applicability of one of the factors for promoting inclusive education that negative attitudes tagged to PWDs would be easily terminated (UNESCO, 1994). Similar findings are reported by Reed & Curtis (2012), Luque et al. (2018), and Muzata et al. (2019), who noted that SwVI did their assignments in groups with their peers. This indicates that the majority of the lecturers had positive perceptions towards SwVI as espoused by the conceptual framework of this study. Once lecturers possess positive perceptions towards SwVI, they do things that promote positive practices in the assessment process. Ideally, mixing SwVI with their peers in group-related activities proves the reality that a human being is a social being, thus allowing opportunities for strong social integration to develop among them. However, mixing SwVI with their peers in group-related activities should not be understood as SwVI not supposed to take part in doing these tasks, and that everything should be done for them by their peers. Instead, SwVI in group-related activities should be allowed chances to share with their group members what they know about the question at hand. Every group member, including SwVI, should be accorded equal opportunities to contribute to these group-related activities.

The revelation on ignoring the educational needs of SwVI by lecturers in take-home assignments, like the deprivation of extension deadlines, is a serious challenge, which was also reported by Acheampong et al. (2020) about SwVI at the University of Education, Winneba, in Ghana. Although the denial of such support services was defended by lecturers as a way to inculcate executive skills like time management in SwVI, findings from Redpath et al. (2013) and Rodrick (2021) revealed a different perception that SwVI were allowed with a deadline extension in their assignments. This difference in perceptions would be linked to the fact that educators in the studies by Redpath et al. (2013) and Rodrick (2021) were more considerate of SwVI's educational needs that is why they considered them even in take-home assignments. Similarly, it is stipulated in the Convention on the Rights of Persons with Disabilities (CRPD) that denying SWDs of reasonable accommodation, which aims to further accessibility in education, is regarded as the violation of the right to education (UN, 2006). Students' morale to do assessment tasks is easily earned when they feel that their rights and dignity are valued. So, failure to consider educational needs of SwVI in these take-home assignments, more specifically those assignments done individually, is another kind of discrimination which drops their morale in doing these tasks as well. As a result, SwVI's performance in these tasks will be poor. Hence, in individually done take-home assignments, SwVI should be given extensions in submission deadlines, and the tasks should be given in an accessible format. It should be noted that SwVI face a lot of challenges compared to their peers when perusing materials on the internet, and in organizing their works using computers, thus extra time should be offered to them.

In addition, the revelation that SwVI, and lecturers loved the use of group-related take-home assignments more than those performed individually, suggests a serious gap in preparing students holistically. Despite the advantages that group-related activities bring, the benefits of assignments done individually should not be ignored. This finding correlates with the research of Lyakurwa (2019), who established the same satisfaction among blind students with group-related activities compared to those done individually. Meanwhile, SwVI's preference towards group-related activities over individually done activities was heightened by challenges associated with the latter, such as inaccessibility, while the reduction of bulkiness in marking was noted as the factor influencing lecturers to use more of group-related activities than individually

done activities. Partly, this finding relates to what Morris (2014) found, that SwVI in further education in Wales resorted to non-examination courses rather than those with examinations due to numerous challenges in the examination courses. Therefore, successful curriculum implementation depends, to a great extent, on the extent to which it is barrier-free for both implementers and beneficiaries. The finding alludes to an unbalanced ratio between the number of students in University X and the lecturers. Since lecturers were few compared to the number of students, they opted to use group-related activities to simplify the marking process. This may result in serious forgetfulness of SwVI in a large class with students without VI if left unresolved. In a larger class, lecturers are more inclined to the needs of the majority of students than the minority. Therefore, an increase in the number of lecturers in the university will consequently escalate lecturers' due care to individual students, including SwVI.

It was also evident that final examinations received more attention from the university management than formative assessment tasks. The university management sent delegates to every college during the conduct of final examinations to inspect the conduct, ensuring it was in line with the rules and regulations of examinations as per the university guidelines, while formative assessments were left under the discretion of lecturers with minimal supervision from the management. Many challenges faced by SwVI during formative assessments are partly linked to inadequacies in the close supervision of these tasks, as manifested during the final examinations. However, this practice contradicts the provisions in the undergraduate curriculum guidebook for the 2022/2023 academic year in University X. In this curriculum guidebook, it is stipulated that coursework and final examinations contribute to 40% and 60%, respectively, to the course assessment, while in other courses, they both weigh equally (50%, 50%). Since both formative and summative assessments have an impact on the course assessment, the university management should provide equal efforts in supervising them to ensure that quality is maintained from the start of the assessment process.

There were also revelations regarding hindrances during the undertaking of assessment tasks by SwVI. Revelations regarding delays in assessment tasks were common, bringing in a lot of tension and anxiety among SwVI who wanted to complete them on time. This finding was similar to the findings by Kisanga (2019) and Acheampong et al. (2020), who revealed that the receipt of tests, quizzes, and final examination questions was delayed for SwVI, creating tension and anxiety during their completion.

Since lecturers' delay in sending their assessment tasks earlier to transcribers was outlined as one of the factors, this aligns with the conceptual framework adopted in this study, which explains that challenges related to assessment are due to a lack of collaboration between lecturers and transcribers. Again, this finding contradicts the law of readiness as explained in the connectionism theory. This law requires psychological fitness for a student to learn well. So, SwVI being anxious and psychologically disturbed due to the delay of their assessment tasks drops that readiness in them to undertake the assessment tasks, a thing which might lead to mass failure. Moreover, the Tanzanian policy on disability of 2004 guides that Persons With Disabilities (PWDs) should be provided services in the same way as those without disabilities (URT, 2004). Thus, the delay in assessment tasks' starting time for SwVI while their peers have already started ahead of them indicates inequalities in the way services in this institution are catered to PWDs. Such inequalities, if not balanced, would lower the self-esteem of SwVI as they would feel unvalued and respected in the same way as their peers.

Secondly, the findings on the issue of inaccessibility of different assessment tasks were associated with the presence of many non-specialist lecturers with inadequate skills on how to support the educational needs of SwVI. The same is established in other studies that SwVI suffered from inaccessible assessment tasks since lecturers lacked expertise in Special Needs Education (Nasiforo, 2015; Kisanga, 2019; Muzata et al., 2019). According to the connectionism theory by Thorndike and the conceptual framework adopted in this study, the incompetent educator would fail to set stimuli (assessment tasks) that would facilitate SwVI to demonstrate what they know (responses). Thus, help from a competent expert, in this case, a transcriber, would be sought out for assessment tasks to be accessible to them. In this era, in which many SwVI are joining higher education in a tremendous number, the employment of transcribers is one of the ways that would enhance the inclusion of these students in the teaching and learning process. According to Johnson & Muzata (2019), inclusive education for PWDs, including SwVI, would be worthwhile if setbacks associated with it are won. Accessibility of the assessment practices to SwVI is the only means that can help these students demonstrate what they know. Failure of it simply implies that though SwVI seem to learn alongside their peers, still there is no inclusion because they are handicapped to access assessment tasks the same way as their peers do.

Thirdly, cases of negative attitudes seem to be a big challenge to the realization of inclusion. SwVI are denied joining groups of their peers by the perception that they are non-intelligent, while some lecturers refrain from helping them with a claim that these students should only be helped by specialist staff like braille transcribers. This concurs with the conceptual framework of this study, which predicts the negative impact on the assessment process when people possess notions that are not constructive. Similarly, it was found that educators and students without VI perceived SwVI as slow learners and non-intelligent ones who could not make any contribution in group-related activities (Reed & Curtis, 2012; Asamoah et al., 2018). In addition, teachers in the study by (Nuru, 2019) viewed printing two categories of tests, one in normal prints and another in large prints, as a wastage of money and resources. Nonetheless, these findings slightly differ from the findings by Muzata et al. (2019) who noted that SwVI experienced no discrimination from their peers towards their academic pursuits. This lack of discriminatory practices reported to these students without VI in the study by Muzata et al. (2019) could be attributed to mass awareness-raising seminars that were provided to students on disability and ways to positively support SwVI in the teaching and learning process. Thus, mass awareness campaigns about disability and how to positively support SwVI in the assessment process should be launched effectively because through these seminars, negative perceptions are diminished. According to the Tanzanian Act on the persons with disability of 2010, every individual is responsible to assist PWDs to be integrated into the community (URT, 2010). On this obligation, there are no special people who are reserved to do that unless the kind of assistance required is technical. Therefore, every member of the educational institution is obliged to shun negative attitudes, a thing that will result in creating a welcoming environment in which every individual, including SwVI, would be included perfectly.

Following the foregoing discussion on the findings emerged under objective one, it is evident that the objective has been achieved fully since the findings fitly answered the research question. The aim of this objective was to explore different types of assessment methods and the ways they were administered to SwVI. The findings established various views of participants on different types of assessment methods applied to SwVI and challenges associated with their execution.

## 5.2 The suitability of the assessment practices used by lecturers for students with visual impairment in the university X found in Tanzania

The use of braille format in various assessment tasks, as established by this study, is one way that makes the educational process meaningful to SwVI in inclusive settings. This is a common practice used to enhance accessibility in the assessment process, as found in other studies by Ndume (2019), Kisanga (2019), Lyakurwa (2019), and Rodrick (2021). It also aligns with the Tanzanian education and training policy of 2014, which requires braille format to be used throughout different educational levels. Muzata (2021) argues that fairness in the assessment process for SwVI is possible when assessment tasks are provided in braille format. However, something that is not well understood by many educational practitioners is the fact that braille prints sometimes may be more of a curse than a blessing to SwVI. Braille is in two grades: braille grade one, which is void of contractions, and braille grade two, which is contracted. Not all students who are braille users possess adequate mastery in braille grade two. As noted in this study, some SwVI were not happy with braille grade two, which was commonly used in their assessment tasks since they had not mastered it all. This suggests that sometimes SwVI fail to attempt questions not because they lack the content knowledge of them, but rather, the braille grade used is not accessible for them. According to Allman (2009), SwVI should be given the braille grade with which they are conversant. Therefore, for the use of braille format to be suitable for SwVI, lecturers in collaboration with transcribers should consult the SwVI, as proposed by the conceptual framework of this study, to understand the braille grade with which the student is conversant and convert the assessment tasks into it. By using a braille grade that a student with VI is competent in, it will promote accessibility to assessment tasks for all students, regardless of their differences.

Similarly, the revelation that lecturers with awareness of Special Needs Education tended to provide varying font sizes for students with low vision, depending on the severity of their impairment, indicates how impactful awareness-raising campaigns could be if all lecturers were exposed to them. On the other hand, this cautions of the flight that SwVI would be in when lecturers who are unaware of Special Needs Education take the lead in the assessment process, as revealed in Rodrick's study (2021) that SwVI were sometimes exposed to normal prints by lecturers who had inadequate knowledge in Special Needs Education. Authors like Ndume (2019) and

Muzata (2021) contend that students with low vision must be catered to using large prints in varying font sizes, reflecting the degree of their VI. However, it demands the awareness of the educators, as postulated by the connectionism theory by Thorndike, to administer a proper stimulus (assessment tasks in proper font size), which would be able to evoke responses from the students with low vision. So, lack of awareness among lecturers would be considered as another factor hindering accessibility of assessment tasks to SwVI, as they fail to customize the font sizes according to the individual educational needs of students.

The additional time for SwVI, as revealed in this finding, lacked flexibility according to individual educational needs. Whereas 16.6% of the normal time was added at University X, in the study by Acheampong et al. (2020), it was revealed that 50% of the normal time was added. Yet, SwVI in the study by Acheampong et al. (2020) expressed their dissatisfaction since some did not manage to complete their work. Although adding time is a commendable practice, as stated by Allman (2009), the time added should not be fixed for all students and courses because of their differences. Courses always vary in terms of content, and SwVI are not the same, as some have multiple disabilities. So, the time should be allocated by considering the nature of the course and the level of VI of students. A study by Nuru (2019) established that SwVI were given varying additional times ranging from 5 to 20 minutes depending on the nature of the subjects, while SwVI in Morris's (2014) study were given up to 100% of the normal duration according to their individual needs. Thus, the additional time should not adhere to the one-size-fits-all approach since SwVI are unique beings who should be treated uniquely. This is also recommended by other scholars (Wetzel & Knowlton, 2000; Ndume, 2019; Acheampong et al., 2020) that additional time should reflect the individual needs of a student with VI. Ignoring the individual needs of SwVI in this segment limits them from fully demonstrating what they know, as they end up providing shallow answers to keep up with the time.

Moreover, this study revealed that special examination rooms were allocated for SwVI, where support services were easily available to them. A similar finding is reported by Reed & Curtis (2012) and Acheampong et al. (2020), who found that special examination rooms consisted of computers installed with pertinent programs for SwVI, and SwVI received additional time there. This is also in accord with the connectionism theory adopted in this study. Allocating a special room where SwVI

could not be disturbed when undertaking assessment tasks helps instill psychological and mental calmness in them as they do assessment tasks in a quiet place with pertinent devices like computers. As a result, the law of readiness espoused by Thorndike in his theory is effected. Allocating special examination rooms for SwVI is much more commendable when challenges associated with the assessment process are mitigated there. In other studies, it was found that special examination rooms were used as a way to overcome challenges faced by both SwVI and their peers when mixed up in the same examination rooms (Matonya, 2016; Ndume, 2019). However, the students' revelation that sometimes being in this special room upturned forgetfulness to lecturers about them since assessment tasks were brought late dwindles the essence of these special rooms as they escalate discrimination instead. This partly concurs with Liasidou's (2014) argument that special rooms are another way of discrimination as they increase labeling. The goodness of special examination rooms outshines when their presence increases the accessibility of SwVI to assessment tasks as others. One of the bases for inclusive education is to ensure all SWDs, including SwVI, have unbiased equal access to quality education when they are learning alongside. Additionally, special rooms may sometimes lose their flavor when all SwVI with varying degrees of vision are placed in one room. For example, students with low vision need large prints, so placing them in the same room with their peers who use noisy braille machines may disturb them. SwVI are unique, so for effective learning, their uniqueness should be considered when it comes to providing them with reasonable accommodation.

The current study's revelation on the use of specialist invigilators for SwVI during the assessment process is in accord with the finding by Mosia & Phasha's (2017) study, which revealed that SwVI were invigilated by specialist staff of VI in the special room. Invigilators who are specialized in Special Needs Education are more likely to provide the required support to SwVI than non-specialist ones. According to the Persons with Disabilities Act of 2010, all support services to PWDs should be rendered by a qualified teacher (URT, 2010). For this case, it is very expedient that invigilation activities are held by staff with some awareness in Special Needs Education. As a matter of fact, it is sometimes difficult to meet this provision as stipulated by the Persons with Disabilities Act of 2010 in inclusive settings where most of the employed staff are non-specialists in Special Needs Education. However, this gap could be easily

covered by initiating various capacity-building workshops on how to support SWDs, including SwVI, in different facets of their school life. This should be taken seriously by the institution management since some of the invigilators who are unaware of Special Needs Education, as noted by the participant SwVI in this study, do not consider their educational needs. For example, cases of loss of answer scripts, as reported in this study, were common under the invigilation of non-specialist lecturers. The implication here is that SwVI would feel respected when they are invigilated with staff who are able to provide supportive services in the examination rooms as may be requested for by them.

Fairness in assessment for SwVI is seriously flouted when the assessment tasks are not adequately adapted to suit the educational needs of an individual student. The core aim of effecting adaptations to assessment tasks for SwVI is to assure them equal accessibility as their peers. Narrations from this study that questions related to diagrams and drawings were turned into descriptions in order for SwVI to access them acted as a great equalizer in education between SwVI and those without VI. This finding is in alignment with the finding from Acheampong et al. (2020), which revealed that questions consisting of tables, diagrams, and calculations were converted into descriptions instead to allow students to do them. Although findings from other researchers like (Nasiforo, 2015; Rodrick, 2021) were at variance with this finding since SwVI were given questions that included diagrams, charts, and tables. Nasiforo (2015) and Rodrick (2021) noted that lack of specialist staff for VI and presence of many lecturers who lacked cognizance in Special Needs Education were the reasons. According to UNESCO (1994), adaptations should be employed to a curriculum to cater for educational needs of SWDs. Once adaptations are not given due attention, learning of SDWs, including SwVI, becomes ineffective as accessibility to the teaching and learning contents, even the assessment tasks, is limited. Further, adaptations which are not appropriately done, as noted in this study, entail no help to SwVI, but a barrier. The narrations from the participant SwVI in this study that they failed to access some of the adapted questions for them exposed the fact that alienation of specialist staff for VI in the process of assessment is disastrous to SwVI. This connects directly to the conceptual framework which insists on strong collaboration between lecturers and braille transcribers in the assessment process for the assessment tasks to be user-friendly to SwVI. From the part VII: 27 (4) of the Persons with

Disability Act of 2010 in Tanzania, it is stated that any adaptation may be recognized as discrimination when it is not user-friendly to PWDs. Therefore, carefulness and expertise are much required when making adaptations in assessment tasks for SwVI.

In most regular universities where SWDs, particularly SwVI, are enrolled, most of the academic staff are not trained to handle their educational needs. Therefore, employing specialist staff like braille transcribers and ICT specialists who could help to provide support services to these students and advise academic staff on appropriate ways to handle their needs seems to be a compelling demand nowadays. This is in tandem with the findings by Lynch & McCall (2007) and Mosia & Phasha (2017), who found that specialist staff for VI helped to make transcriptions and advised teachers on the best ways to serve SwVI. In the assessment process, SwVI may suffer from different challenges like inaccessible examination formats, delay of their results, and prolonged completion cycle than expected due to incomplete and carry-over cases when there are no specialist staff to help them in the process. Studies done in educational institutions which had not employed specialist staff for VI reported discontentment from SwVI because they faced a lot of challenges in the assessment process as a result of absence of specialists (Kisanga, 2017; Muzata et al., 2019; Rodrick, 2021). This also is reflected in the conceptual framework which requires lecturers to be helped by braille transcribers where necessary for the assessment process to be a success. Additionally, the effectiveness of the service in the assessment process from the specialist staff for VI (Braille transcribers) depends much on their competence. When the braille transcribers are not competent enough in Special Needs Education, SwVI suffer a lot in the assessment process because errors that are committed by these transcribers, for example in braille transcription, would be counted on the students themselves when lecturers are marking. Furthermore, the braille transcribers require collaboration from both the academic staff (lecturers) and SwVI themselves to do the work in utmost excellence. As noted in the revelation from this study, sometimes carelessness from braille transcribers affected SwVI's performance in different assessment tasks. This is also in accordance with Kisanga (2019) and Ndume (2019), stating that incompetence of braille transcribers influenced the assessment process for SwVI. The relation is borne also to the connectionism theory which underscores the need for competent staff to be engaged in the assessment process to ensure that the whole process is accessible and fair to SwVI.

Furthermore, the availability of assistive technology is very imperative for the assessment process to be effective. However, the use of traditional assistive devices like slate and stylus and Perkins Braillers, as found in this study, seems to be challenging as the speed is not sufficient, and it also needs a third party's assistance for lecturers to access the answer scripts for marking. In this era where technological advancement is at its peak, the use of advanced assistive technologies like computers installed with assistive programs is highly recommended. Though the revelation under the current study that the willingness of SwVI to use computers was blocked due to a lack of technical skills on how to operate them discloses a pervasive problem which has been hindering the move to applying advanced technologies like computers. This is also noted by Morris (2014), who revealed that some SwVI preferred amanuenses to adaptive technologies like closed-circuit television (CCTV) in Welsh further education. This suggests that these SwVI lacked enough skills to operate these adaptive technologies, which is why they opted for amanuenses. Other studies by Kisanga (2019) and Rodrick (2021) revealed the same, that SwVI's desire to apply advanced technologies was not actualized for they lacked both training in computers and computers with pertinent programs. According to the connectionism theory under the law of readiness, students are likely to learn better when they like what they learn. The law further describes that when the students' desire is not granted, it leads to disappointment and lowered morale. For this case, the university should ensure that the desire of SwVI to use computers is met by providing them with training on how to use them. Otherwise, SwVI would be disappointed in the whole process of teaching and learning since they may consider it as not being respected and valued as their peers. According to Muzata (2021), the independence in learning is easily attained by SwVI when they possess appropriate knowledge in computers because they could be able to do assessment tasks given by their lecturers with ease. Additionally, one of the goals outlined in article 26 in the CRPD is to help PWDs actualize full independence in their life (UN, 2006). This independence needs to be real also in the assessment process for SwVI. It can only be achieved when the purchase of advanced technologies like computers and their related assistive programs, notetakers, and other devices is effected, and sufficient training being offered to both SwVI and their educators.

Conclusively, the discussion of findings in this segment was confined to the second objective of this study which sought to ascertain views of the stakeholders on the

suitability of assessment practices done for SwVI. The revelations from the participants brought in issues which really tallied with the demands of the objective. Mixed perceptions described under each assessment practice give deep understanding of the assessment process and how best it should be carried out.

## 5.3 Lecturers' experiences of assessing learning of students with visual impairment in the university X found in Tanzania

The effectiveness of assessment practices for SwVI is upturned when it takes a multi-disciplinary approach, especially in cases where lecturers are non-specialists in Special Needs Education. More so, SwVI themselves should be at the centre of the whole process. The collaboration among lecturers, braille transcribers, and SwVI in the assessment process found in this study demonstrates the portal to developing assessment practices that are fair and accessible. A study by Waterfield & West (2008) revealed that SWDs felt satisfied with assessment practices used by them because they were the ones who decided on them in collaboration with their lecturers. The study further reported that even their academic performance increased. VI is in varying degrees, so SwVI understand their educational needs better depending on the condition they have than any other person. Therefore, involving SwVI in the decision-making on the assessment practices promises a better and successful assessment process for them. Similarly, Redpath et al. (2013) noted that reasonable accommodations accorded to SWDs were sometimes costly because students had not been given an opportunity to choose assessment practices, but rather, they subscribed to options already decided for them. This suggests the disastrous side when SwVI are not involved in the decision-making about the assessment practices used for them. According to the 2006 CRPD, article 24, enhancement of active participation of PWDs in society should be enabled (UN, 2006). The promotion of the participation of PWDs, including SwVI, in society should start as early as possible from when they are at schools. Thus, involving them in deciding upon their assessment practices would be one way of promoting their participation in a society. Additionally, since non-specialist lecturers in Special Needs Education fall short of skills to support SwVI in the whole process of assessment, involving specialist staff like braille transcribers in the process would make assessment practices more accessible to students. This is in agreement with the conceptual framework adopted by this study, which states that the presence of strong ties among

lecturers, braille transcribers, and SwVI would lead to the development of assessment practices that reflect the educational needs of each student with VI.

In the same way, the contribution of the guidelines and policy in educational institutions, specifically developed for handling issues pertaining to SWDs, including SwVI, should be given due weight. The finding of the current study that lecturers used more of their experiences in the assessment process for SwVI due to a lack of institutional guidelines and policy exclusively for SWDs unveiled many inconsistencies in the process of implementing assessment among lecturers. Pathetically, SwVI were severely exposed to different inaccessible assessment practices due to this absence of guidelines. A similar finding was established by Muzata et al. (2019), who noted that the enforcement of some reasonable accommodations for SwVI, like additional time in the University of Zambia, was lowered down due to a lack of institutional policy on disability. The institutional guidelines and policy that describe diverse ways on how to support SWDs, including SwVI, are very essential as they assure the total observance of students' rights when there is any infringement. Simalalo & Hambulo (2019) argue that the presence of policy and guidelines for SwVI in the institution guarantees students a platform to demand accessible practices as inscribed in those documents. Additionally, institutional guidelines and policy help to harmonize the assessment practices for SwVI throughout the institutional units and departments. In fact, even the handbook for standards and guidelines for university education in Tanzania directs every Tanzanian university to establish a policy that handles the educational needs of SWDs in admission, learning, and assessment (examinations) (TCU, 2019). So, the lack of institutional policy on disability at this university X indicates a gap between policies and practices. When the institutional guidelines and policy are in place, coordination of the assessment practices becomes easy because descriptions of the duties of key players of assessment (lecturers, transcribers, and SwVI) are well elaborated. Consequently, cooperation among these entities grows strong as everyone will bend their efforts to fulfil their duties.

Generally, competences matter when it comes to issues of the assessment of SwVI. The narration by the participants in this study on the absence of capacity building workshops on how to support SwVI in the assessment process shows a weakness by the institution management in serving these students fairly. The same finding is

revealed by Nasiforo (2015), who reported that lecturers in the University of Rwanda missed training programs in Special Needs Education, a thing which, in turn, greatly affected SwVI as they suffered from exclusive assessment practices. The efficiency of educators in the field of assessment for SwVI becomes high when their knowledge and skills are updated every day and then through different workshops and career developmental programs organized by the institution. Scholars like (Morris & Sharma, 2011; Gitonga, 2014; Luque et al., 2018; Muzata et al., 2019) explained in their studies that educators lacked skills to accommodate SwVI in inclusive classrooms. This might have been exacerbated by a lack of training programs for these lecturers on how to support SwVI. However, it is noted that lecturers who lack pertinent skills and knowledge on how to support SwVI are likely to demonstrate negative perceptions towards them (Fraser & Maguvhe, 2008; Luque et al., 2018). According to the conceptual framework of this study, possession of any negative perceptions either towards SwVI or the assessment process itself yields to assessment practices that are inaccessible to students. Similarly, cooperation between lecturers and braille transcribers is highly jeopardized when lecturers have negative perceptions towards SwVI as the result of the lack of knowledge. The connectionism theory by Thorndike adopted in this study posits that for the assessment practices for SwVI to be accessible, it requires competent educators who are able to set them; otherwise, a more able expert in the field of Special Needs Education must be sought instead as per the proposition of the conceptual framework. Likewise, UNESCO (1994) insisted on the importance of training less experienced staff for inclusion to be successful. Therefore, training programs in all kinds should be taken seriously to ensure that lecturers and other stakeholders, in general, are provided with related skills and knowledge which would be used to support SwVI in different school walks such as the assessment process.

Surprisingly, notwithstanding that lecturers at the university X lacked continuous capacity-building workshops, and guidelines and policy on disability, still they had positive perceptions towards adaptations conducted for SwVI in the assessment process. In fact, one of the catalysts for these positive perceptions is ascribed to the presence of specialist staff: both lecturers and braille transcribers and the existence of a degree programme in Special Needs Education at the university; these indirectly helped to raise awareness on SwVI to other staff. These findings resonate with what Muzata et al. (2019) explained that despite the absence of institutional policy on

disability, it is professional for lecturers to support SwVI in combating different challenges they face in their studies. Further, Simalalo & Hambulo (2019) added that awareness helps enhance proper perceptions towards SwVI in schools. Actually, educational institutions where there are no specialist staff like braille transcribers, non-specialist lecturers in Special Needs Education find assessing SwVI as an unbearable activity. This was revealed by Nuru (2019) who found that non-specialist teachers claimed that assessing SwVI was a tough activity that should be carried on by specialist teachers only. This finding by Nuru (2019) suggests that in these inclusive schools specialist teachers were not present or were very few. Equally, the impact of specialist staff in Special Needs Education in an institution should never be neglected since, in one way or the other, they help to raise awareness to their fellow staff regarding the proper ways these SwVI should be served. Researchers like (Lyakurwa, 2019; Rodrick, 2021) established in their studies that SwVI suffered from inaccessible assessment formats as the result of the absence of braille transcribers. These findings are also in line with the propositions given by the conceptual framework that in schools where there are braille transcribers, coupled with a good link among them, lecturers, and SwVI themselves, the assessment process becomes no longer a tough experience to lecturers since these braille transcribers help to advise them on proper ways to assess SwVI. Therefore, it should be noted clearly that effecting adaptations on the assessment for SwVI is not favouring them; rather, it is in the observance of one of their fundamental rights in an educational system that regards equity and fairness to all.

Furthermore, the finding on delays in results for SwVI shows a long-standing problem, which other studies by (Kisanga, 2019; Muzata et al., 2019; Kimaro & Kapinga, 2020; Rodrick, 2021) have established. This means that many educational institutions still have a long way to go to fully realize inclusion for SWDs, including SwVI. According to the 2010 Tanzanian Disability Act (Part VII: 27 (1)), all PWDs across ages should be served equally as their peers since they share the same rights to education. So, providing results earlier to students without VI while SwVI are given the same results late signals some kinds of discrimination extension to SwVI. As it is obvious that one of the basic purposes of educational assessment is to improve students' learning and teachers' teaching (Dixson & Worrell, 2016; Black & William, 2018), failure to render timely feedback to SwVI about their assessment tasks would affect their learning styles

and teachers' pedagogical orientation to them. The same goes in agreement with the theory adopted in this study. According to the connectionism theory by Thorndike, for learning to take place, it should be paired with timely feedback. The sustenance or extinction of the behaviour, in this case, learning, depends on the immediate feedback attached to it. According to the law of effect under this theory, when SwVI are not provided feedback timely or are not given feedback at all, their learning is greatly affected. The power of timely feedback to students, especially with SwVI, should not be neglected as it helps them make adjustments in their studying styles, a thing which, in turn, leads to improved academic performance.

The discussion in this segment has dealt with the findings on lecturers' experiences in relation to the assessment of SwVI at the university X. The findings raised fitly answered the research question under this objective because they revealed different ways lecturers at the university X experienced the assessment. All the lecturers interviewed in this study, for example, regarded assessing SwVI as no longer a tough activity as compared to the early years of their university establishment because there are braille transcribers employed nowadays whose job is to assist the process run smoothly.

## 5.4 Chapter Summary

This chapter discussed the findings of the study on the stakeholders' perceptions of assessment practices for SwVI in Tanzanian higher education. The discussion of the findings was premised on the key findings established in this study following the research objectives. The researcher has discussed the findings in relation to the literature review, theoretical and conceptual framework. Similarly, the findings that seemed to differ from the findings revealed in the previous studies, the researcher has explained the possible reasons for that variance. The researcher again has discussed the findings in relation to the international and local protocols. Furthermore, this chapter has analysed the findings in relation to the ideal practices of assessment for SwVI.

# CHAPTER SIX: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 6.0 Overview

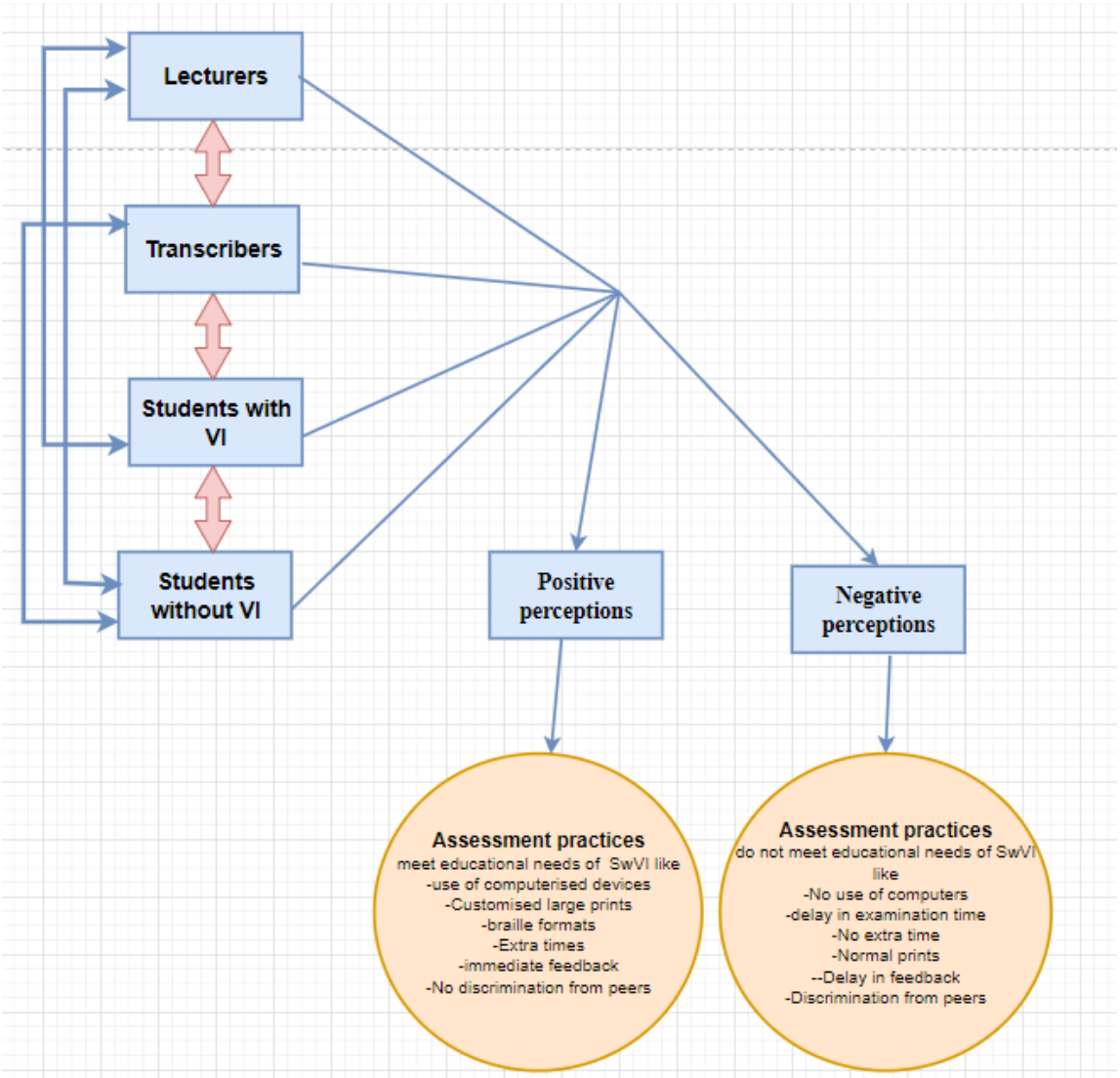
This chapter presents the summary of the key findings, conclusions, and recommendations arising from the findings of the current study. The findings of this study resulted from the exploration of the perceptions of stakeholders on assessment practices for students with visual impairment in a selected public university in Tanzania. This chapter is organized into five subsections: implications of theoretical and conceptual frameworks drawn from the study, the summary of key findings, conclusions from key findings, recommendations for practice, and recommendations for further studies.

## 6.1 Implications of theoretical and conceptual frameworks drawn from the study

The connectionism theory by Thorndike was adopted in this study to answer the research questions on the stakeholders' perceptions of the assessment practices for SwVI in a selected public university in Tanzania. The theory emphasizes the role of the connection between stimulus and response in the teaching and learning process. From this connection, it describes the core function of educators in ensuring that the assessment tasks (stimuli) composed are able to elicit appropriate responses from the students. Moreover, the researcher has discussed how the three laws (the law of exercises, effect, and readiness) are very significant in the assessment process for SwVI when they are applied appropriately.

However, in inclusive settings, the assessment process for SwVI requires a competent person with expertise in Special Needs Education for it to be effective. At this point, the conceptual framework comes in, whereby the braille transcriber is required to provide support to non-specialist lecturers in Special Needs Education to formulate assessment tasks that are accessible to SwVI. The conceptual framework demands lecturers, braille transcribers, and SwVI to work in collaboration for the assessment process in inclusive settings to be effective. Although from the findings of this study, it was noted that students without VI also play a significant role in the assessment process for SwVI, especially in formative assessments, thereby leading to a slight modification of the conceptual framework as follows:

**Figure 6:** Modified conceptual framework




***Source:*** *Emerged from the findings*

This implies that in the assessment process for SwVI in inclusive settings, the collaboration of lecturers, braille transcribers, SwVI, and students without VI promises assessment practices that are user-friendly to SwVI. Generally, the study findings confirm the applicability of the connectionism theory by Thorndike and the modified conceptual framework in understanding the educational assessment process for SwVI in inclusive settings.

## 6.2 The summary of key findings

SwVI were engaged in different assessment methods in which they did the same tasks as their peers. The university management provided different reasonable support services to SwVI in order to help them access the assessment tasks as their peers.

Although participants reported that reasonable support services were available for SwVI only in quizzes, tests, and final examinations, take-home assignments were not accompanied by reasonable support services. Consequently, SwVI were forced to depend wholly on their peers in doing their take-home assignments. Further, in group-related activities, SwVI and their peers had to be in the same groups to do these tasks. In the course of undertaking assessment tasks, SwVI encountered four kinds of challenges: Delays of assessment tasks, inaccessibility of assessment tasks, negative attitudes from their peers and lecturers, and the absence of their peers to assist in take-home assignments.

Besides, different assessment practices were revealed in this study. It was evident that SwVI were exposed to three kinds of examination formats (braille, large print, and oral formats). Other assessment practices like additional time, special examination rooms, provision of specialist invigilators, the use of assistive technologies, transcription, and adaptation processes. Generally, participant SwVI demonstrated mixed perceptions, with some perceiving some of the assessment practices as suitable to them while others had contrary perceptions. This suggests the importance of involving SwVI in the whole process of assessment since their views could be fitly used to develop assessment practices that suit each individual student with VI.

The implementation of effective assessment practices for SwVI is premised on the collaboration among the lecturers, braille transcribers, and SwVI themselves. Participants confirmed that lecturers and braille transcribers, on different occasions, had a tendency to convene meetings with SwVI to discuss suitable ways to handle assessment for them. Although it was reported that these three groups had never met in unison to discuss the same. The university X had no policy or guidelines specifically guiding how assessment practices should be for SwVI. Furthermore, the university did not launch any workshops specifically for raising awareness among the university populace on how to support SwVI in the process of assessment. As a result, lecturers and braille transcribers relied entirely on their own experiences to render service to SwVI during the assessment process, contributing to different assessment practices that varied among colleges, departments, units, and staff. Furthermore, SwVI faced some challenges regarding the receipt of their results, such as delayed results compared to their peers and results in inaccessible formats. Notwithstanding, lecturers demonstrated positive attitudes towards adaptations done for SwVI, and they

explained that the presence of braille transcribers and some assistive technologies simplified the process of assessment for SwVI.

## 6.3 Conclusions from the key findings

The mixture of SwVI with their peers in group-related activities is a good move to combat negative attitudes towards SwVI and enhance peer learning among students, including SwVI. This suggests that as more SwVI are encouraged to perform different assessment activities with their peers, social integration becomes stronger, creating a society with welcoming attitudes towards SwVI.

The use of advanced technologies like computers, assistive programmes, note-takers, and others promises autonomy and independence for SwVI in the assessment process. Effectiveness in the assessment process for SwVI is higher when there is the application of advanced assistive technologies than the use of traditional ones like Perkins Braillers and slate and stylus.

It should be acknowledged that SwVI are not similar. Each student with VI is unique and different from the other; thus, a one-size-fits-all approach is not applicable when administering assessment tasks to SwVI. Arising from the findings that participant SwVI had mixed perceptions on the suitability of assessment practices used for them implies that educational needs of SwVI should be handled on an individual basis.

In an inclusive setting, a multi-disciplinary approach in which SwVI are put at the center of the decision-making process on the assessment practices contributes to the bona fide assessment process, which observes fairness and equity for SwVI. A multi-disciplinary approach engages lecturers and other expert staff in Special Needs Education to work together to prepare assessment tasks that respond to the individual needs of students.

Inaccessible adaptations revealed in this study entail that not all adaptations should be regarded as enablers in the assessment process for SwVI. It can be concluded that the enabling power of adaptations should be appreciated for the ways they help minimize discrimination and maximize the inclusion of SwVI.

The lack of policies and guidelines on disability that exclusively address the issue of assessment for SwVI is the root of many inconsistencies and challenges faced in assessment practices for SwVI at the University X. This is because the findings

established that the lack of policy and guidelines on disability was a spark of many inconsistencies and challenges faced in the assessment process for SwVI.

## 6.4 Recommendations

The following recommendations made are premised on the findings established by this study:

i. The university under study should develop a policy on disability that elaborately describes how SwVI should be assessed
ii. Formative assessments should be given due attention by the university management, just as final examinations are handled. Formative assessments should not be left at the discretion of lecturers; the university management should find a way to monitor closely what lecturers do.
iii. Awareness-raising workshops and in-service development programmes in Special Needs Education should be prioritized in the university. The university populace should be educated constantly through workshops on how to support the educational needs of SwVI in the assessment process.
iv. The university should launch the special education unit in each college rather than the entire university depending on one education unit from one college.
v. The number of braille transcribers should be increased to increase efficiency in handling issues related to SwVI in the assessment process.
vi. The purchase of many advanced assistive technologies like computers with pertinent programmes for SwVI and note-takers should be made to facilitate SwVI obtaining unlimited access to them.
vii. Special training programmes should be organised constantly for lecturers, SwVI, and braille transcribers to orient them on how to operate different assistive technologies in the process of assessment practices.
viii. A profile should be developed for each individual student with VI in their first year of their studies at the university. This document should entail information on the educational needs of the student in the assessment process and the outline on how they should be met.

## 6.5 Recommendations for further research

i. This study explored the stakeholders' perceptions on the assessment practices for one category, both students who are blind and those with low vision; thus,

further studies could be done on other categories of disability like hearing impairment and others.

ii. This study confined its exploration to one public university, so further studies could be engaged in private universities and other levels of education like primary and secondary schools.

iii. Further investigation could be done to assess the readiness of the university, in general, to incorporate advanced assistive technologies in the assessment process, teaching, and learning process in general for SwVI.

iv. Factors that make the university management more engaged in final examinations than in formative assessments need to be further investigated.

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# APPENDICES

## APPENDIX A: Focus Group Discussion Protocol for Students with Visual Impairment

Name of the University: ……..

Date: ……

Nature of the group of SwVI involved: ……. [2nd Year/3rd Year]

Time: Starting Time …… Ending Time ……

1. Based on your experiences, describe assessment tasks that have been used by your lecturers to assess your learning.
2. How have these assessment tasks been administered to you? Describe all the practices involved.
3. How comfortable are you with all practices associated with educational assessments in your university?
4. How have you been involved by lecturers in deciding assessment practices for you?
5. What kind of assistive technologies are given to assist you when undertaking different assessment tasks?
6. How would you comment on the reactions from your peers without visual impairment in group assessment tasks that you have been engaged with them?
7. What are your views about the ways you think assessment practices should be done for you?
8. What other issues related to assessment practices for you would you like to talk about apart from what have already been discussed?

Thank you for your time

**APPENDIX B**: **Semi-Structured Interview Protocol for Lecturers**

Name of the University ……..

Date: ……

Time: Starting time …….. Ending time ……..

1. What category of students with visual impairment have you ever assessed in your courses? (students with low vision/students with blindness or both)
2. Kindly describe the nature of educational assessment tasks you have been using to assess learning of students with visual impairment in your courses.
3. How have you been administering these assessment tasks to SwVI? Kindly describe all practices.
4. Do you think SwVI have been accessing these assessment tasks easily as their peers without visual impairments do? If "Yes," how? If "No", why?
5. How have you been involving students with visual impairment in deciding on assessment practices to use for them?
6. Are there any documented guidelines offered by your university on how SwVI should be assessed? Explain the guidelines.
7. How do you comment on adaptations done to the assessment tasks for SwVI? Is it fair for them to have them? Kindly explain.
8. Based on your own experiences, how do you find assessing the learning of SwVI?
9. How do you comment on your professional relationship with braille transcribers in the whole process of assessment to SwVI?
10. What are your views on improving practices for assessing SwVI in your university?
11. What other issue would you like to recount on assessment practices for SwVI that has not been covered in our interview?

Thank you very much for your time

**APPENDIX C: Semi-Structured Interview Protocol for Transcribers**

Name of the University ……..

Date: ……

Time: Starting time …….. Ending time ……..

1. Based on your experiences, what positive and exclusive practices have been associated with assessment for SwVI in your university?
2. Do you think the outlined positive practices are really positive to all students with visual impairment? If "Yes," how? If "No", why?
3. Why do you think these exclusive practices to assessment for SwVI exist in your university?
4. How have you been cooperating with lecturers and students with visual impairment in ensuring that assessment practices are accessible?
5. How do you comment on the reactions of lecturers when they are told that they need to adapt their assessment tasks to meet the educational needs of SwVI?
6. How best do you think SwVI should be assessed in your university?
7. What else do you think is worthy of sharing about assessment practices for SwVI which has not been covered in this interview?

Thank you very much for your time

**APPENDIX D: Document Analysis Protocol**

University name: ……..

Date: ……

Part A: University published documents (Examination Guidelines/policies/charter etc.)

1. Are there any provisions with regard to assessment practices for students with visual impairment?
2. Identify all practices described in the university examination guidelines regarding students with visual impairment

Part B: End of semester Examination, test and assignment papers

1. Check if they are in proper formats accessible by students with visual impairment (Braille/large print formats)
2. Check whether large prints are in varying sizes depending on the degree of visual impairment students.
3. Check if the added time is indicated on the paper
4. Check whether the time added is varying depending on the degree of visual impairment of students

5. Checking whether the content of examination, test or assignment questions are accessible to SwVI

**Appendix E: Ethical clearance certificate**


# THE UNIVERSITY OF ZAMBIA
## DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

Great East Road Campus | P.O. Box 32379 | Lusaka10101 | Tel: +260-211-290 258/291 777 **Fax**: (+260)-211-290 258/253 952 | E-**mail**: director.drgs@unza.zm | Website: www.unza.zm


**APPROVAL OF STUDY**

***IORG No. 0005376***
***HSSREC IRB No. 00006464***

9th January, 2023

**REF NO. HSSREC:-2022- NOV-012**

Mr. Chiza Lawi,
School of Education,
P.O.BOX, 32379,
LUSAKA.

Dear Mr. Chiza Lawi,

**RE: "STAKEHOLDERS' PERCEPTIONS OF ASSESSMENT PRACTICES FOR STUDENTS WITH VISUAL IMPAIRMENT: A CASE OF A PUBLIC UNIVERSITY IN TANZANIA"**

Reference is made to your submission of the protocol captioned above. The HSSREC resolved to approve this study and your participation as Principal Investigator for a period of one year.

| REVIEW TYPE | ORDINARY REVIEW | APPROVAL NO.HSSREC:-2022- NOV-012 |
|---|---|---|
| Approval and Expiry Date | Approval Date: 9th January, 2023 | Expiry Date: 8th January, 2024 |
| Protocol Version and Date | Version - Nil. | 8th January, 2024 |
| Information Sheet, Consent Forms and Dates | □ English. | To be provided |
| Consent form ID and Date | Version - Nil | To be provided |
| Recruitment Materials | Nil | Nil |
| Other Study Documents | Questionnaire. | |
| Number of Participants Approved for Study | | |

Specific conditions will apply to this approval. As Principal Investigator it is your responsibility to ensure that the contents of this letter are adhered to. If these are not adhered to, the approval may be suspended. Should the study be suspended, study sponsors and other regulatory authorities will be informed.

**CONDITIONS OF APPROVAL**

- No participant may be involved in any study procedure prior to the study approval or after the expiration date.
- All unanticipated or Serious Adverse Events (SAEs) must be reported to HSSREC within 5 days.
- All protocol modifications must be approved by HSSREC prior to implementation unless they are intended to reduce risk (but must still be reported for approval). Modifications will include any change of investigator/s or site address.
- All protocol deviations must be reported to HSSREC within 5 working days.
- All recruitment materials must be approved by HSSREC prior to being used.
- Principal investigators are responsible for initiating Continuing Review proceedings. HSSREC will only approve a study for a period of 12 months.
- It is the responsibility of the PI to renew his/her ethics approval through a renewal application to HSSREC.
- Where the PI desires to extend the study after expiry of the study period, documents for study extension must be received by HSSREC at least 30 days before the expiry date. This is for the purpose of facilitating the review process. Documents received within 30 days after expiry will be labelled "late submissions" and will incur a penalty fee of K500.00. No study shall be renewed whose documents are submitted for renewal 30 days after expiry of the certificate.
- Every 6 (six) months a progress report form supplied by The University of Zambia Humanities and Social Sciences Research Ethics Committee as an IRB must be filled in and submitted to us. There is a penalty of K500.00 for failure to submit the report.
- When closing a project, the PI is responsible for notifying, in writing or using the Research Ethics and Management Online (REMO), both HSSREC and the National Health Research Authority (NHRA) when ethics certification is no longer required for a project.
- In order to close an approved study, a Closing Report must be submitted in writing or through the REMO system. A Closing Report should be filed when data collection has ended and the study team will no longer be using human participants

or animals or secondary data or have any direct or indirect contact with the research participants or animals for the study.

- Filing a closing report (rather than just letting your approval lapse) is important as it assists HSSREC in efficiently tracking and reporting on projects. Note that some funding agencies and sponsors require a notice of closure from the IRB which had approved the study and can only be generated after the Closing Report has been filed.
- A reprint of this letter shall be done at a fee.
- All protocol modifications must be approved by HSSREC by way of an application for an amendment prior to implementation unless they are intended to reduce risk (but must still be reported for approval). Modifications will include any change of investigator/s or site address or methodology and methods. Many modifications entail minimal risk adjustments to a protocol and/or consent form and can be made on an Expedited basis (via the IRB Chair). Some examples are: format changes, correcting spelling errors, adding key personnel, minor changes to questionnaires, recruiting and changes, and so forth. Other, more substantive changes, especially those that may alter the risk-benefit ratio, may require Full Board review. In all cases, except where noted above regarding subject safety, any changes to any protocol document or procedure must first be approved by HSSREC before they can be implemented.

Should you have any questions regarding anything indicated in this letter, please do not hesitate to get in touch with us at the above indicated address.

On behalf of HSSREC, we would like to wish you all the success as you carry out your study.

Yours faithfully,

Dr. J.I. Ziwa

**DR. J. I. Ziwa**

**ACTING CHAIRPERSON**
**THE UNIVERSITY OF ZAMBIA HUMANITIES AND**
**SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE - IRB**

**CC:** Director, Directorate of Research and Graduate Studies
Assistant Director (Research), Directorate of Research and Graduate Studies
Assistant Registrar (Research), Directorate of Research and Graduate Studies

**Appendix F: Permission letter to conduct research from a research site**

THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY
THE UNIVERSITY OF

Our Ref. No. AC/PF/1076/5 25th January, 2023

To: All Principals,
Deans,
Directors,
The University of

Re: Introduction Letter for Mr. Chiza Lawi

The heading above is in reference.

The aforementioned is a bonafide student of the University of Zambia, he has been granted research clearance by the Vice Chancellor of (UNZA) and he intends to conduct research at the University of ( ).

On the basis thereof I kindly introduce him to you and request your esteemed office for any necessary support that he may require in conducting his research at your College/School and Institute. The title of his study is *"Stakeholders' Perception on Assessment Practices for Students with Visual Impairement: A Case of Public University in Tanzania.* "He will conduct his research from 25th January, 2023 to 25th May, 2023.

Kindly do not hesitate to contact the undersigned in case of any queries.

Sincerely,

Prof.
Director-Research, Publications and Consultancy

C.C: Vice Chancellor
Deputy Vice Chancellor-Academic, Research and Consultancy

**Appendix G: Information Sheet**


**THE UNIVERSITY OF ZAMBIA**

**DIRECTORATE OF RESEARCH AND GRADUATE STUDIES**

**HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE**


| | | |
|---|---|---|
| Telephone: | +260-211-290258/353080 | P O Box 32379 |
| Fax: | +260-211-290258/293937 | Lusaka, Zambia |
| E-mail: | director.drgs@unza.zm | |


**Part I: Information Sheet**

**Introduction**

I am Lawi Chiza, a master student in the School of Education at the University of Zambia. I am doing a research on Stakeholders' Perceptions on Assessment Practices for Students with Visual Impairment: A Case of a Public University in Tanzania. I am going to give you information and invite you to be part of this research. You do not have to decide today whether or not you will participate in the research, you may take time to think about it, and then accept willingly. This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you should feel free to ask them.

**Purpose of the research**

The purpose of this study is to explore stakeholders' perceptions on assessment practices for students with visual impairment: a case of a public university in Tanzania. The study will be guided by three objectives. Firstly, to explore methods used to assess learning of

students with visual impairment in higher learning institutions in Tanzania. Secondly, to interrogate the suitability of the assessment practices used by lecturers for students with visual impairment in higher learning institutions in Tanzania. Thirdly, to establish lecturers' experiences of assessing learning of students with visual impairment in higher learning institutions in Tanzania. I believe that you can help me by giving me the information you have on stakeholders' perceptions on assessment practices for students with visual impairment: a case of a public university in Tanzania.

**Type of Research Intervention**

This research will involve your participation in semi-structured interviews. The semi-structured interview will take about thirty to sixty minutes.

**Participant Selection**

You are being invited to take part in this research because I feel that your experience as the lecturer can contribute much to our understanding and knowledge of stakeholders' perceptions on assessment practices for students with visual impairment: a case of a public university in Tanzania. The information obtained will be useful to help fairness and equal access of students with visual impairment in the educational system since assessment practices will be improved to cater their educational needs.

- Do you know why we are asking you to take part in this study?
- Do you know what the study is about?

**Voluntary Participation**

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate, it is fine and nothing will change. You are free to decide.

- Do you know that you do not have to take part in this research study, if you do not wish to?
- Do you have any questions?

**Procedures**

**A.** I am here to explore stakeholders' perceptions on assessment practices for students with visual impairment: a case of a public university in Tanzania. I am inviting you

to take part in this research project. If you accept, you will be asked to give me the details on how you perceive the assessment practices for students with visual impairment in your university.

**B. Semi-structured Interview**

I would like you to participate in an interview with me. During the interview, I will sit down with you in a comfortable place. If it is better for you, the interview can take place in your office. If you do not wish to answer any of the questions during the interview, you may say so and I will move on to the next question. No one else but the interviewer will be present unless you would like someone else to be there. The entire interview will be tape-recorded, but no-one will be identified by name on the tape. The tape will be kept safe and far from unauthorized individuals. The information recorded is confidential, and no one else except my supervisor, Dr. Muzata, will have access to the tapes. The tapes will be destroyed after the research report is produced and submitted successfully.

**Duration**

The research takes place over four weeks in total. During that time, I will visit you once or twice in case there is something I need you to clarify more and each interview will last for about 30 to 60 minutes each. If you decide to take part in the study;

- Do you know how much time will the interview take?
- Where will it take place?
- Do you know that we will be sending you transport to pick you up from your home?
- Do you know how much time will the discussion with other people take?
- If you agree to take part, do you know if you can stop participating?
- Do you know that you may not respond to the questions that you do not wish to respond to?
- Do you have any more questions?

**Uses of information**

The information we shall get from you will be used to help improve assessment practices for students with visual impairment in your university.

**Risks**

There is a risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable talking about some of the experiences and challenges you encounter during the assessment tasks. However, I do not wish for this to happen. You do not have to answer any question or take part in the discussion/interview/if you feel the question(s) are too personal or if talking about them makes you uncomfortable.

**Benefits**

There will be a direct benefit to you, since your participation is likely to help me find out more about how to improve assessment practices for students with visual impairment in educational systems, specifically Tanzanian universities. Further, the knowledge you will share with me will help come up with suitable strategies that lecturers in collaboration with transcribers and management will use to ensure that assessment tasks are accessible to students with visual impairment. Thus this will set a milestone in promoting equity and fairness in education accessibility to all students, including students with visual impairment.

**Reimbursements**

You will not be provided with any incentive to take part in the research because this is purely academic research intended for academic purposes.

- Can you tell me if you have understood correctly the benefits that you will have if you take part in the study?

**Confidentiality**

I will not be sharing information about you to anyone outside of the research team. The information that I am collecting from this research project will be kept private. Any information about you will have a number on it instead of your name. It is only me who will have this information. It will not be shared with or given to anyone.

**Sharing the Results**

Nothing that you tell me today will be shared with anybody outside the research apart from being published in the dissertation and nothing will be attributed to you by name. No information will be shared as this is a purely academic research.

**Right to Refuse or Withdraw**

You do not have to take part in this research if you do not wish to do so, and choosing to

participate will not affect your learning at school in any way. You may stop participating in the (discussion/interview) at any time that you wish without.

**Who to Contact**

This proposal or protocol has been reviewed and approved by HSSREC which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find about more about the IRB, contact:

Chairperson, Humanities and Social Sciences, Research Ethics Committee,

University of Zambia

P O Box 32379

LUSAKA

OR

Director, Directorate of Research and Graduate Studies

University of Zambia

P O Box 32379

LUSAKA

State if also it has been reviewed by a primary ethics committee by indicating an organization which may have reviewed the proposal. This primary ethics committee may be another university's ethics committee or a REC or IRB in another country) or an organization which is funding/sponsoring/supporting the study. Having granted ethical approval by a primary ethics committee in another country does not preclude obtaining ethics approval in a study country.

"Approval to conduct this research has been provided by the University of Zambia, in accordance with its ethics review and approval procedures. Any person considering participation in this research project, or agreeing to participate, may raise any questions or issues with the researchers at any time.

In addition, if you are/ or any person is not satisfied with the response of researchers may raise ethics issues or concerns, and may make any complaints about this research project by contacting the HSSREC on the address stated above. All research participants are

entitled to retain a copy of any Participant Information Form and/or Participant Consent Form relating to this research project.

**Part II: Certificate of Informed Consent**

I have been invited to participate in research on stakeholders' perceptions on assessment practices for students with visual impairment: a case of a public university in Tanzania. I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Print Name of Participant_____

Signature of Participant _____

Date _____

**Statement by the researcher/person taking consent**

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Print Name of Researcher/person taking the consent: **Mr Lawi Chiza**

Signature of Researcher /person taking the consent_____

**Date _____**

CONTACTS FOR QUESTIONS (Names, addresses and phone numbers of the following)

**Principal Investigator (Must be a local person and a Zambian).**

Names: Mr Lawi Chiza

Phone: +255 756 606 271/ +260 974 383 740

E mail: lawichiza@gmail.com

Physical address: P.O. Box 523, Dodoma