

**THE CHALLENGES OF PICTORIAL ILLUSTRATIONS IN TEXTS FACED BY
STUDENTS: THE CASE OF THE
UNIVERSITY OF LIMPOPO IN LIMPOPO PROVINCE, SOUTH AFRICA**

by

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DECLARATION

I declare that this dissertation, submitted to the University of Limpopo, for the degree, Master of Arts in English Studies titled **THE CHALLENGES OF PICTORIAL ILLUSTRATIONS IN TEXTS FACED BY STUDENTS: THE CASE OF THE UNIVERSITY OF LIMPOPO IN LIMPOPO PROVINCE, SOUTH AFRICA** has not been previously submitted by me for a degree at this or any other university; that this is my work in design and execution, and that all material contained herein has been duly acknowledged.

Name: Matshanisi N Date 02ND MAY 2022

DEDICATION

To my beloved laid parents and the whole Matshanisi family and relatives, this is for you.

ABSTRACT

This study explored the challenges of pictorial illustrations in texts faced by Students: The case of the University of Limpopo in Limpopo Province, South Africa. The study seeks to contribute to the process of understanding pictorial illustrations in a teaching and learning environment, where there are VI (visually impaired) students. This study employed a qualitative research approach, and interviews were used to collect data from the respondents. The respondents were ten VI students, five lecturers in the English discipline and two braillists from Reakgona Disability Centre. The selection was based on the roles they play in the learning and preparing of learning materials for VI students. The overall findings from the VI students were that pictorial illustrations are challenging when students are learning English language courses. It was established that pictorials materials exclude and confuse VI students when they are learning. Those pictorials also discourage participation of VI students, as they cannot see the pictorials. On the other hand, lecturers have challenges in explaining and describing pictorials during lessons. Again, it was discovered that when developing pictorial illustrations VI students are not taken into consideration because most content always includes pictorials. The overall findings from the braillists were that English language learning materials with pictorial illustrations are not easy to convert to braille and to enlarge for VI students. The study recommended ways to deal with pictorials in lessons and materials. For example, workshops to help lecturers to accommodate VI students in the learning environment. The study encouraged a good working relationship to assist VI students to overcome pictorial challenges in English courses. This study was intended to offer assistance in terms of the challenges experienced by V1 students with regard to pictorials illustrations in English language learning materials and courses.

Key terms: Pictorial illustrations, Braille, Visual impairment, English Language, teaching /learning materials

LIST OF ABBREVIATIONS AND ACRONYMS

1. ELL - English Language Learning
2. ESP - English for Specific Purposes
3. JAWS - Job Access with Speech
4. MTT - Ministerial Task Team
5. SA - South Africa
6. SAHE - South African Higher Education
7. SL - Second Language
8. SMDT - Social Model of Disability Theory
9. VI - Visually impaired

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CHAPTER ONE

INTRODUCTION & BACKGROUND

1. INTRODUCTION

Lack of awareness and understanding of individual learner differences still exists in the area of lecturing and learning in different higher education institutions in South Africa (Bilal, 2017:16). While several factors may be attributed to this lack of awareness and understanding, special attention needs to be paid to the materials used in learning and lecturing as these materials have both a negative and positive impact on various students with different needs.

Just as this challenge exists in teaching and learning in South African higher institutions, it is evident that this conundrum exist globally as well. This was made evident by various scholars from different countries around the world, who wrote extensively on the subject. For example, Naiki (2017; 146-152) asserts in his study that there are challenges in terms of pictorial illustrations that students with special needs experience. This author focuses on visual impaired students, as they need special materials during presentations in lecture halls. He further explains that VI students in European higher institutions struggle to receive full information about what was written on the presentations during lessons. This was because many pictorials were not explained and described. He also argued that the devices used to read the learning materials could not read what was drawn on the presentations, as it was not words. This means that the device used by VI students read words instead of pictorials.

This research was a shred of clear evidence that a lack of materials for VI students existed in different parts of the world. In addition, a research report by Stone, Kay & Reynolds (2016; 225-237) explains how lecturers used signs during lessons. It also likewise explains how VI students fail to grasp information on different topics, and how lecturers struggle to give verbal descriptions when using materials and texts with pictorial illustrations during learning and lecturing. In other words, this research study supports that there is a lack of inclusive teaching and learning materials for VI students. Thus, it additionally emphasises a lack of pictorial illustrations that are well-explained.

Another study by Hasper et al. (2015), focused on VI students' experiences with their lecturers, it was reported that many lecturers failed to provide instructions in a way that included VI students. The materials used were not accessible to VI students. This implied that inaccessible materials in learning and lecturing led to exclusion of VI students.

This chapter provides the background of the study, which states various definitions of the concepts namely; abled, disabled and pictorial illustrations from different scholars. It goes on to discuss different types of impairments. Thereafter, the challenges related to teaching and learning materials and texts are discussed. The background also identifies a link between teaching, learning and inclusion of materials and texts with pictorial illustrations in English courses. The research problem together with the aim and the objectives of the study are acknowledged. The research questions and limitations, the significance of the study, dissertation outline, definitions of key terms, the summary of the chapter and the conclusion are stated.

1.1 BACKGROUND AND MOTIVATION

The teaching and learning of English in South Africa has created a gap between abled and disabled students (Morelle, 2016; 13). Aabled refers to students who are not limited to performing various tasks and physical activities (Bilal, 2017; 25-26). In other words, abled students have a chance to perform various activities with little assistance. Moreover, abled students can learn in mainstream schools. In contrast, disabled students are defined as those who suffer from limitations in performing various activities and tasks. This means that students who are disabled have difficulties in performing various activities. For instance, in a teaching and learning environment, they may have difficulties in reading and will need various supportive learning materials, for instance, Braille and electronic materials to reach their full potential learning outcomes.

Moreover, learning is considered as challenging for students living with various disabilities; and visual impairment, deafness and physical are some of the examples (Negash: 2017; 52). It is argued that although different types of disabilities bring challenges in learning, VI have the most difficulties in terms of material and texts inclusion during lecturing and learning of English courses. This is often seen in

materials and texts with pictorial illustrations (Negash, 2017; 55). This means that VI students suffer in terms of material inclusion especially those with pictorial illustrations. Pictorial illustrations are defined as a particular kind of image that is used in conjunction with a text (Lew, Kazimierczak, Tomcrak & Leszkiwicz, 2017; 53). Additionally, pictorial illustrations emphasise the meaning of different lecturing and learning materials during English lectures. On the other hand, Klosa (2015) claims that pictorial illustrations are configurations of dots or lines. Klosa further concludes that pictorial illustrations include drawings, cartoons, structures, symbols and figures. This means that pictorial illustrations support and emphasise what is written in texts and materials in learning and lecturing.

Visual impairment is a type of disability that limits someone from performing visual activities and tasks because there is a lack of vision. Kurtz, Elliott, Lemmons, Zigmond, Kloo, & Kettler (2014:24) state that visual impairment is defined as an inability to see at a distance of not more than six meters. It can also include partial sighted. Again, the VI category includes people with low vision and total blindness (Carpenter, 2021). Hence, there are several challenges in learning. However, VI seems to be one of the types of disabilities that affect students' learning and performance in academics (Morelle & Tabane, 2019; 01). Wildsmith-Cromarty & Balfour (2019) state that this is often evident in the teaching and learning of different languages like Tshivenda, Xitsonga, Sepedi, Afrikaans, Sesotho and Second Language which is English to mention a few. In relation to the above statement, the English language is the one selected for this study, as it encompasses numerous topics including syntax, phonetics, lexicography, and cartoons, just to mention a few. Some of these aspects of English require lecturers to use pictorial illustrations to convey and clarify information to students with different needs (Ministry of Education, 2002).

The use of pictorial illustrations in lecturing materials has a negative impact on VI students, as they may have difficulties in firmly grasping visual illustrations (Stone, Kay & Reynolds, 2016; 230). Consequently, the lecturer's inability or struggle to explain pictorials may lead to failure, poor performance and misunderstanding of the information and message. To use phonetics as an example, Alim (2004; 41) states that there are many phonetic symbols that are easy to explain and describe and those that are not easy to explain and describe to the students during lessons. Therefore, phonetics is seen as one of the types of pictorial illustration which is difficult to explain

and describe to VI students. Though phonetics such as [p], [s], [g] and [b] are easy to explain and describe to VI students during lecturing, there are the phonetics that can give lecturers challenges in terms of describing. For a case, a lecturer may use phonetic symbols such as: [ʒ], [Ú], [ǎ], which are difficult to explain and describe to VI students. As a result, VI students may not get enough knowledge about different categories in English courses that include pictorial Illustrations. For example, English phonetics in itself would be an obstacle to the student's effective learning. Using this example, it can be argued that such learning challenges faced by visually impaired students have been ignored for many years in various universities around the world (Asamoah, Ofori-ua, Cudjoe, Abdullah and Nyarko, 2018:2).

In view of the foregoing assertions, this study intended on shedding a light on the challenges faced by visually impaired students in the learning English language specifically where pictorial illustrations are used. The study also will also contribute to the literature by suggesting strategies that lecturers could use to assist the VI students to achieve learning. The findings of the study will help to improve the teaching and learning of VI students at the University of Limpopo and perhaps beyond. In addition, the results of the study will assist lecturers to establish and improve the skills necessary to explain essential pictorials illustrations to VI students. Also, software developers will be informed on how to create better software that can assist visually impaired students in their learning process. Designers of English course materials will be able to acknowledge the need to incorporate dictation into pictorial illustrations for VI students. Overall, this study will improve teaching and learning for VI students at the University of Limpopo.

1.2 RESEARCH PROBLEM

Just as there has been anticipation regarding the lecturing and learning of different topics in English courses for many years, the use of pictorial illustrations in English lecturing and learning materials as well as texts has been relatively ignored. This ignorance led to the challenge of exclusive education, which affects VI students in terms of materials and information accessibility during lessons. The problem of learning and lecturing VI students using materials and texts with pictorial illustrations pose a problem also to English courses lecturers, as they are not aware of the strategies used to explain pictorials (Riskoand, 2016).

Presently, there are concerns and call for fair and accessible materials for lecturing and learning using materials with well-explained and described pictorial illustrations in English in different categories of various courses in higher institutions (Lamischane, 2016;19). This is due to the fact that the English course materials have pictorial illustrations that are not in words. Additionally, lecturers are not aware of the strategies to teach using materials with pictorial illustration. Also, there are no assistive devices that can explain pictorials in words. It is for this reason that this research investigates the challenges encountered by VI students when dealing with pictorial illustrations in teaching, learning texts and materials.

The use of different teaching and learning materials in educational environments affects how learning is facilitated during lectures. In particular, students who are visually impaired find it difficult to learn using different learning materials, especially those that contain pictorial illustrations (Perniss, 2018). Furthermore, English courses are complex and have categories with content that contain cartoons, graphs and symbols, and this is the reason why teaching English as a course to visually impaired students using texts and learning materials with pictorial illustrations is considered a very complicated task. Cope & Kalantzis (2012) is of the view that unlike words, pictorial illustrations are rarely explained, lecturers usually show slides of pictures without explanations. Hence, Morelle (2016:41) highlights that lecturers find it difficult to teach content with pictorial illustrations to VI students, which results in their inability to understand and grasp important information during teaching and learning. Consequently, this problem limits information accessibility to blind students, which in turn leads to poor performance.

This study aims to explore the challenges faced by visually impaired students at the University of Limpopo with regard to pictorial illustrations. Consequently, it focused on finding out the type of devices used by students to read content with pictorial illustrations in order to provide some remedial interventions to these challenges and hopes to help visually impaired students in the English discipline at the University of Limpopo.

1.3 AIM OF THE STUDY

The aim of this study is to explore, identify and probe challenges faced by visually impaired students when dealing with pictorial illustrations in teaching and learning materials, with specific reference to students in the English discipline at the University of Limpopo.

1.3.1 OBJECTIVES

The objectives of this study are

- To explore challenges faced by VI students when dealing with pictorials in English learning lectures as perceived by them.
- To investigate strategies English lecturers use to teach pictorial illustrations to VI students.
- To identify the challenges faced by braillists when brailleing texts with pictorial illustrations.
- To suggest strategies that lecturers can use to improve teaching texts with pictorial illustrations to visually impaired students.

1.4 RESEARCH QUESTIONS

1.4.1 PRIMARY QUESTION

- What challenges do pictorial illustrations pose in teaching and learning materials used for VI students in the English discipline at the University of Limpopo?

1.4.2 SECONDARY QUESTIONS

- What are the challenges faced by VI students (as perceived by them) when dealing with pictorials in their English lectures at the University of Limpopo?
- What are the challenges faced by lecturers in the English discipline while teaching using materials that contain pictorial illustrations?
- What are the strategies employed by lecturers in the English discipline to teach materials that contain pictorial illustrations?
- What are the challenges faced by braillists when brailleing texts with pictorial illustrations?

1.5 SIGNIFICANCE OF THE STUDY

This study is crucial as it will pave a better lecturing and learning of VI students in the English discipline at the University of Limpopo. This will result in VI students not left out without on how to analyse different features in pictorial illustrations within English courses. In addition, this topic is relevant, as it gives strategies to improve content or topics with pictorial illustrations to VI students in the English Studies Discipline at the University of Limpopo. Moreover, it is significant to conduct this topic, as it creates inclusivity in English teaching and learning materials. This study is linked with the right to equal education. For this reason, the study will help English language lecturers to give equal attention to VI and abled students during lectures.

Therefore, this research likewise added to the gap of information about visually impaired education. Additionally, the study will enlighten other scholars who have an interest in inclusive education to improve the dictation of materials that contain pictorial illustrations in English courses. For example, there was a study that was done by Carpio, Amérigo & Durán (2017; 525-542) in Europe, which promoted an inclusive intervention programme in pictorial perceptions with VI students. The aim of the study was to include VI students as far as pictorials are concerned. The study also implemented inclusive education for VI students and effective learning of pictorials.

Also, a study done by Axel & Levent in 2003 give several guidelines on how to give verbal descriptions of different pictorial illustrations in inclusive education. They also suggest the style and techniques that use words instead of pictorials in a class with VI students. These two above given examples suggest that there is a need for different scholars to include VI students when developing numerous learning English courses materials with pictorial illustrations.

On that note, the research intendeds to assist in development of the software and devices. This will encourage the developers to develop devices and software that will explain pictorial illustration in material and texts that are used in English language courses.

Additionally, this study will help RDC brailist to find a solution to challenges that they face when brailleing learning materials for VI students in the English discipline. It will assist the University of Limpopo to improve the lecturer's skills when it comes to

teaching students with eyesight problems. It will promote dissemination of fair information during lectures. The next section will discuss the scope of the study.

1.6 SCOPE OF THE STUDY

This research seeks to explore, identify and find challenges of pictorial illustrations in texts, teaching and materials with specific reference to VI students and lecturers in the English Department at the University of Limpopo. It further identifies the strategies to teach content or sections that include pictorials in English courses. Again, it highlights the challenges faced by braillists when dealing with pictorial illustrations during learning materials conversions. It also gives strategies to reduce those challenges in greater in-depth. It discusses the challenges of pictorial illustrations in English Language Learning (ELL) with specific reference to VI students in the English discipline. It gives perspectives on pictorial illustrations based on English language courses, as well as impacts and strategies to lecture content with pictorial illustrations. The limitation of the study is discussed below.

1.7 LIMITATIONS OF THE STUDY

This study focused on the VI students at the University of Limpopo who are in the English discipline. The research selected English topics or categories that contained pictorial illustrations. The research also focused on pictorial illustrations in the English language. It selected lecturers who teach VI students in the English department at the University of Limpopo. This research was also limited to braillists who are responsible for converting English courses materials for VI students. Additionally, the study was only limited to interviews as other methods will pose challenges to the respondents and the researcher. The key terms of the study are discussed hereunder.

1.8 DEFINITIONS OF KEY TERMS

1.8.1 Pictorial illustrations are defined as a seeing stage that uses a visual representation of a concrete object for language learning.

1.8.2 Language teaching/learning materials are any materials that are used to enhance the teaching to be more effective during English language classes.

1.8.3 Visually Impairment is a term that experts use to describe any kind of vision loss, and that includes someone who cannot see at all or who has partial vision loss.

1.8.4 English Language Learning refers to the learning of English language by students of any age with different native languages. This learning activity may include learning English to perform different purposes. For example, learning English language for writing, and speaking purposes.

1.8.5 Braille is defined as a form of written language for blind people in which characters are represented by patterns of raised dots that are felt with the fingertips.

1.8.6 Large prints materials are those with easy type size to read for people with low vision.

1.9 DISSERTATION OUTLINE

The thesis was divided into five chapters as follows (see Table 1.1 below):

Table 1.1 The five chapters of the study

Chapter	Description
1	<p>General introduction</p> <p>This chapter consisted of the introduction and background of the research, which includes definitions of concepts namely: abled, disabled, pictorial illustrations and visual impaired. It also focused on pictorial illustrations in teaching and learning texts. Thereafter, it states the problem statement, the purpose of the research and objectives of the research, the research questions, the significance of the study, the dissertation outline and the summary.</p>

<p>2</p>	<p>Literature review</p> <p>This chapter discusses both classical and current research works on pictorial illustrations; teaching and learning and the impact of pictorials in teaching; and learning. Therefore, the review was divided into the following sections: introduction; role of the theory, history of VI students in South African Higher Institutions; challenges faced by VI students when dealing with pictorial illustrations in learning texts and materials; perspectives on pictorial illustrations in texts; pictorial illustrations in lecturing materials and the impact of pictorial illustrations on learning, conclusion and the summary.</p>
<p>3</p>	<p>Research methodology</p> <p>This chapter looked at the research methodology used in the research to gather and analyse the data. The chapter was therefore divided into the following sections, namely: Introduction; research design; Research methodology population and sampling, data collection and analysis; the quality criteria, ethical considerations, conclusion and the summary of the chapter.</p>
<p>4</p>	<p>Data analysis</p> <p>This chapter presented the data, analysis and interpretation.</p>
<p>5</p>	<p>Summary, recommendations and conclusions</p> <p>This chapter brings the thrust of the research together by paying attention to the findings, conclusions and recommendations of the study. The chapter was divided into five sections as follows: introduction, findings, conclusion, recommendations and summary.</p>

1.10 SUMMARY

In general, this chapter served as the root of the thesis. The chapter presented the introduction and the background to the study which discussed the definitions of concepts; abled, disabled, pictorial illustrations and visual impaired types of impairment and the effects of pictorial illustrations in teaching and learning. The problem statement, the purpose of the study, objectives, research questions, limitations, and significance, scope of the study, definitions of key terms, dissertation outline and conclusion were clearly stated.

1.11 CONCLUSION

This chapter served as the first eye of research and its continuation to different chapters gave a clear foundation of the research's main problem and why there was a need to investigate challenges encountered by VI in texts and materials that contain pictorial illustration in teaching and learning in English courses. The next chapter will discuss both classical and current research works on pictorial illustrations, teaching and learning and the impact of pictorials in teaching and learning.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This study investigates the challenges faced by visually impaired (VI) students when dealing with pictorial illustrations in texts, teaching and learning materials with specific reference to students in English discipline, and also examines how these challenges can be lessened or circumvented. This study illuminates possible dichotomies that may exist as far as these pictorial illustrations based challenges are concerned. In drawing on the theoretical framework of the Social Model of Disability Theory (SMDT) by Mike Oliver (1983), the focus is on the work of the scholars who have made inroads in the fields of language including language teaching and language studies wherein, abled and disabled students are concerned, through theoretical development and empirical research (Meyers & Stephen, 2014: 403-424.).

In addition, this chapter presents the theoretical foundation upon which this study is grounded. It does so by discussing the literature that is congruent. It addresses the history of VI students in higher institutions in South Africa (SA), challenges faced by these students and perspectives on pictorial illustrations in texts. It also discussed pictorial illustrations in teaching and learning materials and the impacts of pictorial illustrations on learning. Finally, a conclusion and a summary are provided. The theoretical foundation is presented below.

2.2 THE ROLE OF THEORY

Morelle (2016) proposes that theories are developed to ground and support studies in different fields. For example, language studies and empirical science studies. This means that theories are developed to strengthen meaning in different studies or thesis in various domains of teaching and learning. This study is grounded on the Social Model of Disability Theory (SMDT) by Mike Oliver (1983). The SMDT is the theory that looks at how individual people living with disabilities may be protected from abled people's exclusions in particular situations in terms of their needs in different settings (Oliver, 2013: 65). In other words, this theory focuses on protecting people living with

disabilities from exclusions in terms of their needs in various instances. That applies to the teaching and learning environment, materials of lecturing and learning and information accessibility to mention a few. Though this theory focuses on exclusions practised by abled people, it selects impairment as the main concern. This means that VI people are considered to be the disability category that suffers in terms of inclusion in various activities and participation.

SMDT is governed by the belief that there is a need for change to limit exclusion and prejudice between the abled and disabled in different situations. In other words, this belief encourages inclusivity and fair treatment in various situations. For example, in lecturing and learning situations.

Ibid (2004) further adds that this theory ensures fair sharing methods during teaching and learning especially where VI students are included in academic settings. For instance, in lecture halls. This implies that the SMDT includes methods of sharing information that is not exclusive to VI students in a lecture hall and learning materials.

Since this study investigates challenges faced by VI students when dealing with pictorial illustration in texts as well as teaching and learning materials in the English discipline, the SMDT is relevant for this study because it allows equal education for all students with different needs in this case abled and disabled students (Oliver, 2004:19). However, in lecture halls where VI students are learning with abled students, equality in terms of education is not happening. This is because the teaching and learning materials do not accommodate VI students, “especially because these teaching and learning materials include pictorial illustrations that are not explained and described in words to accommodate those students” (Emerson & Anderson, 2018: 158). As a result, the truth is that VI students are not receiving equal education as compared to abled students. For instance, in an English lecture hall where students learn using materials with pictorial illustrations such as cartoons, and syntax structures, just to mention a few. VI students do not receive equal information as abled students. For this reason, there is no equal education for VI and abled students. This is also supported by the below arguments; namely untrained lectures and workshops about lecturing VI students.

a. UNTRAINED LECTURERS

Asamoah et al. (2018; 3) argue that there are untrained lecturers who are teaching VI students. For this reason, abled and disabled students do not receive fair attention in terms of needs. For example, an untrained lecturer may struggle to provide the teaching and learning materials that accommodate VI students. Instead, a lecturer may accommodate abled students. In a lecture hall, this happens when lecturers teach using texts that include pictorial illustrations, and they do not explain the pictorials in words to accommodate VI students. Below is the discussion of workshops about lecturing VI students.

b. WORKSHOPS ABOUT LECTURING VI STUDENTS

Just as different universities have workshops about learning, more needs to be done to remove the ignorance of lecturers in different disciplines. Ibid (2018) is of the view that there is a need for workshops to lecture VI students. These workshops help lecturers in the English discipline to have a light on how to lecture VI students and abled students when there are materials with pictorial illustration in English lectures and lessons. The workshops are a way of granting equal education during learning.

The SMDT is supported by the Needs Analysis Theory (NAT) by Hutchison and Robinson. The NAT take into account the needs of students. In other words, it takes the needs of students as important in a target situation, in this case in a lecture hall. For example, this theory supports equal education by ensuring inclusivity between students with different needs in lecture halls and lecturing and learning content and materials, the next section discusses the implications of SMDT.

2.2.1 SOCIAL MODEL OF DISABILITY THEORY: IMPLICATIONS FOR LANGUAGE TEACHING

The use of SMDT in this study is a way to deal with challenges in language teaching in different institutions of higher learning. The implications if SMDT discusses issues of equal education in lecture halls, wherein VI students are included, and there is equality in lecturing and learning materials, information accessibility and attention. It also discusses the benefits of SMDT in language teaching and learning environment with specific reference to English Language Learning (ELL) and the benefits of SMDT

in understanding predicaments faced by VI students and lecturers in those environmental phases.

2.2.1.1 Issues of equal education in lecture halls

Lecturing students with different needs is a complicated task that needs understanding and support from different areas. Therefore, in English language learning lecture halls, it is not easy to achieve equality in education between abled and disabled students. In this case, VI students.

The use of SMDT in this study helps lecturers practise equality in education in lecture halls. This equality happens by providing needs for all students. In other words, SMDT ensures needs that are equal between abled and VI students. By the use of this theory, all students receive explanations and descriptions of materials and content that include pictorial illustrations in ELL. Also, every detail or visual activity are prepared and instructed to include all students with different needs. For instance, at the University of Limpopo herein, maps show different locations and the kind of English dialects spoken in society course, and the information on the map is explained in full detail to accommodate VI students in a lecture hall. SMDT influences equal education for all students with different needs in lecture halls through explanation and description. Consequently, SMDT in this case, help lecturers to explain and describe a strategy, which will equal education for all student in the ELL lecture hall where pictorial illustrations are used. The next section discusses equality in teaching and learning materials.

2.2.1.2 Equality in teaching and learning materials

Preparing and selecting teaching and learning materials takes hard work for ELL lecturers who are committed to their work. In addition, it is not easy to decide on which materials to use as students have different materials needs. This implies that lecturers find it difficult to specifically prepare and select materials to suit students with different materials needs and preferences. For this reason, the use of SMDT helps the lecturer to prepare teaching and learning materials on time in order to accommodate VI and abled students. In other words, it helps English discipline lecturers to prepare materials in different formats. For example, lecturers may prepare materials in large print before they go to lecture halls. Again lectures may try to limit pictorials and explain them. As

a result, this helps lecturers to use teaching and learning materials that accommodate students with different situations and needs. SMDT helps ELL and lectures to promote equality in teaching and learning materials. The following paragraph discusses equality in information accessibility.

2.2.1.3 Equality in information accessibility

Amatos (2002) states that In the lecture hall where lessons take place, there is much information to share. This is due to the fact that there are many topics in ELL and all of them need attention. Hence, it is not easy to find out if the sharing of information reaches all students, especially in the information that contains pictorial illustrations, as far as VI students are concerned. SMDT advocates for accessibility in terms of information in the learning and educational environment. For this reason, this theory helps lecturers to share all the information written in the texts and teaching and learning materials with pictorial illustrations. This theory does so by encouraging lecturers and being able to share what they are showing and seeing during lessons. For example, in English for Specific Purposes (ESP) lessons, where the information about different learning theories are shown in a form of drawings can be shared in words. SMDT in this case helps lecturers of English disciplines to share information without excluding VI students. Also, it helps VI students to understand what was being taught. Additionally, abled students gain the strategy to share information to help VI in learning. The next paragraph discusses equality in attention.

2.2.1.4 Equality in attention

Lecturers are faced with a difficult task because different students need attention. They are sometimes faced with a diverse group of students in the same lecture hall, and lecturers may struggle to provide the needed attention to a certain group of students due to a lack of awareness (Wang, Rush & Horton (2017) As a result, the use of SMDT helps English language lecturers to realise the students' needs and give them attention based on their needs. In other words, lecturers must give equal attention to abled and VI students. For instance, in ELL classroom a lecturer may give VI students attention when lecturing pictorial illustrations in different sections. Therefore, it also creates

awareness in terms of the attention that VI students should receive during lessons where pictorial illustrations are taught.

Based on the above-discussed benefits. The SMDT addresses English language teaching issues because there will be an improvement in lecturing of VI students as far as a pictorial illustration in teaching and learning materials and texts are concerned. As there will be an improvement in lecturing and learning of this nature, inclusivity and equality in education will be redressed.

Materials are full of words and explanations rather than pictorials. Again, the English language performance will also be fairly improved. The theory will also be beneficial to the ELL environment. It will create an environment where the needs of abled and disabled students are equally and fairly met. This implies that every student will receive the needs that they deserve regardless of their disabilities status. The theory helps to fill the gap in terms of challenges faced by VI students when dealing with pictorial illustrations in texts used during teaching and learning materials. In addition, it assists English language lecturers to find strategies and methods to lecture pictorial illustrations to VI students.

This section discussed the issues related to the SMDT that rounded this study. It has also discussed the implications of the SMDT in relation to ELL. The section below discusses the history of VI students in higher institutions in SA.

2.3 HISTORY OF VI STUDENTS IN HIGHER INSTITUTIONS IN SA

This section presents the history of South African Higher Education (SAHE) for VI students during apartheid and post-1994. Although learning is considered an important aspect of life, during apartheid VI students were excluded from the Higher education system. Mutanga (2017; 135) argues that many VI students were not in higher education institutions. For few VI students who were forced to go to universities to learn, the higher education system segregated them in terms of needs accessibility and equal education opportunities (DOE, 2001). This means that VI students did not enjoy fair accessibility of information when learning in higher institutions in SA. Moreover, the historical imbalances of apartheid towards VI students continued to promote failure to exclude students with different needs in SAHE. As a result, VI

students continued to suffer in terms of inclusive education in higher institutions (Ibid, 2017; 139). This section continues to discuss the history of VI students SAGHE in post1994.

Howell (2006) explores the historical context of South African Higher Education (SAHE). In the exploration of the history of VI students in SAHE. Equity policies were created to increase the participation of black students in higher education. Though the equity policies were created to increase participation access in SAHE VI students continued to be excluded from higher education.

Howell (2006) further argues that analysis from different policies developed in some studies explores the experience of VI students. For example, in 2007, there was a study that explored challenges faced by VI students in increasing access and participation in SAHE in the work of White Paper 6 and the National Plan for Higher Education. The study established that challenges that are faced by VI students in higher education institutions are about inequality. These challenges also include team lecturing and learning support and resources (Matshidiso, 2007).

Matshidiso further conducted a study on lecturing and learning support for VI students from the human rights perspective. In this study, it was stated that one of the difficult issues in higher education is redressing unequal access to teaching and learning between VI students as compared to abled students. This challenge is caused by transforming formal rights on paper into real rights. In other words, it rises from what is written on the Bill of Rights to real practice.

To solve the challenges of VI students mentioned above, three points are pointed out. The first point is that there is a need to change policies to address ideological impediment that constitutes reasonable support. In other words, there is a need to come up with policies that will include issues of reasonable support for VI students in SAHE. The second point formal rights do not automatically make rights real to people. This means that formal rights are not followed as they are to some people in real life. For example, a right to equal education in SAHE. The third point is the need to involve academic staff in decision-making processes for VI students in SAHE. This means there is a need to include academic staff such as lecturers in any decision concerning the lecturing and learning for VI in higher institutions.

In the 2014 promulgation of the White Paper it was stated that, presently, the government is committed to improving access, inclusion and success of VI students through the Department of Higher Education and Training. The introduced framework requires all higher education institutions to come up with clear plans to address VI student's matters within their contexts that are formulated Ministerial Task Team (MTT) and commissioned by the Council of Higher Education (Fitchett, 2015). Some lecturers are not trained to lecture VI students even today. As a result, VI students still suffer in terms of exclusion in teaching and learning in SAHE white paper 6 special needs

There is a need for different SAHE institutions to engage in inclusive education policies. Edgerton (2001) states that in order for the higher institutions to engage in fair education and training system, there should be a need to review policies and framework in teaching and learning of students with special needs. The higher education Act of 1997 and the Further Education and Training Act of 1998, the Adult Basic education and Training of 2000 are the important foundation of inclusive education.

Through the different act mentioned above, different Higher Institutions are encouraged to submit plans on how they admit students with special needs. Also, they should state how they will overcome challenges faced by students with special needs. The goals of inclusive environment and settings in teaching and learning. The achievement of learning can be done by co-ordinating effective students support and services. Another important aspect is the issues of buildings and groundings to allow independence to disabled students.

The higher education and training policies are promoting inclusive teaching and learning in different higher institution. Many students with disabilities are realising the need to part of students who are promoting a better progress and development in today's world. The below section discussed the challenges of VI students in learning

2.4 CHALLENGES FACED BY VI STUDENTS IN LEARNING

Learning is an important task in academic settings. It also needs support in terms of materials, resources and needs depending on the situations and courses. The challenges that are faced by VI students when learning are listed below.

2.4.1 CHALLENGES FACED BY VI STUDENTS IN OTHER FIELDS

VI students experience learning challenges in different fields as compared to abled students. VI students face challenges in various domains due to eyesight.

2.4.1.1 Challenges of VI students in learning statistics courses.

Wang, Rush & Horton (2017) argue that statistics is a field that includes visuals. This means that in this field visuals are used in most cases. For example, graphic displays just like visuals are used in learning of this nature, wherein VI students are included in lecture halls. VI students experience the challenge of being excluded in a learning environment as they cannot see the displayed visuals (Kyari, Entekume, Rabi, Spry, Wormald, Nolan, Murthy & Gilbert, 2015.). As a result, there is a failure in equal education opportunity in higher education institutions.

2.4.1.2 Challenges of learning in the physical Geology field

Lecturing Physical Geology courses is time-consuming. This is because it includes laboratories. In a lecture hall where abled students attend with VI students many challenges occur. These challenges may include exclusion from participation in laboratory activities and practices. Aabled students may have a chance to perform all the laboratory activities without challenges related to sight (West, Rubin, Broman, Munoz, Bandeen-Roche & Turano, 2002). This implies that abled students can participate in all lab activities. However, in this learning environment VI students may not participate in any lab activities. In this case, the truth is that VI students are excluded in terms of materials used to do lab activities. VI students are not given a fair opportunity to learn as abled students. VI students are also denied a chance to perform like other students.

2.4.1.3 Challenges of VI students in engineering fields

Teaching and learning engineering courses is a difficult task as different topics need drawings (Hossain, 2013). In support of this statement, in civil engineering where different buildings are shown in a form of drawings, VI students may fail to see the drawings. It will result in unfair attention as the lecture may focus on abled students

who can draw. VI may struggle to get the attention of the lecturer to explain what the building looks like. This may create unfair attention during lessons.

2.4.2 CHALLENGES OF LEARNING THE ENGLISH LANGUAGE

Lecturing English as a foreign language is a difficult task (Khan, 2011). Especially in a lecture hall where many students speak different languages. The challenges of learning and lecturing English courses are discussed below.

2.4.2.1 PRESENTATIONS

Amatobi & Amatobi (2013) state that presentations are one of the challenges in learning the English language. This is because many students learn English as a foreign language in different universities. Therefore, during presentations, it is difficult for students to pronounce words correctly. For this reason, learning the English language becomes a problem that may affect the spelling of words when writing different tasks and assessments. Again, it also affects speaking fluency during a presentation. For instance, a student may struggle to pronounce some words during presentations.

2.4.3 CHALLENGES FACED BY VI STUDENTS IN LEARNING CONTEXTS

Learning English grammar is seen as a problem for different students in different tasks (Bada & Okunoye, 2007). Students in different lecture halls, where they are grouped in large numbers commit errors in syntax. This was seen in different areas of grammar. For example, tense and verbs, just to mention a few (Aliakbari, 2005). This means that students make errors when using different parts of speech in syntax. This challenge is caused by a large number of students in English language lecture halls which leads to lecturers struggling to check the improvement of all the students in terms of grammar use in writing (Amatobi & Amatobi, 2013).

Another challenge of learning English in higher institutions is the lack of reading books. This challenge exists because university libraries have limited language books (Eneya & Ocholla, 2018). This means that libraries in different universities do not have many English books to read. Consequently, reading the English language remains a challenge for students.

2.4.3.1 The inadequacy of English language learning and lecturing materials including brailled materials

Many universities enrol different students in various courses to achieve the lecturing and learning processes. There are challenges related to the inadequacy of materials for VI in English language teaching and learning.

a. Inadequate learning materials for VI students

In higher education where VI students learn English language courses, there are inadequate textbooks. This is because VI students rely on special reading formats. For example, braille and large prints. For this reason, it becomes difficult for them to learn as their textbooks need conversion before the reading process (Onsinyo, 2018). Braille is defined as small cells of dots used to read and write by VI people (Hertzberg & Stough, 2007 in reading and writing using this format needs hands touches. On the other hand, large prints are documents that are increased in terms of fonts to accommodate VI people especially those who are short-sighted (Lintangsari & Emaliana, 2020). For this reason, it takes time to prepare those learning materials which results in the poor performance of VI students in English courses.

b. Materials for VI students

Brailleing texts from printed text is a difficult task. For this reason, transcribers take time to prepare to learn English language materials. This process of brailleing poses a learning challenge in terms of materials and different learning tasks. For example, in English lectures, students may be given a task to write. However, VI students may not write as materials will take time to be prepared (Amatos, 2002). This creates a challenge for VI students as the tasks will pile up due to the slow production of materials. English language comprehension is an example of what need to be translated into braille.

c. Pictorial illustration and braille materials

Although different universities are trying to offer teaching and learning materials. In materials that contain pictorial illustrations, the brailleing process becomes more

complicated. This implies that materials with pictorials worsened the process of learning. In support of the above argument, braille does not support the texts with pictorials. In other words, braille does not braille pictorials. For this reason, there is still a lack of braille transcribed materials for VI students in English courses (Amatos, 2002).

2.4.3.2 Lack of training on the part of ELL lecturers

In a lecture hall wherein, abled and disabled students are mixed, it is challenging to meet their learning needs.

a. Meeting the needs of VI students in ELL

In a learning environment where different language topics are taught, lecturers may struggle to meet the needs of students with different situations that affect their learning process (Intakhab, 2011). In a lecture hall, this challenge is exasperated by when lecturers are lecturing VI students cannot meet the students' needs. For instance, a lecture may display a reading text on the projector and not read it. For these reasons, the needs of abled students are met. However, the needs of VI students are not met because the reading of a text is not done by the lecturer. For this reason, the need for equal attention was not met.

b. Untrained ELL lecturer with lecturing materials

Lecturers who are not trained find it difficult to use materials that accommodate students with various needs. In a lecture hall, different materials are used. For instance, materials that contain pictures (S'lungile, Ntinda & Hlanze, 2015). In supporting the above argument, untrained lecturers may decide to use materials full of pictorials without considering VI students who cannot interpret the pictorials. Also, a lecturer may find it difficult to explain and describe pictorials.

c. The attitude of ELL lecturers towards VI students

Asamoah et al. (2018) state that some lecturers have a negative attitude towards VI students in a learning environment. This is because the VI students need more attention more than abled students. This is fuelled by the fact that many learning

activities (for example, interpreting the cartoon) need eyesight. Interpreting and cartoons needs lecturers to explain them to VI students. Some ELL lecturers may think VI students need them to give answers to them (Emerson & Anderson, 2017).

2.4.3.3 Lack of technological resources to support VI students in higher education institutions including those learning languages

Various scholars lamented the lack of technological resources in institutions to help VI students. It is stated in many studies that in SAHE institutions there is still a problem with technological resources. In addition, there is a lack of technological resources to support VI students (Cryer, Cryer, Home, Wilkins, Cliffe & Rowe, 2013). This is a serious challenge to the students.

a. Appex

Simui, Kasonde-Ngandu, Cheyeka, Simwinga & Ndhlovu, 2018 argue that Appex is a technological device that is used to read and write documents by VI students. In addition, this device uses braille and speech. There is a deficit of this device in some higher institutions as it is expensive.

The lack of this device creates challenges in learning the English language, as braille of materials takes time. Also, it creates a challenge in terms of writing VI students' tasks. This is because screen readers selected by the institutions of higher learning cannot edit and proofread documents like Appex that use speech and braille to read the documents. In language learning, the lack of this technological device may affect the editing and proofreading of a document after writing different assessments.

b. Recorders

Simui et al. (2018) argue that recorders are technological devices that are used to tape different learning lessons in a lecture hall. Mouzakis (2008) maintains that lack of these devices affects the VI students learning as students cannot remind themselves about what was taught. For example, in a lecture hall, where extracts about challenges of writing English, VI students may struggle to remind themselves about what is read in the extract.

2.4.3.4 Lack of in-service training for English lecturers to teach VI students

Mbuvha (2018) states that in-service training refers to a professional and personal educational activity for lecturers to improve their efficiency, abilities knowledge and motivation in their professional work. This means that it is a way of improving how they do their work. For example, lecturing students and selecting different strategies for learning. In addition, in-service training offers a better chance to improve the lecturing activities and instructions.

Lintangsari & Emaliana (2020) concludes that there is a need for in-service training for lecturers teaching VI students, as there are challenges associated with lecturing VI students. The argument is that lack of training affects different areas in the teaching and learning environment.

a. Lack of courses to lecture VI students

Mbuvha (2018) is of the view that many SA lecturers are not trained to teach VI students in higher education institutions. This is because many universities do not offer courses and activities on how to prepare lecturers to teach VI students. For this reason, lecturers lecturing English language courses struggle to teach VI students different topics that include pictorial illustrations, which affect their teaching skills and motivation. This is evident in English language lectures, where different pictorials are used to clarify difficult vocabularies, a lecturer may struggle to explain and describe pictorials to VI students. Therefore, the lecturing skill and motivation suffer in lecturing and learning activities. Also, VI students experience exclusion in learning activities and information in English courses.

b. Lack of inductions

Mbuvha (2018) argues that many universities do not involve lecturers in inductions for disabled students. Coates (2020) states that induction is the process of bringing about something in an organisation. In addition, is the process of showing or telling a new employee about what the organisation entails. South African universities are not doing enough to induct lecturers in terms of lecturing and learning of VI students.

Consequently, lecturers struggle to understand how to manage lecture halls where VI students are included. This is because they are not aware of how they should teach VI students pictorials. For example, if the English language lecturer is not aware that there are VI students in the lecturer hall, he or she may decide not to use a method that accommodates abled students. In other words, a lecturer may use the method that accommodates those that do not have problems with eyesight. For instance, an English language lecturer may use the pointing method to show pictorials.

2.4.3.5 Compliancy, lack of monitoring and evaluation

Jackson (2005:9) clarifies compliance as to when companies in pursuit of quality assurance (QA), “require an organisation to specify, implement, monitor and record their compliance with standard operating procedures in all areas of the work process. In the UL quality assurance in teaching and learning is the responsibility of the head of departments (HODs) school directors and executive faculty deans. In this case, the relevant QA structures develop teaching and learning policy implementation, monitoring and evaluation.

Executive deans who are responsible for senate QA in learning and teaching in the faculty structures review internal programmes required by Higher Education Quality Committee and Council on Higher Education and relevant professional bodies. Senate is the highest decision making in the university overseeing matters of teaching and learning (UL Policy, 11).

In teaching and learning VI students, it is difficult to find people who quality assures the monitoring and evaluation of the teaching and learning treatment for VI students in a lecture hall. Again, the university does not state teaching and learning for VI students. In other words, there are no compliances put in place to avoid unfair treatment in teaching and learning for VI students.

2.5 PERSPECTIVE OF USING PICTORIAL ILLUSTRATIONS

2.5.1 Perspectives on pictorial illustrations in texts

There are many perspectives associated with the use of pictorial illustrations in texts. For example, ELL text with pictorial illustrations such as grammar texts with cartoons

and phonetic symbols texts. VI students are unable to access learning materials because braille of teaching and learning materials takes time to be converted into braille. This is because the software used to convert those materials used the Microsoft word format (Forcelini, García & Schultz, 2018). In other words, many materials that are converted into braille need to be converted to Microsoft word to make the braille process easier.

Moreover, there is a lack of quality books transcribed into braille (McDonald and Rodrigues (2016:01). In other words, VI students never receive learning information and lecturing materials on time. All published textbooks selected for learning or studying are of quality (i.e peer-reviewed), and VI students generally need more time for their learning process (Ibid, 2018). For instance, in an English lecture hall where pictures are used to explain different vocabulary words, VI students may have difficulties understanding the explanations because they cannot see the pictures. As a result, it may take some time for the lecturer to explain the illustrations in the teaching and learning materials that are in the form of texts (Ibid, 2018).

Lugome (2018) claims that there is a lack of training in English courses lecturers on technologies that can be used to help VI students learn. In other words, English language courses lecturers are not trained to use technology resources that assist VI students in lecturing and learning. Ibid (2018) further adds that there is also a lack of technology training for VI students. For this reason, VI students continue to struggle to learn using different technology given to them in higher institutions. For instance, VI students struggle to read English learning materials using the Job Access with Speech (JAWS) Screen reader. As there is a lack of training in technology used to help lecturers to lecture VI students and for VI students learn, Lecturers struggle to lecture VI students which results, in exclusion in terms of materials. On the other hand, VI students may struggle to learn independently through the use of technology.

As there are hardly any English braille books that have explanations of pictorial illustrations. Thus, there is still a need for educational texts and teaching materials in English courses to accommodate VI students. In particular, VI students are not getting enough training and support on the use of different technological devices with different software for example; OrCam and JAWS software (Ibid, 2017:39). JAWS is the

software screen reader that reads what is written on the screen (Mwakyeya, 2013). The JAWS software does not read texts with pictorials. OrCam is the software that read text on the screen and also on textbooks. In view of this, VI students still face difficulties in accessing different English educational texts (Walton, 2012; 242). The next section will discuss the perspective of using pictorial illustrations in teaching and learning presentations.

2.5.2 Perspective of using pictorial illustrations in teaching and learning presentations

Devries (2017) argues that pictorial illustrations are considered to be important in presentations when lecturing and learning English courses. In other words, pictorials are considered an important aspect in presentations for learning and lecturing in lecture halls where English language courses are lectured. Okeke (2013) is of the view that the role of pictorial illustrations in presentations is to help students and lecturers to grasp the process and verbalise the meaning as visual impute in verbal storage. This implies that pictorials are converted to words that can be memorised by a student (Asamoah, 2018). Consequently, students will understand the meaning of the pictorial illustrations. For example, in a lecture hall where presentations on English Second Language learning theories are taught, a lecturer may use a picture of learners behaving in different ways to support the Behaviourism Theory. In this example, a lecturer may show a learner beating other learners and the other learner reading a book. These pictures may leave students visualising and memorising the meaning of the picture.

However, Gould, Rouffey & Barentsen (2018) point out that during the learning of this nature, VI students will be confused as they will only rely on listening to the presentation with limited information as they cannot see the pictures with supporting information. Also, they cannot have a chance to fully visualise the pictures. For this reason, it can be argued that although pictorials are important in teaching and learning materials, they are not important for VI students. This is because they confuse the learning processes which may result in a poor understanding of information. It also creates unnecessary exclusion in the learning and lecturing environment for English courses (Konomi, 2014).

2.5.3 Perspectives of abled versus VI students in learning

In higher institutions where abled and disabled students are learning in the same lecture hall, it is difficult for students to understand the needs of different individuals. As a result, it creates different views about disabled students in these VI students in the learning environment. Asamoah; et; al (2018) state that abled students are against the idea of inclusive lecturing and learning in higher institutions.

This implies that in higher education wherein learning include abled and VI students, abled students turn to be against inclusive education where all students are given equal learning opportunities and attention. This is influenced by the fact that other students think that students with special needs will not cope with lessons taught in class (Babić, Simić & Friedman, 2017: 9). This implies that, in learning, students living with disabilities are sometimes judged because of their senses' limitations to perform some tasks, like for instance, seeing. This is due to lack of knowledge about the disabilities. This view concludes that some abled students fail to understand the concepts of learning in the same lecture hall as students living with visual impairments. The lack of knowledge about disabilities, in this case, refers to VI students who can struggle to ask for the attention they need to pass the English language course. For example, VI students may be afraid to ask abled students to read the comprehension. Also, VI students may feel demotivated in learning, as they need more attention than abled students as there are limited ELL materials.

2.6 PICTORIAL ILLUSTRATIONS IN TEACHING MATERIALS

In learning, goals should be consistent when dealing with pictorial illustrations in lecture halls (McDonald & Rodrigues, 2016:02). Lecturing and learning of VI students can be successful by modifying the content. In other words, the lecturing and learning of VI students can be achieved by reducing pictorial illustrations in ELL materials. For example, in grammar content where drawings are used to show different word categories. Due to that fact, when a lecturer teaches with the help of visuals, he or she must use different ways of conveying the information (Laura, 2020). This is demonstrated by when an English lecturer may use the dictation method to explain various cartoons. Large prints can also be used for partially blind students. Large prints are documents with an enlarged font (Morelle, 2016: 59). Font enlargement can be

done in various documents including books. Godfrey, Murrell & Sorge (2018) maintain that students with low vision may not be able to discern information from pictorial illustrations as some may not be clear after increasing the font. For a case, in an English course where there are maps, large prints may be invisible to a low vision student.

2.7 THE IMPACT OF PICTORIAL ILLUSTRATIONS ON LEARNING

Pictorial illustrations have an impact on English language learning. Firstly, pictorials encourage students not to read the given information in the text because they can rely on pictorials (Bilal, 2017:40). Secondly, it discourages blind students from paying attention to what is given in words and focusing on the information they cannot see (Ngonyani, 2018:3). Pictorial representations convey messages in a short time. For example, a lecturer may use a cartoon to convey the mood of a person during learning. Pictorial illustrations may create confusion about a particular topic in an English text. Klosa (2015:516) proposes that: in teaching and learning texts, pictorials can be used to organise different structures for text content. For example, in English grammar, a tree may be drawn to show different noun phrases in syntax. These illustrations may organise a text with suitable meaning to understand the relationship between the picture and the words written in the texts. Pictorial illustrations affect the way VI students receive information and meaning during learning as lecturers struggle to explain pictorials in words (Walton, 2012).

2.8 INCLUSION OF PICTORIAL ILLUSTRATIONS IN ENGLISH COURSES

During teaching and learning, lecturers work hard to use different texts with illustrations to support and convey meaning (Aggarwal, 2014). The inclusion of pictorial illustrations has both positive and negative impacts on learners with different needs. In other words, in a classroom where there are abled and VI students, pictorials have both positive and negative impacts depending on the ability of the students (Walton, 2012). It is argued that the inclusion of pictorials helps students to understand the meaning of the texts and materials (Morelle & Tabane, 2019). However, the inclusion of pictorial illustrations in English teaching and learning materials has negative impacts on VI students. VI students may have an incomplete meaning of a text or concept. For instance, in a lecture hall, a lecturer may use a map to show

countries with different English dialects. The above-mentioned example emphasises that VI students may struggle to understand different English dialects in their locations. This implies that pictorial illustrations used in teaching and learning materials and texts cause the exclusion of important information (Griffin, 2020).

Another impact is that sometimes pictorial illustrations do not support the meaning of a text (Klosa, 2015; 516-517). This is because the use of pictorials is sometimes meant for decoration in lecturing materials in English reading texts. For instance, a lecturer may use drawings such as shapes to decorate the reading text to attract the attention of students during teaching and learning. Based on the above example, students will struggle to focus on the given reading text and its meaning, as they give more attention to the drawings. As a result, the intended meaning in the text will not be fully understood. Therefore, the goal of reading and understanding the content will be left unattended (Cardillo, 2017). The next paragraph will discuss types of pictorial illustration texts.

2.9 TYPES OF PICTORIAL ILLUSTRATION IN TEXTS

Pictorial illustrations are used in different texts to clarify meaning to students and lecturers in lecturing and learning materials. This section will discuss the types of pictorial illustrations in texts and how they are used in learning materials in English disciplines and how they affect the learning of VI students in learning.

2.9.1 Interpretational pictorial Illustrations in texts

Carney & Levin (2002) claim that interpretational pictorial illustrations are defined as pictorials that help students to understand the meaning in a form of a picture rather than words (Carney & Levin, 2002). In other words, pictorials assist students to understand difficult text and meaning through the use of pictures. In addition, these pictorials clarify difficult word meanings in a text in ELL. For example, in a learning text where idioms are used to give hidden meaning, a student may struggle to understand the meaning of words. However, if the lecturer use pictorials related to the hidden idiom meaning, student may understand the intended meaning of a text. Interpretational pictorials are used in order to help students to clarify difficult texts. For

instance, interpretational texts can be used to create the meaning of high blood pressure by a picture of a pump system (Ibid, 2015: 129-135).

This means that in-text illustrations can be used to clarify difficult meaning concepts in English courses and materials. Singmann, Bolker, Westfall, Aust & Ben-Shachar (2015) argue that the use of pictorial illustration in texts may assist students without visual impairment as they can understand and comprehend texts with pictorial illustrations. On the other hand, VI students will not get the clarity in terms of meaning intended in the text and it will affect their understanding of some information.

2.9.2 Transformational pictorial illustration in texts

Tono (2011) states that transformational pictorial illustrations refer to a type of pictorial used to help readers to recall the information in the text. These kinds of pictorials include the mnemonic system, which is a process of memory enhancement that assist in memorising the information in the text. For example, a student can memorise information in the extract about the challenges of writing English essays. In English courses texts and materials, these kinds of pictorials are meant for improving the reader's memory of information in the texts. In other words, the use of transformational illustrations in the learning and teaching texts helps students to memorise the meaning in the text. However, the use of these pictorial illustrations may demotivate reading for VI students, as they will struggle to see the pictures that help abled students to memorise the meaning (Munoz-Luna, 2015). For instance, a lecturer can use cartoons to help students to recall what they have read in the text.

2.9.3 Representational pictorial illustrations in texts

Munoz-Luna (2015) maintains that representational pictorial illustrations refer to pictorials that mirror all the content in the ELL texts. This means that these types of pictorials present the content in ELL texts. In addition, these types of pictorial illustrations are commonly used in lecturing and learning texts. For example, syntax textbooks will be drawings of a tree to represent different syntax structure drawings.

2.10 APPROACHES TO ANALYSING PICTORIAL ILLUSTRATIONS IN TEXTS AND MATERIALS

Pictorial illustrations can be analysed in different ways. Firstly, pictorials in texts can be analysed to be more sensitive to the effect on learning English courses. For this reason, this analysis may provide incomplete English courses examinations based on various factors associated with this problem (Morelle & Tabane, 2019:4). For instance, to gain a more complete understanding of pictorial illustrations in texts and materials in English courses. It may be concluded that pictorials may create incomplete thoughts in examinations. Secondly, one of the common approaches found in teaching and learning texts and materials with pictorial illustrations is the continuing adherence to media comparison methodology. This type of approach considers pictorials as discrete wholes rather than pictorials with meaning words. As a result, this leads to a comparison of students learning from different English reading texts that include pictorial illustrations and those without pictorials (Ngonyani, 2020).

2.11 THE USE OF PICTORIAL ILLUSTRATIONS IN INSTRUCTIONAL MATERIALS AND TEXTS

Instructional materials are materials that are meant for completing instructional tasks and activities in different courses (Tin et al, 2007). Instructional materials are materials that are used in different courses and content for successful lecturing and learning. The materials focus on the needed content. For example, in ELL where pictorials are taught, the explained and described materials may be needed to accommodate VI students.

On the other hand, instructional tasks refer to activities whereby lecturers and students engage during lecture hall instruction, and that is oriented towards achieving particular skills and ideas. In other words, instructional tasks are meant for developing and achieving skills to perform different activities in learning. For instance, in an ELL lecture hall, a lecturer and students may engage in instructional reading where the goal is to achieve reading skills and the correct pronunciation of English concepts (Ibid, 2007).

2.11.1 Instructional materials versus instructional tasks

Although the two concepts are used in lecturing and learning ELL, they can be distinguished. Choppin, Roth McDuffie, Drake & Davis (2020) give the distinction between instructional materials and instructional tasks.

Instructional materials focus on the materials that are used to achieve lecturing and learning. On contrary, instructional tasks are activities that achieve skills in different tasks in a lecture hall. Again, instructional materials focus on the needs of students. While instructional tasks are performed without the needs of students. In other words, instructional tasks are performed from the view of the lecturer. In instructional materials, the lecturing and learning focus on the needed material based on the instructions. On the other hand, instructional tasks do not focus on the instruction, rather it focuses on what the lecture wants the students to achieve in the learning and lecturing setting. These two concepts are both used for lecturing and learning in ELL.

Instructional materials may be needed to accommodate VI students as far as pictorial illustrations are concerned. This is because ELL included content that contains pictorial illustrations that are not explained and described to accommodate VI students. For example, learning different cartoons may require explained and described text to accommodate VI students in terms of information and meaning.

Pictorials illustrations can be used in examinations to support the written information in texts. For example, an extract can be supported by a cartoon to support what is written on the extract. However, the use of cartoons in an extract may confuse VI students. This may lead to much time wasted on one question and a shift of focus to understand the important written information in the extract. This implies that the use of illustrations may cause confusion during examination (Walton, 2012).

The use of pictorials in reading texts may affect how students acquire reading skills in English courses. For a case, in an English class, a lecturer may give students a reading text with pictorials. This may affect the reading of students as they will focus on pictorials rather than words. For this reason, VI students may end up losing the meaning of the text. In other words, pictorials in reading may affect the student's ability to read (Bilal, 2017).

2.12 PERSPECTIVES ON THE USE OF PICTORIAL ILLUSTRATIONS IN INSTRUCTIONAL TEXTS AND MATERIALS IN ENGLISH COURSES

It is argued that lecturers may include pictorial illustrations unnecessarily in different lecturing texts and materials (Krukru, 2015). This means that lecturers turn to include pictorial illustrations that are unnecessarily. For example, a lecturer may include drawings to decorate the reading passage during an English lesson. The decoration drawings are not necessary as they do not give meaning and support to the message in the text. Abled students may focus on pictorial illustrations rather than focusing on the words in the text. This means that abled students may put more attention to looking at the pictorials and lose concentration on reading the words in the texts. For example, in a class where a lecturer gives a text with attractive cartoons in a text, students may focus on the cartoon. It may be concluded that students' understanding of the text and the meaning may be distracted by the use of pictorial Illustrations.

In a lecture hall where there are VI students, pictorial illustrations may shift the learning and understanding of a text in English courses. For example, if some lecturers use drawings to explain syntax to VI students, it will affect their understanding and learning abilities as they can only imagine the drawings without seeing them.

This section discussed the pictorial illustrations in instructional materials and instructional tasks. It has also discussed the use of pictorials in instructional and instructional tasks, and how it affects the learning and lecturing of VI students in English courses.

2.13 MULTIMODALITY IN TEACHING AND LEARNING OF PICTORIAL ILLUSTRATIONS

Magnusson & Godhe (2019) claims that multimodality is a term that is widely used in an academic world. Multimodality refers to the interplay between different representational modes. For instance, images, written and spoken words (perniss, 2018). In other words it is the combination of words and pictorials in communication especially in teaching and learning. In teaching and learning the multimodality is used to support or interact the message in teaching and learning texts. It is also used to share the message through the use of written and spoken words. Kress & Selander,

2012) argues that multimodality is linked with pictorial illustration in learning in meaning-making. However, multimodality in learning pose difficulty in meaning-making especially for VI students (Bezemer & Jewitt,2010) This is because VI students cannot use pictorials to communicate or for learning as they cannot see them. In other words, the meaning-making of multimodality cannot accommodate VI students. For this reason, multimodalities such as images, symbols and pictures exclude VI students in terms of meaning-makings. The use of representational pictorials create confusion to VI students as they cannot relate the texts with different representations.

Through the relevant reviewed literature, pictorials are used as representation to support what is written in different learning texts and materials especially in English language courses. However, VI students are not favoured using pictorials in learning. The concept of pictorial illustrations is not accommodative especially in lecture halls where abled and disabled students are learning using materials with illustrations.

2.14 CONCLUSION

This chapter gave information from different scholars who have paved the roads to learning and lecturing VI students in higher institutions. It also gave the existing challenges faced by VI students in an inclusive environment where their needs are the focus. For this reason, no study was researched concerning challenges faced by VI students when dealing with pictorial illustrations in texts, teaching and learning materials in English courses. For this reason, this chapter is anticipated to develop other research chapters in this study. In addition, it will also take a lead to build the gap that was not researched by different academic scholars (Ngonyani, 2020:85).

2.14 SUMMARY OF THE CHAPTER

This chapter gave an overview of the existing literature on the challenges faced by VI students when dealing with pictorial illustrations in texts, as well as the teaching and learning materials with specific reference to students in the English discipline.

Likewise, this chapter gave the role of theory, implications of SMDT to language teaching, and the history of VI students in higher institutions in SA. It further gave information about the challenges faced by VI students in learning, challenges of learning the English language, the perspective of using pictorial illustrations,

theoretical perspective, pictorial illustrations in teaching materials, the impact of pictorial illustrations on learning, the inclusion of pictorial illustrations in English courses, types of pictorial illustration in texts, approaches to analyse pictorial illustrations in texts and materials, the use of pictorial illustrations in instructional materials and texts, perspectives on the use of pictorial illustrations in instructional texts and materials in English courses. The next chapter will discuss the research methodology for the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter presents and discusses the research methodology that was used to collect relevant data. Creswell (2014:31) states that research is done in order to discover and explore hidden knowledge about different research topics. In addition, researchers collect data in order to find in-depth information related to the problem and thereafter interpret it in a reliable manner. Also, this chapter discusses the research design, research approach, population, location of the study, sampling and data collection. Furthermore, it also discusses data analysis, quality criteria and ethical considerations. Conclusion and the summary of the chapter are provided.

3.2 RESEARCH DESIGN

Mouton (1996: 175) maintains that “the research design serves to plan structure and execute the research to maximise the validity of findings”. In addition, it gives clear directions from the underlying philosophical assumptions to research design and the data collected. Charles & Metleer (2002) argue that research design discusses the overall detailed plan that shows how the researcher intends to find, analyse and interpret data. Through research design, the researcher can communicate the decisions regarding how the information will be collected from the respondents, how the respondents will be selected and how the findings will be analysed (Kumar, Singh, Ali & Chander, 2014). This study employed an exploratory research design to find and identify challenges faced by VI students when dealing with pictorial illustrations in texts, teaching and learning materials in English courses. An exploratory research design was used to make preliminary investigations into relatively unknown areas of research (Hammond & Wellington, 2012: 107). It had done so by answering what and why research questions. On a similar note, McNabb (2015: 96) is of the view that “majority of exploratory researches were conducted to investigate a topic in order to develop insights and ideas about its underlying nature”. Exploratory research set out to discover whether what was in question was true or not (Wisker, 2001: 119).

The exploratory research design was suitable for this study because it permitted the researcher to discover new information about challenges encountered by VI students in as far as pictorial illustrations are concerned. Additionally, exploratory research was meant to clear up the challenges of pictorials and provide convincing evidence (Ibid, 2001). This means that the challenges of pictorial illustrations were resolved by using an exploratory research design. The research approach is discussed hereunder.

3.3 RESEARCH APPROACH

The research approach is defined as a plan and procedure for research that span steps from broad assumptions to detailed methods of collecting, analysing and interpreting data (Cresswell , 2014; 32). This means that the research approach is how a study is planned based on different procedures of collecting, analysing and interpreting data. Cresswell (2014; 32) further argues that this plan entails several decisions that should be followed by the researcher. There are three well-known research methods namely; qualitative, quantitative and mixed methods (Cresswell 2013, Matthew & Ross, 2010, Hammond & Wellington 2013). This study employed a qualitative research method.

3.3.1 DEFINITIONS OF QUALITATIVE RESEARCH APPROACH

Tesch (2013:55) articulates that the qualitative method is a way of discovering and understanding the meaning that people or groups impute to a social problem. Hammond & Wellington (2012) define the qualitative research method as an approach for exploring, explaining and uncovering a belief. Additionally, it also generates new theoretical insights which were challenges faced by VI students when dealing with pictorial illustrations in texts, teaching and learning materials with specific reference to English discipline in the University of Limpopo. This kind of study was not explored before. For this reason, there was a need to research and explore these challenges. Kubayi (2013) states that qualitative research is a method for exploring and understanding the meaning that different people ascribe to a human problem. In this research, the problem was researched by engaging VI students who were doing English courses, English language lecturers who taught VI students and braillists who braille learning materials. The qualitative research method assumes that the answer to any research objective lies within the related issues pertaining to deeply seeded

aspects of humanity (Margaret, Roller & Lavrakas, 2015; 1). This implies that in order to find answers to the research objectives of the study, the researcher has to involve VI students and lecturers in the English discipline, the reason being that qualitative research focus on what people say about a phenomenon.

The qualitative research method was suitable for this study for several reasons. This study's main prominence was to find out challenges encountered by VI students when dealing with pictorial illustrations in texts, teaching and learning materials in English language courses. It explored challenges faced by VI students when dealing with pictorial illustrations in texts as well as teaching and learning materials with specific reference to English discipline in the University of Limpopo. It also identified these challenges from VI students in the English language courses, English language lecturers teaching those students, and braillists who braille learning materials. Again, qualitative data were dependable and trustworthy in the sense that readers can always confirm the data provided by the researcher (Relmer & Vanroyzin, 2015, 61). In other words, if the same or related study was conducted the same data could be found. The qualitative research method gave in-depth information about challenges faced by VI students when dealing with pictorial illustrations in texts, teaching and learning materials in English courses. Qualitative research allowed an affluent vivid product. The sampling is discussed hereunder.

3.4 SAMPLING

3.4.1. POPULATION

Population refers to an aggregate of all the objects subjects or members that conform to the set of specifications (Polit & Hungler, 2004; 290). In this study, the population consisted of VI students who were doing English language courses at the University of Limpopo in Limpopo Province, South Africa. Also, English language lecturers who taught VI students English language courses in the Department of Languages at the University of Limpopo in South Africa. In addition, it involved the braillists responsible for compiling braille learning materials at the Reakgona Disability Center (RDC) at the University Of Limpopo in South Africa. This population was useful for this study as

they gave challenges as far as pictorial illustrations are concerned in teaching and learning materials. The location of the study is discussed below.

3.4.2 LOCATION OF THE STUDY

The research was conducted in The University of the North, nicknamed “Turfloop” which is now called The University of Limpopo which was established in 1959 under the apartheid regime’s policy of separate ethnically-based institutions of higher learning policy. The University of Limpopo is located in Polokwane Municipality in Capricorn District, Mankweng Township in the foothills of Hwiti (Wolkberg mountain range) Limpopo Province, South Africa. The university is about 40 kilometres east of Polokwane city (ApplicationSA, 2022). The location was suitable for this study because it comprises diverse students including visually impaired students learning English language courses. The sampling method is discussed in the next section.

3.4.3 SAMPLING METHOD

“Sampling is the process of finding people or places to study, to gain access to study, and establish a rapport so that the respondents provide relevant data” (Creswell, 1998;110). Furthermore, Creswell (2014) asserts that there are four sampling categories namely: purposive, probability, convenience and mixed methods. This study adopted purposive sampling which was known to be selective and subjective. For that reason, this study focused on challenges encountered by VI students as far as pictorial illustrations are concerned in English language courses at the University of Limpopo. Consequently, it is not just anyone who participated in this study and give relevant information.

The purposive sampling technique is also known as judgement sampling. It is the deliberate choice of respondents due to their qualities and positions (Etikan, Musa & Alkassim, 2015; 2). It is a non-random sampling that does not need underlying theories. Therefore, it allows a researcher to decide what needs to be known. It also sets out to find respondents who are willing to provide information by virtue of the experience that they have.

Matthews & Ross (2010; 167) propose that purposive sampling is related to research designs that are based on gathering qualitative data, exploration and interpreting experiences and perceptions. Purposive sampling was also suitable for this study because it has looked for a sample with relevant features to obtain high-quality research results (Liamputtong, 2009; 11). Purposive sampling afforded the researcher the latitudes to decide whether the data is relevant or not. For the purpose of this study, the researcher selected ten VI students who were studying English language courses in the department of languages at the University of Limpopo. The reason is that they experience challenges as far as pictorials are concerned first-hand. This assisted the researcher in finding out information on the challenges faced by these students in English lessons.

The study also selected five English language lecturers from the Department of Languages precisely in the English discipline at the University of Limpopo. This sample assisted in providing information on how these lecturers teach content with pictorial illustrations during English language lessons. Furthermore, two brilliant employees from the RDC at the University of Limpopo were selected. The reason is that the RDC is responsible for braille notes and learning materials for VI students. This sample assisted in identifying and probing challenges faced by these brailleists when braille texts that contain pictorial illustrations. The data collection is discussed below.

3.5 DATA COLLECTION

Data collection is defined as the process of gathering data using different methods or instruments (Remler & Van Ryzin 2021, 65). This means that the researcher collects data using different instruments and proceeds to the process of analysing and interpreting it. Similarly, Charles & Mertler (2002) conclude that “data collection is the procedure of gathering information based on the research questions in order to acquire outcomes”. It uses different research tools. For instance, interviews, observations and questionnaires. Qualitative research focuses on the business of gathering data that is truthful from the respondents who provide data (Margaret et; al, 2015; 4).

3.5.1 DATA COLLECTION INSTRUMENT

Data collection instruments refer to different tools that are used to collect data (Marshall & Rossman, 2014). This study used telephone interviews to collect “truthful data from the respondents”. Matthews & Ross (2010; 191) are of the view that interviews are a specific type of conversation between the researcher and the interviewees. In this kind of conversation, the interviewer, that is the researcher, formulates sets of questions that are posed to the respondents. The researcher selected interviews because they were useful in learning the story behind respondents’ lived experiences (Liamputtong, 2009:43). In this study, the story behind the respondent’s lived experience was the challenges of pictorial illustrations faced by VI students in English language teaching and learning materials. Interviews assisted the researcher to obtain in-depth data concerning the challenges of pictorial illustrations in teaching and learning English language materials for VI students during lectures. However, the researcher has to create a relationship with the respondents to ensure trust within the period of the interviews (Berg & Lune, 2012). The researcher produced legitimacy of data, meaning that the researcher had to persuade the respondents that it was vital to take part in the study and the researcher must ensure that the data is precise and meaningful for research.

The researcher used telephone interviews as face to face interviews could not be conducted due to covid 19 pandemic. Each interview was conducted for 15 minutes. One of the advantages of telephone interviews is to avoid the necessity of travelling to the respondent’s place (Walliman, 2001: 239). Telephone interviews guarantee unbiasedness from the researcher (Berg, 2012). Another advantage of telephone interviews is that: they allow the researcher to ask questions that cannot be answered in a face-to-face situation (McNabb, 2010: 112). Interviews were relatively speedy when collecting data. The researcher asked interview questions to ten VI students who were doing English language courses, English language lecturers who were teaching VI students and two braillists. During those interviews, all the conversations were recorded using a tape recorder for the researcher to find truthful and meaningful data for the topic investigated. The researcher gave clarity on what the interviewees did not understand. Also, the researcher got a chance to ask follow-up questions and seek

clarity from some of the answers given by the respondents. Thereafter, the data were transcribed into written form. The data analysis is discussed hereunder.

3.6 DATA ANALYSIS

Marshall & Rossman (2006) conclude that data analysis is the process of bringing order and meaning to the collected data. Data analysis is also defined as ‘the mechanism for reducing and organising data to produce findings that require interpretation by the researcher’ (Burns & Grove, 2003; 479). Vos, Strydom, Fouche & Delport (2005: 339) are of the view that data analysis is a challenging and creative process that includes an intimate relationship between the researcher with respondents and the data that is generated.

Creswell (2013; 179) argues that data analysis can be classified into five types namely; thematic, content, narrative, discourse, and semiotic analysis. In this study, the researcher used thematic analysis. In addition, it is a “method for identifying, analysing and reporting the patterns (themes) within the data and was perceived as the foundational method for qualitative analysis” (Flick, 2014; 421).

Thematic analysis was suitable for this study since the aim of this study was to reveal themes that emanated from the questions asked by the researcher to the respondents. Themes are some things relevant to the research questions which were seen on some levels patterned meaning within the data set (Ibid, 2014: 421). It was also suitable because it organises data and describes it thoroughly. Moreover, it interprets various features of the research topic, which were challenges faced by VI students when dealing with pictorial illustration in texts, teaching and learning materials in English language courses.

Braun and Clarke’s guide to the six stages of conducting thematic analysis was identified by (Gupta, Shaheen & Reddy, 2017).

They were as follows:

3.6.1. Becoming familiar with the data

This implies that after that data has been collected the researcher must transcribe the data from the conducted interviews into written form. This helped the researcher to identify possible themes and codes that were related to the objectives of the study

which were concerned with challenges faced by VI students when dealing with pictorial illustrations in English language courses teaching and learning materials.

3.6.2. Generating initial codes stage

This stage of thematic analysis is where the generating of items list takes place out of the data set has endless patterns. In addition, this organised technique gain the important parts of data which focused on the research questions. This implies that the researcher had to reduce the collected data in a manageable manner.

3.6.3. Searching for themes

This stage of thematic data analysis is started when everything that is regarded as data has been coded and organised. Also, the list of various codes acknowledges across the research data set In other words, the researcher sorted and organised all the possibly relevant useful coded data extracts into different themes (Braun & Clarke, 2006).

3.6.4. Reviewing themes

This stage begins immediately after the set of themes had been developed which results in the need for enhancement (Gupta et; al, 2017). This implies that, during this stage, the researcher reviews the coded data information for each theme in order to contemplate and decide if that data forms a clear pattern.

3.6.5. Defining and naming themes

In this phase, the researcher decides what characteristic of the data each theme brought out and chooses what is concerned about them including the reason. For this reason, for each and every theme the researcher must conduct and write a comprehensive analysis dichotomising the story that each respondent theme expresses.

3.6.6. Producing the report

The final phase begins when the researcher had completely recognised the themes and he or she is prepared to start with the analysis conclusions and the report writing. It is argued that writing of thematic analysis is meant to deliver a brief, comprehensible coherent, non-repetitive and attention-grabbing explanation of the data and through different themes (Braun & Clarke, 2006) This means that, the researcher had written a clear description of the data information obtained from the respondents on challenges of pictorial illustrations.

After the data were collected the researcher transcribed it into Microsoft word document where different themes were developed and analysed the responses which helped the researcher to identify themes for data presentation and analysis. All the themes were presented from the questions asked by the researcher to the respondents. All the data were interpreted through exploratory design. Data from VI students, lectures and brailists were interpreted and analysed. Also, the conclusions were drawn by the researcher. Quality criteria are discussed below.

3.7 QUALITY CRITERIA

“Qualitative research must insure quality” (Kubayi, 2013; 118. Creswell (2013) is of the view that qualitative research quality can be ascertained by considering four conventional strategies: credibility, transferability, conformability and dependability. Therefore, the researcher focused on the four above mentioned strategies.

3.7.1. CREDIBILITY

Anney (2014, 256) argues that credibility is mainly used to determine whether the researcher is authentic and trustworthy. Credibility deals with how congruent are the findings with reality (Shenton, 2004:64). The researcher ensured credibility by acknowledging all the sources and authors used in the study. Again, the researcher provided evidence of findings and the information from the respondents in a truthful manner. The researcher made sure that the data were trustworthy by keeping all the recording of interviews from the respondents. The researcher kept the data recordings

for two months to make sure that whatever that was transcribed was correct and relevant..

3.7.2. Transferability

Transferability states that the theoretical knowledge gained from qualitative research studies can be applied to other related situations (Liamputtong, 2009; 22). This implies that the study should be able to be linked and compared to other studies that were conducted on the challenges of pictorial illustrations in teaching and learning materials in English language courses. The researcher presented all the sample's information as raw as they were. This means that, if a study related to this one was to be done, the same results were to be found. Transferability refers to "the degree to which the results of qualitative research can be transferred to other contexts with other researchers, it is the interpretive equivalent of generalisability" (ibid). This means that, if research was to be done on pictorial challenges using the same methods, the same results must be found. Shenton (2004; 69) maintains that "it is the responsibility of the researcher to ensure that there is enough contextual information about the fieldwork sites to enable the reader to make such transfer". To ensure transferability the researcher also gave the information concerning the respondents who took part in this study. For example, the researcher indicated the number of respondents. Again, the method used to collect data was provided. Similarly, the location where the study was based was mentioned.

3.7.3. Conformability

Conformability checks the findings, and the interpretation thereof can be established by another similar study (Marshall & Rossman, 2006). The concept of conformability is the qualitative researcher's comparable concern to objectivity (Kubayi, 2013). To ensure conformability, the researcher did not provide information from his or her imagination. The readers should be able to link the findings with the data that was gathered (Creswell, 1998). This implies that the reader must see how the data interpretations were made. Furthermore, the researcher ensured conformability by presenting information from the respondents step by step. Also, all the information concerning the challenges of pictorials was analysed and interpreted. All sources were acknowledged where possible.

3.7.4. Dependability

Dependability makes sure that research findings were reliable and can be repeated. Dependability was confirmed by the quality in which the research was conducted, analysed, described and presented. The researcher ensured dependability by applying objectivity when presenting the findings without being subjective (Ibid, 2004; 71). The Ethical considerations are provided hereunder.

3.8 ETHICAL CONSIDERATIONS

Qualitative research consists of researchers and respondents; it is also established on collaboration and teamwork between the two parties (Hammond & Wellington, 2013: 285). Ethics is an important component of qualitative research. Therefore, in collaboration, both the respondents and the researcher should be able to understand them for positive communication during the data collection process (Liamputtong, 2009:32). Hammersley & Traianou (2012: 82) argue that ethics are “a set of principles that embody or exemplify what is good or right, or allow us to identify what is bad or wrong.” Furthermore, the main aspect of ethics is to avoid harming respondents or researchers in the research process. Hence, there are two most important ethical values that a researcher must consider when conducting research, namely; permission, informed consent, confidentiality and anonymity, protection from harm and respect.

3.8.1 Permission

The researcher applied for ethical clearance and permission from Turfloop Research and Ethical Committee (TREC). The study also pursued permission from the registrar of the university.

3.8.2 Informed consent

“Gaining consent can be a practical necessity if access to relevant data is to be achieved” (Hammersley & Traianou, 2012: 83). Respondents must be informed about everything in the study; including the benefits, risks and procedures of the research, in order for them to decide whether they want to participate or not (Ibid, 2012; 84). The researcher informed all the respondents about the benefits, risks and procedures

which were linked to the study. The researcher did not force the respondent to take part in this study. Therefore, the participation was voluntary.

3.8.3 Confidentiality and anonymity

The researcher provided the respondents with the right not to share information that they are not comfortable with. Respondents were permitted to withdraw from the research study whenever they wish to. To ensure anonymity, the respondents' real names were not mentioned in the study and the information obtained only was used for research purposes.

3.8.4 Protection from harm

The goal of ethics is to avoid partakers in the research injury by the research process or the researcher. The researcher considered the protection of respondents' identity information. Anonymity protected the respondent's privacy.

3.8.5 Respect

Lastly, the researcher respected all respondents. Respondents' positions and statuses were respected. Respondents were not forced to disclose information they feel uncomfortable with. The conclusion is discussed in the next section.

3.9. CONCLUSION

Generally, many researchers continue to come up with new ideas about different topics, so it is vital to choose the research method that will produce quality in a research study. For this reason, different studies have different aims and objectives that need the best research design to reach the rich end product. It is important to know and understand different research methodology techniques to give its best in data collection (Flick, 2014).

3.10 SUMMARY OF THE CHAPTER

This chapter discussed the exploratory research design, the qualitative research approach the population of the study and the location. In addition, it has also discussed sampling which was purposive sampling, data collection and data analysis. Again, quality criteria were discussed and ethical considerations were also discussed. Finally, the conclusion and the summary of the chapter were given.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA FINDINGS

4.1 INTRODUCTION

This chapter presents, analyses and interprets data that were collected using interviews. Data were collected from ten (10) VI students and five (5) lecturers in the English discipline at the University of Limpopo. In addition, the data were also collected from two (2) RDC braillists at the University of Limpopo. The aim of this study was to explore, identify and find out challenges faced by VI students when dealing with pictorial illustrations in texts, teaching and learning materials with specific reference to English discipline at the University of Limpopo.

4.2 INTERVIEW DATA OF THE STUDY (QUALITATIVE)

Interviews helped the researcher to obtain in-depth information about the challenges of pictorial illustrations in teaching and learning materials as far as VI students in the English discipline are concerned. The interviews were successful through the participation of VI students, English language lecturers and RDC braillists at the University of Limpopo. The data is presented below.

The findings in this section will be presented and discussed based on several related themes. It should be noted that these findings reported in this section are not entire interview sessions but only common viewpoints are reported.

4.2.1 PRESENTATION OF DATA FROM THE VI STUDENTS

4.2.1.1 THEME ONE: VISUAL IMPAIRMENT CATEGORIES

This theme identified the respondent's visual impairment categories in order to help the researcher to find relevant data. The data from the respondents are as follows:

Table 4.1 Visual impairment categories of the respondents

Research Respondent	Status
Respondent 1	“partially sighted”
Respondent 2	“partially sighted”
Respondent 3	“totally blind”
Respondent 4	“totally blind”
Respondent 5	“totally blind”
Respondent 6	“low vision”
Respondent 7	“partially sighted”
Respondent 8	“low vision”
Respondent 9	“totally blind”
Respondent 10	“low vision”

Based on the above data three students were partially sighted (Respondent 1, 2 and 7). Respondents 3, 4, 5 and 9 were totally blind. While the other students fall in the low vision category (respondents 6, 8 and 10). This was very important because these categories of students are relevant to this study because they are the ones who are affected. Thus, the researcher felt that these were the subjects who can provide relevant and valid data. Carpenter (2021) concludes that visual impairment may include totally blind, low vision and partially sighted. Differences especially in visually impairment can affect how a person can see and different information on pictorial illustrations.

4.2.1.2 THEME TWO: ASSISTIVE DEVICES TO ACCESS ENGLISH LANGUAGE LEARNING MATERIALS

This section aimed to identify different assistive devices used by VI students to access English language learning materials. It included braille, screen readers, magnifier and spectacles. Respondents were asked about the method they use to read English learning materials. Their responses were as follows.

Research Respondent	Comment/s
Respondent 1	<i>"...I magnifier and spectacles"</i>
Respondent 2	<i>"...I use spectacles"</i>
Respondent 3	<i>"...I use braille and JAWS screen reader"</i>
Respondent 4	<i>"...I use braille and JAWS screen reader"</i>
Respondent 5	<i>"...I utilise JAWS screen reader"</i>
Respondent 6	<i>"...JAWS screen reader and magnifier"</i>
Respondent 7	<i>"...I use magnifier and spectacles"</i>
Respondent 8	<i>"...I do not use any assistive device I rely on the little sight I have"</i>
Respondent 9	<i>"...I use Braille and JAWS screen reader"</i>
Respondent 10	<i>"...I use magnifier"</i>

Table 4.2 Assistive devices to access English language learning materials

The findings of this study revealed that one respondent (respondent 10) uses a magnifier only to access English language learning materials while one (Respondent 2) uses spectacles to access English language learning materials. On the other hand, two VI students (respondent1 and 7) used both magnifiers and spectacles to access English language learning materials. In contrast, three students' VI students (Respondents 3, 4 and 9) use both braille and JAWS screen reader to access English language learning materials. While one student (respondent 5) uses only a JAWS screen reader to access English language learning. Hence, one student (respondent 6) uses both a JAWS screen reader and magnifier to access English language learning materials. One student (respondent 8) does not use any assistive device to access English language learning materials, the respondent said the following:

"I do not use any assistive device I rely on the little sight I have".

Lugome (2018) is of the view that VI students struggle to read English language learning materials with pictorial illustrations using different assistive devices. For example JAWS Screen reader. Another aspect that was found was that not all VI students can use the devices to access the learning materials and therefore, those students continue to suffer.

4.2.1.3 THEME THREE: CHALLENGES OF PICTORIAL ILLUSTRATIONS IN ENGLISH LANGUAGE LEARNING MATERIALS AND LESSONS

In a learning situation where the English language is lectured, different materials that contain pictorial illustrations are used to support, convey and clarify meanings in the texts. However, the use of pictorial illustrations poses challenges to VI students. Respondents indicated the challenges they face when reading texts that contain pictorial illustrations. The responses from the respondents are presented hereunder.

Table 4.3 Challenges of Pictorial Illustrations in English Language Learning Materials and Lessons

<p>Respondent 1</p> <p><i>“...I have challenges, especially in dictionary use where phonetics are included because I struggle to see them which results in misunderstanding of them. I also feel excluded during English language lectures”</i></p>
<p>Respondent 2</p> <p><i>“...I struggle to see pictorial illustrations because even if I increase the font. For example, in one of the English language courses cartoons are sometimes used and they are not visible enough after increasing the font”.</i></p>
<p>Respondent 3</p> <p><i>“...I have a challenge when it comes to materials with pictorial illustrations in English language learning materials because the assistive device that I use does not recognise cartoons and figures. In other words, I mean that they are not explained and described by the JAWS screen reader. Instead, the screen reader just says image without explanation or description. They also cause confusion during lectures as they may contain important information rather than words”.</i></p>
<p>Respondent 4</p>

“The challenges I have are as follows; I miss important information during English language lectures because some of the lecturers do not explain and describe pictorial illustrations in a manner that will help to understand better...”

Respondent 5

“I cannot understand what is portrayed in the pictures or cartoons and due to that I end up feeling excluded during English language lessons...”

Respondent 6

“I struggle to understand what I am reading if the materials contain pictorial illustrations, the magnifier cannot clearly increase some of the pictorials. I end up failing to understand what I am reading, I also have challenges in syntax because I cannot see how the tree diagram is drawn, it is difficult for me to understand the structure of sentences since I cannot see the tree that they use to branch sentences.

Respondent 7

“...Pictorial illustrations sometimes create confusion to me because some are not visible enough regardless of font increase. Another challenge is that some cartoons and maps are too dark for an assistive device that I use and however, they affect my understanding of important information written on the cartoon”.

Respondent 8

“...English language learning materials that contain pictorial illustrations have challenges in my learning process because some pictorials are not clearer even after increasing the font so it is hard for me to see what is written or shown on the cartoons”.

Respondent 9

“I get confused when reading English language learning materials with pictorial illustrations. As braille and JAWS screen reader cannot describe and explain the pictorial illustrations. During lessons, I get confused because you may find that I am struggling to understand the given information on the cartoons so unexplained cartoons may pose a challenge...”

Respondent 10

“...I struggle to participate if there are many cartoons and maps that I cannot see and understand ...”.

Based on the above-presented data the use of English language materials that contain pictorial illustrations in learning and lectures is challenging because it impacts the understanding of phonetics negatively. The study also established that cartoons and maps lead to confusion in terms of understanding information that is being taught in lecture halls. Also, the data found revealed the use of pictorial illustrations in English language course learning materials has challenges in terms of information accessibility and understanding. Additionally, pictorials have challenges in the inclusion of VI students, and respondent 6 have challenges when it comes to syntax structures and how the sentences are structured. Also, it was found that assistive devices used by VI students do not help them to read and learn using materials with pictorials in English language courses. Hence, pictorials discourage VI students to participate in lessons.

Gould, Rouffey & barentsen (2018) state that that in a learning where pictorials are included VI students will be confused as they cannot see the pictorials. Another challenge that was covered is that the assistive devices do not help VI students to read learning materials with pictorial illustrations. These challenges affect the learning of VI students and their participations during lessons.

4.2.1.4 THEME FOUR: CAUSES OF PICTORIAL ILLUSTRATION CHALLENGES IN ENGLISH LANGUAGE LEARNING.

The challenges of pictorial illustrations are influenced by different causes in the teaching and learning processes. Respondents were asked about the causes of the challenges that they face when dealing with pictorial illustrations during lessons.

Respondents stated the following:

Table 4.4 Causes of pictorial illustration challenges in English language learning.

<p>Respondent1</p> <p><i>“...Some pictorials are poorly drawn and presented in the texts”</i></p>
<p>Respondent 2</p> <p><i>“...Some pictorials cannot be enlarged in big font”.</i></p>
<p>Respondent 3</p> <p><i>“...I think that lecturers are not well trained to teach pictorials in a lecture hall where abled and Visually Impaired are included in the same class”</i></p>

Respondent 4

“Lack of training to English language lecturers. Also, there is a lack of policies concerning the teaching and learning of Visually Impaired or disabled students in general in different universities including the University of Limpopo...”

Respondent 5

“...Some lecturers do not try to explain pictorial illustrations to Visually Impaired students instead they only focus on abled students or those who can see pictorials during English courses lessons”.

Respondent 6

“...The cause is that screen readers such as JAWS are not well developed to read or recognise pictorials in learning materials”.

Respondent 7

“...Some lecturers are ignorant to our needs during lectures. There is a lack of attention during lectures where pictorials are used or included. They do not know how to help us”.

Respondent 8

“...Some pictorial illustrations are more or printed in a small font that does accommodate people with eyesight problems”.

Respondent 9

“There is silence about the teaching and learning of Visually Impaired students in the University of Limpopo policy...”

Respondent 10

“...I think that some Visually impaired students in the English English language courses are afraid to need help from their lecturers and to explain their struggle in terms of their struggle regarding the use of pictorial Illustrations during learning and lessons”.

This theme gave causes concerning challenges of pictorial illustration. It found that some pictorial illustrations are poorly printed which leads to those pictorials not being enlarged in a way that can accommodate VI students in English language lectures and materials. The theme also discovered that there is a lack of training for English language lecturers teaching VI students. In addition, there is a lack of policies that give information about the teaching of VI students in English Language Learning (ELL) and

teaching. There is a lack of assistive devices such as screen readers to read materials with pictorial illustrations. Additionally, there is a lack of attention to VI students during the lessons where pictorials are included. Also, there is a fear of VI students explaining challenges experienced during the learning and lessons where pictorials are included.

The data from the respondents revealed that there is a lack of attention to VI students by English language lecturers as far as the teaching of pictorials is concerned in lecture halls. This means that some English language lecturers do not know how to help VI students in a lecturing hall where materials with pictorial illustrations are used. Respondent 7 said, *“Some lecturers are ignorant to our needs during lectures. There is a lack of attention during lectures where pictorials are used or included. They do not know how to help us”*. This means that there is a lack of attention during the teaching of pictorials to VI students and some lecturers do not know how to help VI students during learning.

Moreover, in the UL Policy, VI students or disabled students are not included in terms of their needs. In other words, VI students are not recognised as part of the learning policy. Again, in this policy, the university does not say anything about the learning environment where VI students are mixed with abled students in a learning environment.

The study found that there is silence on teaching and learning of VI students in the University of Limpopo Policy. One of the respondents (Respondent 9) said “There is silence about the teaching and learning of visually impaired students in the University of Limpopo policy”. The teaching and learning of VI students are not included in the University of Limpopo Policy. In support of this view, The University of Limpopo Policy states that the UL teaching and learning policy was developed to achieve the teaching and learning culture. In other words, it focuses on how different activities and academic programmes are facilitated in the teaching and learning environment.

On page 5 of the UL policy in 3.3, VI students are not included and recognised in terms of their needs. The policy just states that it promotes the teaching and learning of diverse students. For this reason, UL policy is silent on the teaching and learning of VI

students and their needs in a learning environment. Language teaching and learning do not say much about lessons and challenges in language teaching and learning

The study also found that screen reader software such as JAWS is not well developed to read, recognise, explain and describe pictorial illustration in English language learning materials. This means that the JAWS screen reader used by VI students to read materials cannot recognise them. Hence, Respondent 6 said, *“The cause is that screen readers such as JAWS are not well developed to read or recognise pictorials in learning materials”*.

Mbuyha (2018) proposes that many South African lecturers are not trained to teach VI students especially in higher education. It was also found that there is lack of policies on learning and teaching of VI students.

Again, many students are not receiving the needed attention from ELL lecturers. Another covered cause of challenges was the lack of devices to read pictorial illustrations. Cryer et al (2013) claims that the lack of devices for VI students is a serious challenge in South African Higher Institutions. All these cause have negative impact towards learning of VI students.

The above section presented data from the students. The data were analysed and interpreted. The below section discusses interview data from English language lecturers.

4.3 INTERVIEW DATA FROM LECTURERS

In this interview, five lecturers in the English discipline at the University of Limpopo were interviewed. These interviewed lecturers were those who have VI students in their class. This Section is divided into themes.

4.3.1 THEME ONE: STRATEGIES FOR TEACHING PICTORIAL ILLUSTRATION TO VI STUDENTS

Selecting and preparing materials in ELL is a complex task. The data for English language lecturers are presented below. Lecturers were asked the type of strategies

that they use to teach content or topics with pictorial illustrations. They said the following:

Table 4.5 Strategies for teaching pictorial illustration to VI students

<p>Respondent 1 <i>"...explaining strategy"</i></p>
<p>Respondent 2 <i>"...I omit pictorials because I have challenges when it comes to explaining and describing them to VI students"</i></p>
<p>Respondent 2 <i>"...I omit pictorials because I was not trained on how to explain and describe them.. I have challenges when it comes to explaining and describing them to VI students"</i></p>
<p>Respondent 3 <i>"...I try to explain and demonstrate them, especially cartoons"</i></p>
<p>Respondent 4 <i>"...I use dictation strategy"</i></p>
<p>Respondent 5 <i>"...I use explaining strategy"</i></p>

Based on the above presented data some ELL lecturers use strategies such as explaining, describing, demonstrating and dictating in order to accommodate VI students during ELL lessons. In contrast, only one lecturer tries to omit pictorials because the respondent was not trained on how to describe and explain them. S'lungile, Ntinda & Hlanze (2015) lecturers who are not trained find it difficult to teach using materials with pictorial illustrations. In that data that was found, lecturers are not trained to teach pictorials to VI students. From the data findings it is seen that lecturers are still trying to find better strategies to teaching using document with pictorial illustrations to VI students.

4.3.2 THEME TWO: CHALLENGES OF TEACHING PICTORIAL ILLUSTRATIONS TO VI STUDENTS

Some challenges may be encountered by lecturers when teaching using materials that contain pictorial illustrations. Some of the challenges that lecturers encounter are highlighted below.

Table 4.6 Challenges of teaching pictorial illustrations to VI students

<p>Respondent 1</p> <p><i>“Even though I use an explaining strategy I am still struggling to explain pictorials in a manner that will fully accommodate VI students understanding of information on the cartoons or sometimes maps. In other words, I am not sure if my way of explaining is correct or not to VI students”.</i></p>
<p>Respondent 2</p> <p><i>“I struggle to explain and describe pictorials especially those phonetics with some sort of drawings”.</i></p>
<p>Respondent 3</p> <p><i>“...I am not familiar with the correct manner to explain and demonstrate what is on the cartoon. In fact, I even try to demonstrate but the challenge is some VI students end up being confused especially those who are totally blind”.</i></p>
<p>Respondent 4</p> <p><i>“...I try to dictate those pictorials before going to my lessons. However, the challenge I have is that when I try to ask questions I realise that I always leave some important information that can help VI students to understand better”</i></p>
<p>Respondent 5</p> <p><i>“...I sometimes struggle to pay attention to VI students as there is not enough time to explain and teach those pictorials at the same time”</i></p>

Based on the above-presented data that the study found that even though lecturers explain those pictorials, they are not sure if their explanations really accommodate VI students. The study also found that lecturers have a challenge when it comes to explaining and describing phonetics with drawings to VI students. Additionally, the data above reveals that even though lecturers explain and demonstrate the cartoons to VI students during ELL lessons, there is a need to know the correct manner to accommodate VI students when sharing information to avoid confusion. This can be done to avoid leaving out important information when dictating pictorials because some lecturers struggle to do so. Hence respondent 3 said the following:

“I am not familiar with the correct manner to explain and demonstrate what is on the cartoon. In fact, I even try to demonstrate but the challenge is some VI students end up being confused especially those who are totally blind”.

The study also established that with the given lecturing time that lecturers are allocated, they cannot focus and explain the same information with pictorials clearly to both VI and abled students. During ELL lessons fair attention is not given to VI students when explaining illustrations. In this regard, Respondent 4 said the following:

“I try to dictate those pictorials before going to my lessons. However, the challenge I have is that when I try to ask questions I realise that I always leave some important information that can help VI students to understand better”.

This concludes that lecturers are still to accommodate VI students in ELL lecturers where materials with pictorials are used. On a similar note, they are struggling to have full details on how to use explaining, describing and demonstrating strategies during lessons where VI students are included. Similarly, some ELL lecturers still suffer in terms of which strategies to use when teaching using materials with pictorial illustrations. Mbuva (2018) lecturers may struggle to explain and describe pictorial illustrations to VI students.

4.4 INTERVIEW DATA FROM RDC BRAILLISTS

Preparing materials for VI students need more time and effort. The data of braillists are presented as follows:

4.4.1 THEME ONE: CHALLENGE OF BRAILLING ENGLISH LANGUAGE LEARNING MATERIALS

4.4.1.1 METHOD USED TO PREPARE LEARNING MATERIALS FOR VI STUDENTS

Braillists at the University of Limpopo use different methods to prepare learning materials for VI students. Respondents 1 & 2 said the following:

“We use braille method for totally blind students and large prints for partially sighted and low vision students to prepare English Language learning materials”.

The data above reveals that braille and large print methods are used to prepare learning materials for VI students. Onsinyo, (2018) attain that VI students rely on special reading format such Braille and large prints.

4.4.1.2 CHALLENGES FACED WHEN PREPARING ENGLISH NOTES WITH PICTORIAL ILLUSTRATIONS FOR VI STUDENTS

There can be challenges when preparing English notes with pictorial illustrations for VI students. Respondents stated some of the challenges below.

4.4.1.3 CHALLENGES CONCERNING MATERIALS WITH CARTOONS

Table 4.7 Challenges concerning materials with cartoons

Respondent 1 <i>“...materials with cartoons are not easy to convert to braille”.</i>
Respondent 2 <i>“So for these reasons, it is not easy to deal with those materials because we struggle to explain those cartoons since we are not familiar with the content that is taught in class...”</i>

The information above reveals that is difficult for brailleists to prepare ELL materials with pictorials. Similarly, it is difficult to give the explanation of pictorials on learning materials since some brailleists are not familiar with the content or how it should be explained. Amatos (2002) is of the view that brailleing materials with pictorials is a complicated task.

4.4.1.4 CHALLENGES CONCERNING MATERIALS WITH SLIDE PRESENTATIONS

Respondents 1 and 2 said the following:

“...we have challenges concerning slides presentations with pictorial illustrations because it is not easy to convert the PowerPoint documents. This is because the braille process is easy with Microsoft word, so the inclusion of pictorials in slides makes the braille process difficult”

The information above suggests that slides are not easy to convert to braille especially those with pictorials they make the braille process difficult. Amatos (2002) stress that it is difficult to braille documents with pictorials.

4.4.1.5 CHALLENGES CONCERNING MATERIALS WITH GRAPHS AND PIE CHARTS

Respondents 1 and 2 said the following:

“Graphs and pie charts affect our braille process because the software that we use for braille does not recognise them and it takes time to try and remove the information on them. For this reason, when braille materials with graphs and pie charts, it is difficult to remove drawings in a manner that will not affect the information”.

The study discovered that it is not easy to braille ELL materials with pictorial illustrations such as pie charts and graphs. This means that pie charts and graphs pose a challenge in ELL materials for VI students.

4.4.1.6 CHALLENGES CONCERNING MATERIALS THAT ARE IN PICTURE FORMAT

Respondents 1 & 2 said the following:

“Some ELL materials are given to us as pictures. For this reason, it is difficult for us to braille those learning materials because they need to be retyped and it takes time. It makes us sad because while we are trying to retype the information on the pictures, our students remain without materials to learn for a long period of time which may lead to them failing their English courses assessments and task given to them.”

The study found that ELL materials that they receive in a form of the picture are not easy to braille they need much time to retype them. For this reason, it is a challenge to braille materials that are in a form of a picture.

4.4.1.7 CHALLENGES CONCERNING MATERIALS WITH SYMBOLS AND SIGNS

Respondents 1 and 2 said the following:

“it is challenging to braille materials with symbols or signs because some of them are in drawings and they are not easy to explain. We often see this challenge in materials with phonetic symbols because we cannot explain them.”

The information above reveals that learning materials with symbols and signs are not easy to explain. For example, phonetics.

4.4.1.8 CHALLENGES CONCERNING MATERIALS WITH TABLES THAT HAVE MANY COLUMNS

Respondents 1 and 2 said the following:

“We have a challenge in ELL materials that include tables with many columns because it is not ready to convert them. As a result, when we try to take out information on those drawing it becomes a challenge because VI students end up being confused as these columns result in a lot of information with many pages which takes time for our students to understand this information without the use of tables.”

The study found that the use of tables with many columns affects the process of braille which affects VI students not receiving information at the right time. This means that it is not easy to deal with tables with many columns for braille and VI students in ELL materials.

4.4.1.9 CHALLENGES CONCERNING MATERIALS WITH STRUCTURAL DRAWINGS

When it comes to challenges concerning materials with structural drawing, the responses were as follows: Respondents 1 and 2 said the following:

“We have challenges when it comes to materials with syntax structures because when we try to braille we cannot draw the tree. It becomes a problem when we have to pack the information, we are not sure if the students understand how we put our information since the tree is removed since we cannot draw the tree”

The study found that brailleists have challenges when it comes to learning materials with syntax especially when they are to put the information that is branched on the tree that is used for syntax.

4.5 CONCLUSION

The presented data revealed the important information concerning pictorial illustrations challenges faced by VI students in ELL materials and lessons. It is important to select teaching and learning materials that suit all students with different needs.

4.6 SUMMARY OF THE CHAPTER

This chapter presented, analysed and interpreted data from VI students in the English discipline and lecturers experience in teaching English language course. It presented, analysed and interpreted data from the brailleists responsible for converting materials into braille format. This chapter also provided the findings. The next chapter will discuss the summary, recommendations and conclusions.

CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

5.1 INTRODUCTION

This last chapter presents the summary, recommendations and conclusions

5.2 SUMMARY

This research focused on the challenges faced by VI students when dealing with pictorial illustrations in texts, teaching and English language learning materials. This study's main aim was to explore, identify and find out challenges faced by VI students when dealing with pictorial illustration with specific reference to students in the English discipline at the University of Limpopo. This study was also based on the following objectives: to explore, identify and probe challenges faced by VI students when dealing with pictorials in English learning lectures as perceived by them; to establish what strategies English lecturers use to teach pictorial illustrations to VI students, to explore, identify and probe the challenges faced by brailleists when brailleing texts with pictorial illustrations; and to suggest and recommend strategies that lecturers can use to improve teaching texts with pictorial illustrations to visually impaired students. This research study was characterised by five chapters.

Chapter one served as the root of the thesis. The chapter presented the introduction and the background to the study which discussed the definitions of concepts; abled, disabled, pictorial illustrations and visual impaired types of impairment and the effects of pictorial illustrations in teaching and learning. The problem statement, the purpose of the study, objectives, research questions, limitations, significance, scope of the study, definitions of key terms, dissertation outline and conclusion were clearly stated.

While chapter two gave an overview of the existing literature on the challenges faced by VI students when dealing with pictorial illustrations in texts, teaching and learning materials, with specific reference to students in the English discipline. Also, this chapter gave the role of theory, implications of SMDT to language teaching, and the

history of VI students in higher institutions in SA. It further gave information about the challenges faced by VI students in learning, challenges of learning the English language, the perspective of using pictorial illustrations, theoretical perspective, pictorial illustrations in teaching materials, the impact of pictorial illustrations on learning, the inclusion of pictorial illustrations in English courses, types of pictorial illustration in texts, approaches to analyse pictorial illustrations in texts and materials, the use of pictorial illustrations in instructional materials and texts, perspectives on the use of pictorial illustrations in instructional texts and materials in English courses.

On the hand, chapter three served as the root of the thesis. The chapter presented the introduction and the background to the study which discussed the definitions of concepts; abled, disabled, pictorial illustrations and visual impaired types of impairment and the effects of pictorial illustrations in teaching and learning. The problem statement, the purpose of the study, objectives, research questions, limitations, significance, scope of the study, definitions of key terms dissertation outline and conclusion were clearly stated.

In the contrary chapter four discussed presented, analysed and interpreted data from VI students in the English discipline and lecturers teaching English language courses. It presented the analysed and interpreted data from the braillists responsible for converting materials into braille format. This chapter also provided the findings.

Finally, chapter five discussed the summary of the findings, the study recommendations and gave a conclusion of the whole study.

5.3 RECOMMENDATIONS

This section presents suggestions for further research based on what this study discovered. During this study, the researcher discovered that there are areas of research with regard to the problem investigated in this study that demands further inquiry. Thus, the following recommendations are made:

5.3.1. Students

VI students in English discipline should try to raise their challenges when lecturers are teaching using materials with pictorial illustrations and extra lectures should be provided where necessary to avoid exclusion and confusion in lecture halls.

5.3.2. Lecturers

English language lecturers should try to find strategies to teach pictorials to accommodate VI students. On a similar note, lecturers should give attention to VI students to check if they follow or understand what they are teaching. Similarly, lecturers should have a good working relationship with RDC, so that they understand the learning challenges faced by VI students when dealing with pictorial illustrations in learning materials and lecture halls. Additionally, lecturers should ask for help from RDC, subsequently that they can assist students better. Lecturers should also design or create something that is touchable so that it can be easier for visual impaired students to touch and understand the drawings that they are talking about especially in syntax.

5.3.3. Braillists

Braillists should explain challenges that they have concerning converting materials with pictorial illustrations to the English language lecturers, consequently that they can assist them. There should be a good working relationship between them and lecturers.

5.3.4. University of Limpopo

The university should train lecturers concerning different disabilities, especially visually impairment disabilities because it has many challenges in a learning environment. This type of disability requires assistance in terms of learning, for example, it requires many assistive devices to support the learning. The university should encourage inclusivity through introducing compulsory inductions and workshops to address and train lecturers concerning visually impairment matters in learning English language courses. Moreover, the university should encourage the interaction between RDC and lecturers by coming up with new ideas on how to help VI students in terms of information accessibility of learning materials and devices for VI students. Also, the university states something about the teaching and learning of VI students. It must ensure compliance for VI students learning.

5.3.5 Material designers

Material designers or authors should try to explain any pictorials that they use when they prepare English Language materials to include VI students.

5.3.6 Software developers

Software developers should come up with a better software to accommodate visually impaired students in terms of explaining and describing pictorials. In other words, they should design softwares that can explain and describe pictorials.

5.4 CONCLUSION

The overall findings of this study were that pictorial illustrations have challenges in the learning of VI students, especially in learning materials that contain pictorial illustrations in English language courses. They struggle to understand information during learning and lessons. For this reason, the use of pictorial illustrations had a negative impact on their understanding of information and meaning conveyed by the use of pictorial illustrations in ELL.

This study also concluded that the use of pictorials in learning materials affects the inclusion of VI students during lessons and materials, as there is a struggle to access important information as VI students struggle to see pictorials even through the use of different assistive devices.

The study further concluded that pictorials limit fair equal education opportunities for VI students during English language lectures, where pictorials are used as there are no explanations and descriptions that accommodate VI students. In addition, VI students receive no attention when pictorial illustrations are taught, instead some ELL lecturers focus only on abled students or those who can see pictorials during lectures. In other words, VI students do not receive attention in terms of pictorial illustrations from some of the lecturers. Overall findings were that ELL lecturers are still struggling to find strategies that can best accommodate VI students in terms of pictorial teaching. On the hand, braillists struggle to find a way to reduce the challenges they face when brailleing ELL texts that pictorial illustrations.

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APPENDICES

APPENDIX A: LETTER OF INFORMED CONSENT

Dear Respondent

My name is Ndivhuwo Matshanisi. I am a Masters candidate in the Department of English studies studying at the University of Limpopo.

The title of my research is: The challenges of pictorial illustrations faced by students in texts: The case of the University of Limpopo in Limpopo Province, South Africa.

It is important to participate in this study as it will assist the researcher to achieve the aim of the study, which is to explore and identify the challenges faced by visually impaired students when dealing with pictorial illustrations in teaching and learning materials, to find out the strategies English lecturers use to teach pictorial illustrations to VI students, to explore the challenges faced by brailleists when brailleing a text with pictorial illustrations.

The interview will take a minimum of 15 minutes. The researcher will explain and clarify some of the questions that you do not understand. This is voluntary, and you will not be asked anywhere during the interview to mention your name. The information that you share with the researcher during the interview will remain confidential. Your participation is thus important!

I can be contacted at the School of Languages and Communication Studies Department of Languages (English studies), University of Limpopo. Email: 201630377@keyaka.ul.ac.za or matsani.nd@gmail.com Cell: 0797739546.

My supervisor is Dr TJ Kekana who is located at the School of Languages and Communication Studies, Department of Languages (English Studies) University of Limpopo. Contact details: email tebogo.kekana@ul.ac.za Telephone number: (015) 268 2586.

APPENDIX B: PERMISSION LETTER

P. O BOX 143

Ha- Makuya

0973

05 November 2021

Office of the Registrar

Private Bag X1106

Sovenga

0727

Application for permission to collect data.

Dear Prof Masha

My name is Ndivhuwo Matshanisi. I am a Masters candidate in the Department of English studies studying at the University of Limpopo.

The title of my research is The challenges of pictorial illustrations faced by students in texts: The case of the University of Limpopo in Limpopo Province, South Africa.

I am writing this letter to ask for permission to conduct a study and collect data at the University of Limpopo. My sample size is 10 visually impaired students, 5 English lecturers and 2 people from the Reakgona disability Center. It is important for the above mentioned to participate in this study as it will assist the researcher to achieve the aim of the study, which is to explore and identify the challenges faced by visually impaired students when dealing with pictorial illustrations in teaching and learning materials, to find out the strategies English lecturers use to teach pictorial illustrations to VI students, to explore the challenges faced by brailist when brailing a text with pictorial illustrations.

The interview will take a minimum of 15 minutes. This is voluntary, and respondents will not be asked anywhere during the interview to mention their names. The information that they will share with the researcher during the interview will remain confidential. Your permission is important!

I can be contacted at the School of Languages and Communication Studies in the Department of languages (English studies) at the University of Limpopo. Email: 201630377@keyaka.ul.ac.za or matsani.nd@gmail.com, Cell: 0797739546.

My supervisor is Dr TJ Kekana who is located at the School of Languages and Communication Studies, University of Limpopo. Contact details: email tebogo.kekana@ul.ac.za, Telephone number: (015) 268 2586.

Yours sincerely

Matshanisi Ndivhuwo

ANNEXURES

ANNEXURE A: INTERVIEW QUESTIONS FOR STUDENTS

1. Which category of visual impairment are you? (Partially, low vision or totally blind).
2. Which method do you use to read English learning materials? (Braille, screen reader, magnifier or spectacles).
3. Does the above-mentioned method assist you to access pictorial illustrations in English courses?
4. What are the challenges you face when reading texts with pictorial illustrations in English courses?
5. What do you think is the cause of these challenges?
6. What do you think should be done to reduce the challenges mentioned above?

ANNEXURE B: INTERVIEW QUESTIONS FOR LECTURERS

1. Do you have visually impaired students in your classes?
2. What are the strategies you use to teach topics or content with pictorial illustrations to VI students?
3. What are the challenges you face when teaching the content with pictorial illustrations to VI students?
4. Concerning those challenges, how do you want the University to help with the matter in a way that VI students will understand the content with pictorial illustrations better?

ANNEXURE C: INTERVIEW QUESTIONS FOR REAKGONA DISABILITY CENTRE BRAILLISTS

1. What method do you use to prepare learning materials for VI students?
2. What are the challenges you faced when preparing English notes with pictorial illustrations in them?

