INTEGRATING INCLUSIVE PRACTICES AT TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) COLLEGES IN LIMPOPO PROVINCE

BY

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DECLARATION

I, Lorna Pheeha Sako, declare that the study entitled "Integrating inclusive practices at technical and vocational education and training (TVET) colleges in Limpopo Province" is my work. Sources were correctly cited in the content and all sources are mentioned in the list of references.

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L.P. Sako   Date

DEDICATION

I dedicate this dissertation to:

My husband John Mohoto, for his encouragement, support in this project from the beginning up to the end.

My daughter Choene and my son Noko for understanding when I could not spend quality time with them because of my involvement in this project.

My parents and siblings for their encouragement and support throughout the research project.

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ABSRACT

Access and support for students with disabilities remain limited despite strong legislative and policy framework for addressing inclusivity in the education sector. Presently, TVET colleges encounter severe obstacles and hiccups in that they must improve the quality of education provided together with other compulsory obligations. As a result, TVET colleges continue to encounter challenges as and when they try to improve the quality of education. In South Africa, the integration of people with disabilities has been an ongoing process since the advent of the democratic government. The study investigated the integration of inclusive practices for students with disabilities at Technical and Vocational Education and Training (TVET) colleges. The study followed the qualitative research approach. The purposive sampling technique was used to select participants.

Twenty-seven participants took part in the study. Participants comprised campus managers, HoDs, student support officers, lecturers and students with disabilities. Two different methods to analyse data were used, namely, thematic categorisation (for interviews and observations) and content analysis (for documents). The study is premised on the social model of disability and Bronfenbrenner's bioecological system theory to understand participants' views and how they carry out inclusive practices in their lecture rooms. Data was collected using three techniques, namely, interviews, observations and document analysis. The findings of the study revealed the following: lecturers at TVET colleges are struggling to support students with disabilities due to lack of training on different types of disabilities; students with disabilities are given access to certain types of training based on the nature of their disability; students who experience mobility disabilities are faced with challenges of inaccessible of physical environments; the curriculum at TVET colleges does not fully cater for a range of diverse needs of and students with impairments. The study recommends that: lecturers require training on different types of disabilities in order to support students with diverse learning needs; the involvement of disabled students in the planning of their support programmes; all stakeholders be encouraged to appreciate change and to contribute towards meaningful inclusive practices.

Key words: Inclusivity, Technical and Vocational Education and Training (TVET) Colleges, inclusive practices, impairments, diverse learning needs

ACRONYMS

CRPD   Convention on the Rights of Persons with Disability

EFA   Education for All

JAWS   Job Access with Speech

UNESCO   United Nations Educational, Scientific and Cultural Organisation

FOTIM   Foundation of Tertiary Institutions of the Northern Metropolis

TVET   Technical and Vocational Education and Training

HoD   Head of Department

ILO   International Labour Organisation

DHET   Department of Higher Education and Training

PSET   Post School Education and Training

NEET   Not in Education, Employment and Training

TVET   Technical and Vocational Education and Training

OECD   Economic Co-operation and Development

CLEP   College Lecturer Education Project

CET   Bank Community Education and Training

ADP   The Asian Development

NSDC   National Skills Development Council

FET   Further Education and Training

MLHRD   Ministry of Labour and Human Resource Development

WDDF   Women with Disabilities Development Foundation

VET   Vocational Education and training

ICT   Information and Communication Technology

ZAPD   Zambia Agency for Persons with Disabilities

PROPEL   Disabilities in Employment Through Legislation

EU   European Union

EFA   Education for All EFA

NIOS   National Institute for Open Schooling

SDGs   Sustainable Development Goals

AISA   All-inclusive Student Assistive model

LIST OF FIGURES

LIST OF TABLES

TABLE OF CONTENTS

CHAPTER ONE

CONTEXT OF THE STUDY

1.1   INTRODUCTION

The purpose of this study was to establish how inclusive practices were integrated at Technical and Vocational Education and Training (TVET) colleges. Using the case study approach, the study investigated inclusive practices carried out at TVET colleges as described by participants. The study was necessitated by deficiencies in access, support and quality of education offered for students with diverse needs, students with disabilities in particular. Students with disabilities include, amongst others, Hearing loss, Low vision or blindness, Mobility disabilities, Traumatic Brain Injury (https://cft.vanderbilt.edu).

A better understanding of challenges faced by students with disabilities will help institutions to adapt and create more accessible learning environments for all. It is important to point out that such students should be supported through their vocational training by various stakeholders at TVET colleges, namely Heads of Department (HoDs), campus managers, lecturers and student support officers.

1.2   BACKGROUND TO THE STUDY

The landscape of the education of students with disabilities in South Africa has undergone immense paradigm shift since the advent of democratic dispensation in 1994. Efforts have been mounted to move away from segregated settings towards a more inclusive setup, with a quest to address scholastic needs of students with diverse learning capabilities, especially those with disabilities. That said, there is still a lot to be done in the arena of Technical and Vocational Education and Training (TVET) with regards to the inclusion of students with disabilities. After all, TVET colleges play a pivotal role in the development of nations around the world. Countries across the globe have mounting expectations on TVET systems to address a range of sustainable development difficulties, gender mainstreaming, disability and youth unemployment, to name but a few. However, by contrast, TVET systems are experiencing challenges in terms of meeting these demands (European Network on Inclusive Education and Disability 2015, UNESCO, 2016). Students with

disabilities around the world who participate in vocational training are usually treated less favourably, placed in separate facilities and offered courses of low standard that do not meet market requirements (Mugor, Chang'ch & Keter, 2014). In a similar vein, the training of students with disabilities often takes place in segregated classes, and even then, the quality of the training offered is inferior compared to the one at general TVET centres (International Labour Organisation (ILO), 2017). A study conducted by Malle, Pirttmaa and Saloviita in 2015 revealed that students with disabilities participating in vocational education and training programmes reported facing systemic barriers compared to their non-disabled counterparts. However, different countries, including South Africa, have developed policies to deal specifically with the rights of persons with disabilities. The development of inclusive education in South Africa was influenced by legislative developments around the world such as the Salamanca conference and the *United Nations Convention on the Rights of Persons with Disabilities* (CRPD). *The Salamanca World Conference on Special Needs Education: Access and Quality* held in Spain in June 1994 gave attention to inclusion of all learners in the mainstream education system. The conference was held by more than 300 participants representing 92 governments and 25 international organisations (UNESCO, 2009). The CRPD (2006) gave undivided attention to disability-inclusive vocational training. State parties to the Convention are required to ensure that persons with disabilities can access general tertiary education inclusive of vocational training without discrimination (ILO, 2017). The CPRD also highlights a multiplicity of factors faced by women and girls with disabilities. Accordingly, it demands State parties to take proper measures so as to effect the rights and fundamental freedoms set out by the Convention, including the right to vocational training (CRPD), 2006: Article 6).

In the hectic schedule of universal educational civilisation, South Africa has not been left behind. Since the advent of the democratic government in 1994, the Republic has been constructing a new education and training system with the aim of meeting the needs of a democratic society (Department of Higher Education and Training (DHET), 2013). The democratic era abolished arbitrary discriminatory practices and availed quality education to all by developing equitable educational opportunities for students with disabilities. As a result, South African schools have adopted the inclusive education model to cater for

the needs of learners who experience a range of diverse learning needs. On the onset, the South African democratic government resolved to transform higher education and all other social and economic institutions into a new social order, that is, inclusivity (Organisation for Economic Co-operation and Development (OECD), 2012). To this end, the government has put strategies in place to enhance the national vocational education system to a more advanced level to ensure equal access for all segments of the population. In order to achieve this objective, cabinet has approved a White Paper for Post-School Education and Training in 2013. The said White Paper concerned itself with building an expanded, effective and integrated post-school system. Some of the main policy considerations in the White Paper include expanding access, improving quality and increasing diversity (DHET, 2013).

TVET colleges, previously known as Further Education and Training (FET) colleges, were ushered in the South African higher education system in 2012 (DHET, 2013). These colleges formed the government's response to skills and job interface; they are intended to be attractive institutions of choice for school leavers (DHET, 2013). Presently, TVET colleges encounter severe obstacles and setbacks to improve the quality of the education in parallel or alongside other compulsory obligations (DHET, 2013). Furthermore, the sector has been neglected over a long period of time, leaving it wanting (Akojee, 2016). Over and above, TVET colleges have minimal self-determination on their education and training provision, and there is nominal distinction within the TVET college system (Human Resource Development Council for South Africa (HRDC), 2014).

There should be greater differentiation and diversity among our institutions in order to provide for the wide variety of needs for both students and employers (DHET, 2016). The Department of Higher Education and Training has a directive to produce a skilled and capable market related workforce in South Africa. The said mandate includes students with disabilities; as such it is essential to eliminate barriers that might hamper inclusivity in the education sector. For this purpose, the Department of Higher Education and Training has established a national College Lecturer Education Project (CLEP) which aims to support the development of new qualifications programme for Technical and Vocational

(TVET) and Community Education and Training (CET) college lecturers. This is a five-year project to capacitate college lecturers at institutions of Higher Education. This study is part of the said national College Lecturer Education Project. It is against this backdrop that this study is aimed at investigating how inclusive practices can be integrated at TVET colleges in Limpopo Province in order for the Post School Education and Training (PSET) to adequately respond to the needs of students with a range of diverse needs, including those with disabilities.

1.3   STATEMENT OF THE PROBLEM

South Africa has established policies in the field of inclusive education. Nonetheless, students with disabilities often abandon the course of education and training earlier than their non-disabled counterparts and are overrepresented in the population of those Not in Education, Employment or Training (NEET) (UNESCO, 2015). Despite a strong legislative and policy framework of addressing inclusivity in the education sector, access and support for students with disabilities remain limited (DHET, 2013). In some countries, individuals with disabilities have limited access to educational and vocational training programmes (Malle *et al.*, 2015). A lot of resources have been utilised in the development and production of numerous Guidelines and White Papers dealing with inclusive education. It has been many years since the advent of the new dispensation, and yet problems regarding students with disabilities persist. A study conducted by Lang, Scheider, Cole, Kett and Groce (2017), established that in as much as some amount of progress has been made regarding disability inclusion at a policy level, more still needs to be done for inclusion to be fully realised. Policy stipulates that access to proper education and training opportunities is fundamental. As a result, institutions should be transformed in more ways than one, if equity for people with disabilities is to be fully realised. `

Students with disabilities face barriers that affect access to technical and vocational education and training institutions (Mugor, 2014). Such students are marginalised in the curriculum design. As such, they are subtly deemed not to be suitable candidates for admission in certain fields of study (Malle *et al.*, 2015). TVET colleges lack the capacity to cater

for students with disabilities (DHET, 2013). This study was intended to investigate how inclusive practices could be integrated at TVET colleges in South Africa.

1.4 PURPOSE OF THE STUDY

The purpose of the study was to develop inclusive education model by undertaking an investigation into the integration of inclusive practices in TVET colleges

Research questions

This study was geared towards answering the following questions:

- How are inclusive practices integrated for students with disabilities at TVET colleges?
- What are the diverse learning needs of students at TVET colleges?
- What barriers do TVET colleges face when integrating inclusive practices?
- What measures are in place to integrate inclusivity into the curriculum at TVET colleges in Limpopo Province?
- Which model can be developed to integrate inclusive practices at TVET colleges in   Limpopo   Province?

1.5 SIGNIFICANCE OF THE STUDY

This research was worth conducting owing to the fact that constitutional imperatives demand equality of treatment to all persons alike. In this regard, legislative and policy frameworks favour inclusivity in education. Students with disabilities at TVET colleges in Limpopo Province deserve to be accorded equal opportunities as the law provides. It is an important milestone that lawmakers have drafted pieces of legislation in inclusive education. It will, however, not avail students with diverse learning needs if their rights only appear in government books without being implemented. It becomes more imperative for the TVET system to give full effect of the rights in question. It is for different reasons that the best practices of integrating inclusive practices at TVET colleges in Limpopo Province

have not been fully realised. This study becomes relevant in investigating systemic problems besetting institutions of higher learning offering inclusive education. In the final analysis, the study proposes solutions that may be of great benefit to TVET colleges in Limpopo Province and the educational sector in South Africa. Students with diverse learning needs will also find this study helpful in that problems perennial to their environment will come to the fore and accordingly eliminated. This in itself makes this study important and eminent. There is no illusion that education is important, and the length of time with which the problem has persisted may be indicative that government too has no solution thereto. In this regard, this study would be an asset to authorities. Furthermore, the study will contribute to the field of knowledge by developing a model for integrating inclusive practices at TVET colleges.

1.6   RESEARCH METHODOLOGY

1.6.1   Interpretive design

The study adopted an interpretive design, which is concerned with understanding the world as it is from the subjective meaning of participants' experiences (Creswell, 2007). In other words, personal opinions, points of view, emotions and judgement of participants came under the spotlight in the study. This study also examined meanings attached to inclusivity by various role players such as Heads of Department (HoDs), lecturers, campus managers and students, and how inclusive practices are integrated at these institutions within the province. According to Neuman (2014), an interpretive researcher must learn what is meaningful or relevant to participants and how they experience everyday life. The interpretive paradigm is relevant in this study due to the fact that multiple methods of investigation and data gathering procedures were used to examine how to integrate inclusive practices in TVET settings. The study followed the qualitative research approach where a multiple case study research design was adopted. Reality was interpreted through the meaning that research participants live in their life world in order to examine how inclusive practices can be integrated at TVET colleges in Limpopo Province (de Vos, Strydom, Fouche & Delport, 2011).

6

Given that qualitative research occurs in natural settings (McMillan & Schumacher, 2010), I observed formal and informal settings in three TVET colleges, interviewing lecturers, HoDs, campus managers and students during their normal daily activities. Furthermore, direct interaction with participants was highly considered during data collection. The focus of the study was on participants' interpretation and views on how inclusive practices could be integrated at TVET settings.

1.6.2 Multiple case study

In keeping with the purpose of the study outlined earlier in the section on the purpose of the study, I employed a multiple case study design. As pointed out earlier, a multiple case study of three TVET colleges in Limpopo Province was combined into a single case in keeping with the argument by McMillan and Schumacher (2010), who posit that multiple cases may be combined into a single study to generate a single case. The case that was examined in this study was how inclusive practices could be integrated at TVET colleges. A multiple case study was preferred in the present study because analytic benefits of investigating more than one TVET college may be substantial, and conclusions more powerful than those coming from one TVET college (Yin, 2009). The exploration and description of how to integrate inclusive practices at TVET colleges took place through detailed and in-depth semi-structured interviews, observations and document study as sources of information that were rich in context in accordance with views espoused by de Vos *et al.*, (2011).

1.6.3 Population and sampling

Limpopo Province is situated in the north-eastern corner of South Africa and shares borders with Botswana, Zimbabwe and Mozambique. It forms a link between South Africa and countries further afield in sub-Saharan Africa. Limpopo Province has five municipal districts and within each district there is one TVET college with satellite campuses. The TVET colleges are situated in various districts of Limpopo Province. The colleges are as follows: Vhembe, Capricorn, Sekhukhune, Waterberg and Mopani. The target population of this study included three TVET colleges in Limpopo Province, namely : Vhembe, Capricorn, Sekhukhune, Waterberg and Mopani. From the three colleges one campus each

7

were selected for the purpose of this study. The colleges were selected because they have enrolled students with disabilities. Other colleges were left out because of time constrains. According to Leedy and Ormrod (2014), researchers using qualitative approach delve into thick data based on documents, interviews and observations. In the present study, I collected data on students and lecturers, HoDs, campus managers, documents, teaching and learning methods on how to integrate inclusive practices at TVET colleges.

The purposive sampling technique was used to select participants from each category of the population. Maximum variation (heterogeneous) as a form of purposive sampling was adopted as a strategy to maximise a diverse range of cases relevant to the present study (Emmel, 2013). Participants were selected on account of characteristics within their respective functions. In this case, HoDs and campus managers from each main campus of the TVET colleges were selected; lecturers and students with diverse learning needs involved in the same study programme or course were selected from the population as they were representative and informative about how to integrate inclusive practices at TVET colleges in Limpopo Province. According to McMillan and Schumacher (2010), in purposive sampling, the researcher selects particular elements from the population that will be representative or informative about the topic of interest. In other words, the selected participants were chosen because they were likely to be knowledgeable about integrating inclusive practices at TVET colleges.

1.6.4 Sample Size

Participants comprised three college HoDs, three campus managers, three student support officers, nine lecturers and nine students with disabilities. The total number of participants was twenty-seven. It is common in qualitative research not to employ a large sample size. In the nature of qualitative research, there exists no barometer, measure of sufficiency, mathematical formula or academic equation available to establish sample size (Emmel, 2013). According to McMillan and Schumacher (2010), qualitative samples can range from one to forty.

1.6.5 Data collection

For the purpose of this study, triangulation was emphasised in this context in order to reduce researcher bias, bringing more than one source of data, including document study, semi-structured interviews and observations. Furthermore, students, lecturers, HoDs and campus managers were also interviewed to strengthen the study's usefulness for other settings in keeping with opinions of other scholars (Marshall & Rossman, 2011).

Phase one: Document analysis

Document analysis was used to examine how to integrate inclusive practices at TVET colleges in Limpopo Province. Document study included policies on inclusivity, timetables and assessment, plans including tests and examination question papers. According to de Vos *et al.* (2011), the use of document study enables the qualitative researcher to conduct in depth investigations by analysing authentic written materials. Documents were evaluated in order to verify data that were collected from semi-structured interviews and observations on the integration of inclusivity.

Phase two: Semi-structured interviews

Semi-structured interviews were used to gain a detailed picture of participants' beliefs about how to integrate inclusive practices at TVET colleges. Semi-structured interviews were conducted following a predetermined interview guide in line with recommendations of experts (McMillan & Schumacher, 2010). In consonance with expert opinion, interviews were guided rather than dictated by the schedule (de Vos *et al.*, 2011). Students, HoDs, campus managers and lecturers were asked to explain how to integrate inclusive practices at their respective institutions. I used a voice recorder to capture conversations during the semi-structured interviews.

Phase three: Observation

Observations took place to establish how inclusive practices are carried out as well as how students with a range of learning needs are supported at TVET colleges. Observations allowed me to see and hear what was occurring naturally at TVET colleges (McMillan & Schumacher, 2010. I played a role of a non-participant observer, thus recording

what was observed without interacting directly with participants. This type of observation was utilised in order to gain a deeper understanding of the TVET colleges in Limpopo Province and participants' behaviour. Teaching and learning methods, presentation of lectures and availability of resources were recorded as part of my field notes. I prepared an observation checklist for guidance during observation.

1.6.6   Data analysis

Data which were collected through document analysis were analysed inductively. This technique used a set of codes to reduce volumes of print materials into more manageable data from which I identified patterns and gained insight (McMillan & Schumacher, 2014). I acknowledged that inductive content analysis required in-depth reading and re-reading of material (Bowen, 2015). I   began by organising raw data through open coding process. Through this process, I reviewed the material, notes were made and the headings in the text were written. This process required repeated reading of the material, after which I transcribed notes and headings onto a coding sheet (Mc Millan& Schumacher, 2014). In the next step, I grouped the data, and reduced the number of categories by combining similar headings into broader categories (McMillan & Schumacher, 2014). Through this process, I generated knowledge and increased understanding of the material. Data obtained through semi-structured interviews were analysed using thematic analysis. This is one of the most common form of analysis in qualitative research (Bowen, 2015). It emphasises pinpointing, examining and recording patterns or themes within data. Themes were therefore transformed into categories (Creswell, 2014). Thematic analysis created codes and meaningful patterns (Marshall & Rossman, 2011). I familiarised myself with data, generated initial codes, searched for themes among codes, reviewed themes, defined and named them, and produced the final report.

 Data which were obtained through observations were analysed through thematic analysis. I started with transcription of the written notes which were recorded during observation in the classroom. I read the written notes in order to establish similar themes that emerged before, during and after observations. I made sure that each text is noted to establish common and different issues. Texts with common or different themes were noted. I re-wrote the noted text in separate documents which represent emerging themes

(Bowen, 2015). In this observation analysis, I avoided picking and choosing instances of behaviour out of context.

1.7 TRUSTWORTHINESS

1.7.1 Credibility

Credibility or truth value involves how well one establishes confidence in the findings based on the research design, participants and context (Ary, Jacobs, Sorensen & Walker, 2014). Credibility ensures that the subject under study has been accurately identified and described (Marshall & Rossman, 2011). As explained in the previous sections of this study, I conducted semi-structured interviews with lecturers, HoDs, campus managers and students with diverse learning needs who were supported at TVET colleges in Limpopo Province. Data from observations and document analysis were also used to enhance credibility.

1.7.2 Dependability

Dependability is concerned with the consistency or stability of results in qualitative research. It is the extent to which the same general results would occur with different sets of people or in different settings or time periods (Ary *et al.*, 2014). Guidelines for data collection and data analysis were properly described in order to make it possible for other people to evaluate the quality of the study.

1.7.3 Confirmability

Triangulation was emphasised in this context to ensure that the research was free of bias in line with scholarly recommendations (Ary *et al.*, 2014), bringing more than one source of data, including document study, semi-structured interviews and observations. Furthermore, students, lecturers, HoDs and campus managers were interviewed to strengthen the study's usefulness for other settings (Marshall & Rossman, 2011). I provided a complete audit trail in order to enable other researchers to initiate further investigations on the same subject.

1.8   ETHICAL CONSIDERATIONS

1.8.1 Permission to conduct the study

Relevant persons and authorities, including the Ethical Clearance Committee of the University of Limpopo were consulted for permission to conduct the research. I obtained permission to conduct research from the Department of Higher Education and Training (DHET) and participating TVET colleges in Limpopo Province. To this end, I requested permission in writing from the authorities (Creswell, 2009).

1.8.2 Informed consent and voluntary participation

I gave participants a detailed exposition of the purpose and procedure of the study, and their consent was sought. Moreover, I informed participants that their involvement in the research was not compulsory. According to Neuman (2014), participants should be made aware that their participation in the study is voluntary. It was made clear to them that should they elect to withdraw from the research, their information would not be used anywhere in the study. I requested them to furnish me with their written consent before the semi-structured interviews in keeping with scholarly recommendations (Creswell, 2009). All written consents from participants have been preserved as part of the study records.

1.8.3 Confidentiality and anonymity

Confidentiality and anonymity of participants was maintained. I explained to participants that the information gathered was between them and individuals who are part of the study. To ensure that both confidentiality and anonymity principles are not violated, I used pseudonyms rather than their actual names in the research in consonance with scholars in the field (Creswell, 2009).

1.8.4 Respect and dignity

Participants were assured on aspects of human dignity, respect, protection against harm, as well as protection of information from public disclosure (Neuman, 2014). Every participant will be treated with respect and dignity. I will have due regard to the right of privacy and confidentiality, religion, beliefs and opinions, welfare, perceptions, customs and cultural sensitivities of those involved in the research process.

1.9 CONCLUSION

The importance of TVET colleges is embedded in the fundamental notion that they impart knowledge and skills in technological and related sciences of occupations in different components of economic and social spheres of life. There remains a challenge though, in so far as students with disabilities are concerned. The post 1994 political order in South Africa put an end to inequitable prejudicial distinction between different categories of learners. In this regard, government introduced equal educational latitude for students with disabilities.

The overall purpose was to give an overview of the investigation into how inclusive practices at TVET colleges were carried out. The enquiry is a multiple case study of three TVET colleges in Limpopo Province. This chapter provided a description of the research design, population and the sampling technique, the data collection process and instruments used. It addressed issues of data analysis, discusses trustworthiness and ethical considerations.

CHAPTER TWO

LITERATURE REVIEW

2.1   INTRODUCTION

This chapter explores existing knowledge about how the integration of inclusive practices are carried out at TVET colleges by citing appropriate references from the literature. After all, the significance of literature review is to demonstrate the extent to which scholars have researched the subject under the spotlight and to contrast and establish links between knowledge and the research problem. According to Creswell (2014), literature review shares with the reader other studies closely related to the one being undertaken. In the present chapter, a general overview of how disability and inclusion are carried out in TVET settings globally is presented. The literature on barriers that hinder inclusivity and integration strategies also come under the spotlight. I have also reflected on evaluation because disability inclusion in vocational education and training is a worldwide concern.

2.2   GLOBAL TRENDS ON DIVERSE LEARNING NEEDS IN TVET SYSTEMS

Disability inclusion is a component of diverse learning needs. Numerous studies have been conducted on challenges faced by TVET systems, implementing TVET curriculum, social justice and lifelong learning. However, the literature in the present study shows that the integration of inclusive practices at TVET colleges has been under-researched. As a result, there is paucity of information on inclusive education in TVET systems, particularly disability mainstreaming (UNESCO, 2013). The world, albeit a global village, differs in approach in terms of addressing general matters of education, especially issues of inclusive education. Global indicators are that aspects of access, retention, progression and participation of students with disabilities within higher education institutions have enjoyed minimal attention (Ahmed, 2016). Evidence suggests that in some countries, students with disabilities are still discriminated against and somewhat isolated (Mugor *et al.*, 2014, ILO, 2017). Compounding the situation are reports of key constraints to TVET performance, namely, insufficient and inequitable access, poor quality and low market relevance, weak institutional capacity and disproportional investment gaps (The Asian Development Bank (ADB), 2017).

In juxtaposition, countries (of the world) have developed policies to deal specifically with the rights of persons with disabilities. CRPD (2006) gave an undivided attention on disability-inclusive vocational training. State parties or signatories to the Convention are required to ensure that persons with disabilities can access general tertiary education inclusive of vocational training without discrimination (ILO, 2017). The *Third International and Vocational Education and Training* (TVET) congress was held in Shanghai, the People's Republic of China, from 14 to 16 May 2012. It reviewed major trends and policy developments in TVET since the *Second International Congress* that was held in Seoul, Republic of Korea, in 1999. In the said congress, they discussed challenges faced by TVET systems and explored suitable responses thereto. The responses so discussed were directed at understanding contributions of TVET colleges and to persuade the international community to support TVET for all (Shanghai Consensus, 2012). In addition, *the 2030 Sustainable Development Goals* (SDGs) have specifically recognised and included vocational education and training, thereby giving TVET and Skills systems unparalleled global status. SDG's have set targets and time frames to ensure equal access to vocational training for persons with disabilities (ILO, 2017). Although TVET systems around the world experience some challenges regarding disability mainstreaming, the intensity of the barriers may differ from country to country.

2.2.1 Asia

In Asia, participation in TVET systems for disadvantaged groups, including people with disabilities is limited (Asian Development Bank, 2010). For the same reason, in countries such as Bangladesh, youth with disabilities lack requisite skills to find employment (https://blogs.worldbank.org). TVET institutions in that country are unable to accommodate young people with disabilities. Over time, there has been a shift of mindset as governments do appreciate the importance of ameliorating equitable access to education and the need to make it more fully inclusive from basic education through to higher education and skills development (ADB, 2017).

2.2.1.1   Bangladesh

Bangladesh has ratified the UN (CRPD) and has adopted national policies favourable to persons with disabilities. The country has passed the *Rights and Protection of Persons with Disabilities Act 2013*, a piece of legislation intended to advance the rights of persons with disabilities. The said Act ensures accessibility to TVET institutions to fast track the enrolment of students with disabilities across all skills development programmes (Women with Disabilities Development Foundation (WDDF), 2013). During October 2016, the government of Bangladesh also approved the *National Strategy for Inclusion of Persons with Disabilities in Skills Development* (www.ilo.org/dhaka, 09/06/2019). The formation of a *National Skills Development Council* (NSDC) was provided for in the *National Skills Development Policy*. The NSDC is the highest skills development body which oversees and monitors all activities of public and private training providers related to TVET and skills training in Bangladesh. Constituent membership of the NSDC forum is reviewed to ensure sustenance of proper representation by government and other relevant organised structures, inclusive of youth and disability groups.

2.2.1.2   India

India was amongst the countries that resolved to achieve *Education for All* (EFA) by the year 2015 (Mahapatra, 2017). Member States, inclusive of India, carry a mandate to fast track equal access at all levels of education and vocational training. This resolve was in keeping with *Sustainable Development Goal 4* adopted to empower vulnerable children inclusive of persons with disabilities by 2030 (4.5). (*Goal 4.a.*) is specifically aimed at upgrading education facilities that are accommodative of child, gender and disability needs and that are conducive to friendly, efficient and safe learning environment for all. The National Institute for Open Schooling (NIOS) is designed to dispense and impart education through distance learning from primary to senior level, with a specific mandate to offer vocational education and training programmes to the general populace with disabilities (Goel, 2011). A study conducted by Ahmed (2016) concludes that students with disabilities are confronted with a peculiar range of challenges in higher education in terms of gaining physical access to buildings, including broader aspects concerning curriculum adaptation, teaching, learning and assessment.

2.2.2 Europe

Europe is resolute in the implementation of inclusive and equitable quality education. The *European Agency for Development in Special Needs Education (2012)* provides that emphasis must be placed on learners' vocational abilities and not on their disabilities. European countries have signed the UN CRPD which oblige state parties to ensure that general tertiary education, including vocational training is offered without discrimination and is accessible to persons with disabilities. In order to achieve this objective, state parties are obligated to ascertain that reasonable accommodation is provided to persons with disabilities (Article 24.5). *The Europe 2020 Strategy for Smart European Union* asserts that TVET is a lifelong learning approach in the development of education and training systems. In keeping with this approach, a continuous written *Declaration by the European Parliament on Promoting Inclusive Education Systems* (2015) outlines that European Union (EU) member states have already experienced positive results from implementing inclusive education systems (European Network on Inclusive Education & Disability, 2015).

2.2.3 Australia

Australia ranks amongst countries that embrace social inclusion as a public policy, with strong support of interventions to improve lives of the marginalised, disadvantaged and disability groups (Hargreaves, 2011). As a result, Pacific Island countries are signatories to the *Convention of the Rights of the Child*, Article 23, which provides for equal rights amongst children inclusive of children with disabilities. In a meeting dubbed the *First Forum Disability Ministers Meeting* held in 2009, ministers endorsed the *Pacific Regional Strategy on Disability 2010-2015*, a resolve on programmes involving disability inclusive education and training programmes.

Kiribati is an island republic in the central Pacific. TVET in this region is constrained to offer programmes that are accessible and relevant to people with disabilities (Majumdar & Teaero, 2015). The Ministry of Labour and Human Resource Development (MLHRD) runs the majority of schools within the TVET sub-sector. There is paucity of statistics or information about people with disabilities. As a result, inclusive education as a concept is

17

slippery in Kiribati. Resultantly, vocational training and initiatives for people with disabilities are non-existent, and neither the desire nor the demand for TVET for such people is known (Majumdar & Teaero, 2015). In a study conducted in Kiribati and Fiji, it has been established that people with disabilities are evidenced to suffer more disadvantage (Maglen, Weston Wall, & Rokovunisei, 2014; Majumdar & Teaero, 2014). In Fiji, as far as TVETs for people with disabilities are concerned, the approach has been more akin to occupational therapy than genuine preparation for the world of work (Maglen *et al.*, 2014). Recently, there is a concerted effort by governments to maximise Vocational Education and Training (VET) enrolment and completion for students of marginalised backgrounds, aborigines, refugees and Australians with disabilities (UNESCO, 2018). Throughout the Pacific region, in both urban and rural communities, people with disabilities face multiple and compounding forms of discrimination (Pacific Framework for the Rights of People with Disabilities, 2010-2015).

2.2.4   Africa

Most countries in Africa are signatories to UN CRDP (Lang, Scheider, Cole, Kett & Groce, 2017). Some good progress at policy level has been made regarding the inclusion of disability, yet a lot is still to be done. *The Africa Union Outlook Report on Education 2014: Continental Report* detailed a hindsight view of achievements that have been attained with respect to identified goals of *the Plan of Action for the Second Decade of Education in Africa* which was published in 2006. The Report concluded that the Plan of Action has directly resulted in improved educational outcomes for all people throughout Africa, including vocational education training (TVET). More importantly, the said *Outcome Report* singles education as a basic human right that should be accessible to all, and by parallel reasoning, accessible to people with disabilities (African Union, 2015).

African nations have accepted TVETs as a mode of economic empowerment and self-sustenance of the youth; thus, the role of TVET colleges is applauded as meeting multi-pronged needs of people, especially employment opportunities (Malle, 2016).

The challenge remains that in most instances, TVET systems provide training which is in keeping with traditional stereotypes rather than tackling those stereotypes head on (Murgor, 2013). The ability of TVET institutions to accommodate learners from other disadvantageous groups, including those from rural locations or with disabilities is also still very low.

2.2.4.1   Ethiopia

In Ethiopia, individuals with disabilities have limited access to educational and vocational training programmes (Malle, Pirttimaa & Saloviita, 2015). However, in line with the newly emerging internationally recognised opportunities, the Ethiopian government has made endeavours to provide vocational training for persons with disabilities through formal and vocational education programmes (Malle *et al.*, 2015: 59). Since 2014, the Federal TVET Agency has accepted trainees with disabilities in skills training centres in all regions in Ethiopia. The Agency has developed national guidelines for the inclusion of persons with disabilities in TVET. The mammoth task was achieved with support from International Labour Organisation (ILO) cooperation project, namely, *Promoting Rights and Opportunities of Persons* with *Disabilities in Employment Through Legislation* (PROPEL) and the *Ethiopian Centre for Disability and Development* (Melles & Korpinen, 2013). Regardless of the above-mentioned developments, students with disabilities enrolled in vocational education and training programmes report facing barriers compared to their non-disabled counterparts.

2.2.4.2   Kenya

TVET programmes in Kenya are school oriented, but manifestly short of properly qualified teachers. Ngure (2013) asserted that as things stood during her investigation, the curriculum was also strait-laced in the mode of one size fits all. Therefore, the undesirable result is that the curriculum was designed to suit all students regardless of their needs. So, the policy framework failed to address the diverse learning needs because of the centralised straight-jacketed curriculum structure, irrespective of the diverse learning variances, and even less so, the requisite industrial demands. The driving factors of barriers to access for students with disabilities are social and economic imbalances obtaining in

Kenya. Nevertheless, there are some students who have made it through in engineering studies. A study conducted by Mugor *et al.* (2014) established that students with disabilities were treated differentially from their non-disabled counterparts. Even against the odds, it has been reported that students were at liberty to pursue studies of their own choice, unconstrained. Access to buildings remains a hindrance though to students with disabilities in Kenya.

There are special funds designated for students with special needs, the purpose of which is to enable such students to further their studies. The *National Disability Development Fund* distributed through the *National Council of Persons with Disabilities* is an example of such a scheme which provides funding for the youth with disabilities (Kett, 2012). The *African Union Commission Department of Social Affairs* outlined 8 (eight) strategic thematic areas for implementation at national level. Malle (2016) concludes that the promotion of inclusion of persons with disabilities in all sectors of society was one of the thematic areas declared on the *Continental Plan of Action for the African Decade of Persons with Disabilities of 2010-2019*. As a result, Article 54 of the Kenyan constitution outlaws discrimination on the basis of disability, and provides specific articles in the *Bill of Rights for Persons with Disabilities* that provide for facilities, adaptive equipment and tools to address educational and other special needs of persons with disabilities (Republic of Kenya, 2010). It is encouraging that institutions such as the *Karen Technical Training Institute for the Deaf* in Nairobi, Kenya, are providing phenomenal service in the training of students with disabilities (Kett 2012). Certain vocational courses were designed to target different disabilities. For example, visually impaired students have access to information and communication technology-related courses, such as switchboard operators; while the hearing impaired are taught design, cutting and tailoring, as well as machining. Persons with physical disabilities are allowed to follow all courses, but mostly enrol on electronics and systems repair courses (Kett 2012).

In addition, there is lack of necessary resources to perform assessments of students' disabilities and thus to adapt the courses accordingly. Furthermore, examination ques-

tions can be inaccessible and not adapted to the special needs of students with disabilities. However, lack of assistive devices, tools, interpreters and assistants were also mentioned as hindering participation and as added barriers to inclusion.

2.2.4.3   Zambia

The Zambian policy framework *Educating Our Future* provides for equal opportunities, non-discrimination and participation of students with disabilities in mainstream school activities and in the community in general. The Zambian position on inclusion has been influenced by the Salamanca Statement and Framework (UNESCO, 1994), to which Zambia is a signatory. The *Zambia Agency for Persons with Disabilities* (ZAPD) is a statutory body established in terms of *Persons with Disabilities Act Number* 6 of 2012. The mandate of the agency is to plan, promote and administer services for all categories of persons with disabilities. The enabling statute (the Disability Act) recognises equality of rights and freedoms of persons with disabilities. Systemic barriers, which involve several ministries were identified as needing attention. The barriers that hinder participation included lack of assistive devices, tools, interpreters and assistants. ZAPD has an overall mandate to oversee the implementation of the Act in question.

The Persons with Disabilities Act of 2012 makes provision for free primary education and ensures that persons with disabilities are included in the attainment of secondary and higher education. The Act makes provision for vocational training for persons with disabilities and guarantees special schools for those who cannot ordinarily be admitted in schools offering inclusive education. It is only systemic obstacles that hinder persons with disabilities from attaining specialised or high-level education. The Act provides for physical access to institutions of learning and individualised support inclusive of alternative forms of communication. The said piece of legislation goes as far as to make provision for monetary allowance to cater for extra costs attendant to learning. These well intended measures are short of implementation. Albeit there exists a comprehensive vocational training system in Zambia, persons with disabilities, in the main, are met with unequal treatment from training on equal footing with their non- disabled peers. While their training is often in segregated classes, the level of education is also of inferior standard than that

offered in general TVET colleges. Persistent negative attitudes and public stereotypes about persons with disabilities cause constant prejudice. This is compounded by obstacles occasioned by physical barriers and the un-adapted curricula; and training materials present obstacles to access for persons with disabilities.

The UN CRPD has stimulated change in Zambia. As a result, the government is moving away from the system of separate special schools to a more inclusive approach of mainstream education and vocational training services. Furthermore, the Disability Act of 2012 states that the education system at all levels must offer equal opportunities to all and be free of discrimination. During 2012/ 2013, ILO cooperated with the Ministry of Education, Science, Vocational Training and Early Education to advance the implementation of the disability policy. Through a programme on *Promoting Rights and Opportunities for People with Disabilities in Employment through Legislation* (PROPEL), five TVET institutions participated in the pilot project. [These institutions are Mansa Trade Training Institute, Kaoma Trades Training College, Lusaka Business and Technical College, Luansya Technical and Business College and the National Vocational Rehabilitation Centre]. In line with the ILO Disability Equality Training mode, a two-step approach was adopted. The first involved accessibility audits based on international standards to identify barriers, the simplicity of use of buildings and improvement of the physical structures existing in the training colleges. The second step of equal importance was disability training awareness for managers and staff of TVET colleges. The project was of great value in that it also partnered with other agencies to review the legal framework to align it with international norms and standards.

2.2.4.4 *Zimbabwe*

Zimbabwe does not have specific legislated policies on inclusive education (Mosalagae & Lukusa, 2016). However, the Department of School Psychological Services and Special Education is vested with the responsibility of supporting the execution of inclusive practices by providing in-service training and teaching of students with disabilities. The existing laws are sufficiently in concert with international standards and frameworks. For in-

stance, the Zimbabwe Education Act, 1996, provides for free education for all; the Disabled Persons Act of 1996 and several other circulars such as *Education Secretary's Policy* Circular No. P36, 1990, makes provision for rights of persons with disabilities. While the *Disability Act* is noticeably silent on the government's commitment towards supporting educational needs of persons with disabilities, it inversely specifically prohibits lawsuit against government to enforce accessibility to facilities or for meaningful participation. Zimbabwe also prides itself with Child Protection and *Welfare Assistance Act* (Mosalagae & Lukusa, 2016). It is noteworthy that the country has ratified and is signatory to the Convention on the Right of a Child. The government's commitment to inclusive education, though, may be inferred from the country's signing of the *Salamanca Statement* and *Framework for Action on Special Needs Education* and other related international instruments pertaining to inclusive education (Chireshe, 2013). At any rate, Zimbabwe did ratify the United Nations Convention on the Rights of Persons with Disabilities during 2013 (Deluka, 2014). In spite of this, Mosalagae and Lukusa (2016) opine that Zimbabwe does not have an inclusive policy, and instead, accuse the country of ignoring the spirit and purpose of the *Salamanca Conference* (Mosalagae & Lukusa, 2016)*.* Resource rooms are used within regular schools to place students with disabilities for the purpose of offering supplementary specialised instruction. There exist self-contained special education classrooms in regular schools, as well as special schools where students with severe disabilities are offered functional curriculum (Chitoyo & Muwana, 2018).

2.3   DISABILITY INCLUSION IN THE SOUTH AFRICAN TVET SYSTEM

The current South African context is beset by a range of challenges, including a poorly defined curriculum responsiveness, inadequate market relationships and lack of resources (Lolwana, 2014). However, the DHET has come up with *a White Paper for Post-School* that envisages to integrate different components that will complement one another to improve quality, quantity and diversity of Post-School education in South Africa (DHET, 2013). The DHET has prioritised the strengthening and expansion of public TVET colleges through improving their management and governance, developing the quality of teaching and learning, increasing responsiveness to local and labour markets, improving

student support services and developing infrastructure. However, barriers still persist despite post 1994's potential to support greater participation of students with disabilities. Students with disabilities have been faced with the challenge of inaccessible physical environment over the years. According to DHET (2016), all higher education institutions need to ensure that there is proper access for learners who experience mobility challenges. In addition, DHET (2016) acknowledges that accessibility of the physical environment remains a serious challenge for students who require assisted mobility. As part of the transformation agenda, the South African government pursues strategies for integration of learners with disabilities in all aspects of university and college life (Mphogoshe, Mabunda, Tugli & Matshidze, 2015).

In this country, more and more tertiary institutions are now focusing on the mainstreaming and inclusion of students with disabilities (Foundation of Tertiary Institutions of the Northern Metropolis (FOTIM), 2011). The Department of Higher Education and Training (DHET) has committed itself to the provision of quality post-school education and training in South Africa. This is in line with the *Bill of Rights* as enshrined in the *Constitution*. Section 29 thereof provides that everyone has the right to basic education, including adult basic education and to further education, which the state through reasonable measures must make education progressively available and accessible (The Constitution of the Republic of South Africa Act, 1996). The White Paper on Post-School by the DHET is committed to improve access, inclusion and success of students with disabilities in Higher Education (DHET, 2013). Despite all the efforts, students with disabilities continue to experience discrimination in terms of access to post-school education and training opportunities and the system as a whole has inadequate facilities and staff to cater for the needs of the disabled (Mphogoshe *et al.*, 2015; DHET, 2013).

2.4   BARRIERS TO INCLUSIVITY

2.4.1   Barriers faced by students with disabilities

Several barriers for students with disabilities remain in place at colleges and universities. These include barriers such as negative attitudes, architectural barriers, inaccessible in-

formation and technology, rules and policies that are not actually enforced and methodologies that do not favour inclusion (Kochung, 2011; Morena, 2017). Some difficulties are linked to teachers' understanding and attitudes towards disabilities as well as matters around the relative accessibility of their instructional methods (Marquis, Jung, Schoeman's, Jumanji, Wilto & Baptiste, 2016). TVET facilities are still systemically segregated in many countries that offer inclusive education, thereby leaving persons with disabilities with limited options. Students with disabilities are side-lined on the basis that they are not suitable for acceptance in some fields of study such as automotive, manufacturing, construction and electricity; and that students with disabilities are more suitable in fields such as accounting and business studies. Factors hindering students with disabilities include lack of qualified trainers, non-availability of adaptive and assistive   technology, suitable machinery, financial resources and adequate safety measures (Kett, 2012). Since students differ in degrees of impairment and ability, accommodations and modifications must be individualised according to their needs.

2.4.2 Physical barriers

Certain barriers emanate from the infrastructure and the environment that students with disabilities find themselves in. Students with disabilities oftentimes experience barriers occasioned by architectural or structural physical buildings. Such barriers are a hindrance for students with disability to access a structure. It is this inaccessibility which impacts negatively on their mobility (Kochung, 2011). Inaccessible environments coupled with poor support services, amongst others, emerged as main inhibitors to quality life in the learning environment (Kochung, 2011; DHET, 2016). Students with disabilities are confronted with physical barriers in institutions of learning, such as unavailability of ramps or elevators in multi-storied buildings, inaccessible washrooms, heavy doors and lack of transport to and from institutions of learning (Ahmed, 2016). According to Mphogoshe *et al.* (2015), for all learners to maximally participate in all areas of educational programmes, physical and infrastructural modification of the learning facility, and the provision of assistive devices for those learners with special needs is required. Attitudinal barriers also affect students with disabilities negatively.

25

2.4.3   Negative attitudes

Stereotypes, attitudes and general public perceptions about persons with disabilities present exaggerated obstacles to these persons. This is compounded by the un-adapted curricular and lack of training material which make it more difficult for persons with disabilities to access learning opportunities. Negative attitudes rank high amongst barriers that people with disabilities encounter. Such attitudes underscore the failure by authorities to address other barriers. For example, those related to accessibility, laws and policies (ILO, 2013). Article 6 of The UN CPRD recognises a multiplicity of factors faced by women and girls with disabilities; accordingly, it demands of State parties to take proper measures so as to give effect to the rights and fundamental freedoms that it sets out, including the right to vocational training (UN CPRD, 2006). Women with disabilities face dual barriers and discrimination, based on their disability and their gender. The category of these women in question is usually encouraged to move into training areas that others feel are most appropriate for them (ILO, 2013). For example, when deaf women are encouraged to follow sewing as a career, because hearing does not necessarily affect the quality of sewing.

2.4.4   Teaching methods

Methods of imparting knowledge to students with disabilities may not be user friendly to students with disabilities and may thus inhibit their learning. Ngubane-Mokiwa and Khoza (2016) argue that some participants were unfamiliar with various methods of teaching students with disabilities. Students differ in degrees of disability. As such there is a need to modify needs in order to accommodate students at an individualised or personalised level. Teachers who are better knowledgeable in matters of inclusive education are equipped to encourage learning amongst students, irrespective of physical disabilities.

2.5   BARRIERS RELATED TO IMPAIRMENT

Some forms of impairments are a direct result of brain damage. For instance, cerebral palsy, epilepsy and learning impairments such as dyslexia or dyscalculia, including certain forms of intellectual, hearing and visual impairments (Landsberg, Krüger &Swart,

2019). Some conditions such as muscular dystrophy is progressive, but cerebral palsy and epilepsy can improve with treatment.

2.5.1 Physical impairment as a barrier

Physical disability entails a range of impairments, congenital and or acquired. Different types of physical disabilities include mobility related, health and medical disabilities while others arise from brain injury (Landsberg *et al.*, 2019). Some physical disabilities are noticeable with a naked eye, while others are latent and not readily visible.

Physical disabilities are generally visible. Such students are treated differently or even with some negative attitude (Bornman & Rose, 2017). Students with physical disabilities may experience stigma and social exclusion. Some students may require assistance with activities such as opening a door, toilet facilities, and so forth. It is imperative for all children with physical disabilities to have proper sitting and positioning in order to avoid fatigue and to prevent pressure sores. Some physical disabilities require the use of an assistive device (for example, a wheelchair or walker). Physical disabilities may affect someone's ability to stand, walk, sit or move around.

2.5.2 Visual impairment as a barrier

Visual impairment refers to a significant loss of vision in both eyes which cannot be corrected with glasses. Vision impairment can range from no vision – blindness – or very low vision to not being able to see particular colours. The degree of loss may vary significantly, which means that each student with low vision or blindness needs individual adjustments to learn more effectively. Not all visual impairments are the same, although the umbrella term "visual impairment" may be used to generally describe the consequence of an eye condition or disorder. One characteristic that is shared by all students with visual impairment is that these students have a limited ability to learn incidentally from their environment. It is through sight that much of what we learn is received and processed (www.projectidealonline.org/v/visual-impairments).

Total blindness is the inability to tell light from dark, or the total inability to see. Low vision is a severe reduction in vision that cannot be corrected with standard glasses or contact

lenses and reduces a person's ability to function at certain or all tasks (Mekenzie, Kelly and Shanda, 2018). Persons who are totally blind do not have any visual awareness and require assistance with mobility. They often use Braille as a medium of instruction and can make use of screen-reading programmes to access the written word. Severe visual impairment ranges from only being able to tell the difference between light and dark, to being able to read large print using electronic devices (Mekhenzie *et al.*, 2018). Visual impairments may cause challenges such as safely manoeuvring around the classroom, conceptualising objects, reading, operating standard educational tools such as calculators and word processing software. Challenges in conceptualising objects occur because the student lacks the vision to process objects the way that his or her classmates do (https://www.specialeducationguide.com/disability-profiles/visual-impairment).

Students with visual disabilities encounter a recurrent set of problems with commonly used instructional technology. However, most of the problems can be resolved through minor changes in instructional practices that are completely within an instructor's control (Tailor, 2016). Children with visual impairments need to learn the same subjects and academic skills as their sighted peers, although they will probably do so in adapted ways. They must also learn an expanded set of skills that are distinctly vision related.

2.5.3 Hearing impairment as a barrier

Hearing impairment is a broad concept that refers to hearing losses of varying degrees from hard-of-hearing to complete deafness. The main impediment facing students with hearing impairments is communication. Learning is in the main acquired aurally, resulting in students with hearing problems presenting both experiential and language deficiencies. As they do not hear environmental noises and ordinary conversations, children with hearing impairment miss the greater part of important information which in the ordinary course of events is learned incidentally by other children who do not have hearing problems (https://sites.allegheny.edu/disabilityservices/students-who-are-deaf-or-hard-of-hearing). Deaf learners cannot access spoken language and therefore are excluded from important learning and teaching processes in the hearing classroom (Glaser & van Pletzen, 2012).

Students with hearing impairments miss out to some extent or another on experiences of being immersed in the world of spoken language.

Most students with hearing impairments resort to a complexity of communication methods. The most commonly improvised method of communication is a combination of speech reading (lipreading) and residual hearing, which is often amplified by hearing aids. Students with hearing impairment mostly make use of electronic note takers during class because it is difficult to speech read and take notes at the same time. It is not uncommon for some students with hearing impairment to have linguistic and vocabulary deficit. Others with more severe hearing problems make use of assistive devices inclusive of hearing aids and cochlear implants; over and above, they follow oral-aural methods to develop spoken language through lip-reading and speech production (Mkhize, Kelly and Shanda, 2018).

Glazer and Pletzen (2012) established through their research several problems attendant to the provision of fully fledged inclusive education for students with hearing impairment. The usage of sign language in the classroom oftentimes represented an extremely poor form of language. Sign language itself was found to be used inappropriately comparative to the level of cognitive and discourse of second language requirements. Evidence suggested that the usage of sign language interpreters in the classroom was discordant and out of synchrony. All these mishaps have far reaching implications for deaf students' access to learning and classroom processes. Sign language is not universal and has no written form. Most students with hearing impairments make use of sign language. Sign language has its own unique vocabulary, rules of semantics, syntax and pragmatics which do not follow the normal attributes of spoken and written language. Deaf children are taught in the main by use of signed language, and since that language has no written form, students with hearing impairment have an added challenge of learning to read and write in non-signed language (Glazer and van Pletzen, 2012). Adults who use sign language have poor literary skills (Bornman and Rose, 2017).

2.6   INTEGRATING INCLUSIVITY

2.6.1   An inclusive curriculum

Central to the accommodation of diversity in all education levels is a flexible curriculum and assessment policy that is accessible to all learners irrespective of their learning needs. A curriculum that focuses on inclusion of a range of diverse learning needs is a requirement in each education sector (*Education White Paper 6*). In a study conducted by Mphogoshe *et al.* (2015), it was established that the curriculum affected the students with disabilities, especially blind students since they depended on other non-disabled students for assistance in reading and writing. The challenge arose as blind students were given equal timeframe as other students during their computer lessons. TVET programmes are inadequately linked to the changing needs of the labour market. In addition, TVET colleges do not always provide students with disabilities with the requisite knowledge, skills and attitudes needed to make the transition associated with personal and occupational aspirations (UNESCO, 2015). As a result, people with disabilities often experience difficulties during transition between training and the world of work (European Network on Inclusive Education & Disability, 2015). Higher learning institutions are obliged to provide education and training necessary for expectations of students and requirements of employers, both currently and for the future (Hènard & Roseveare, 2012).

2.6.2   Access and participation

Access to TVET is a sensitive issue for students with disabilities. In some settings, students with certain types of disabilities are only given access to certain types of training based on stereotypical thinking and on the nature of the disability. For example, mobility impaired students learn computer skills because they are able to work seated while blind students learn massage therapy because sight is not an essential element for such a job (ILO, 2013). Access to higher education is hamstrung by financial resources from government or other institutions but nonetheless, should be accessible to those who qualify regardless of their race, gender or physical characteristics as stipulated in the South African constitution. In the same breath, developmental services should be exposed to all, especially those students in need of assistance (UNESCO, 2002). In order to remove

barriers in the learning environment and to accommodate students with diverse learning needs, it is important to ensure that the necessary assistive devices, such as Information and Communication Technology (ICT) programmes and the appropriate teaching and learning methodologies, are in place.

It is imperative to address barriers and hindrances to access and to find new ways to extend access. Equity and fairness are a serious equation of access. Accordingly, it is of great importance to ensure that the previously marginalised, including people with disabilities, those living in rural areas and those with meagre financial resources do have improved access to PSET opportunities (DHET 2014 – 2017). Equity and fairness focus on making TVET accessible to all, particularly the previously disadvantaged, women and the disabled. The policy ramification is that TVET system makes it possible to surmount the hurdles of access, equity and inclusivity in TVET learning, organised and structured programmes in the world of everyday work (Hoosen and Mahembe, 2014). It is crucial to address barriers to access and to seek innovative ways to expand access. Equity is a serious dimension of access and is therefore crucial to ensure that previously disadvantaged individuals, including persons with disabilities, those who live in rural areas and those in financial need, have improved access to PSET opportunities (DHET, 2014-2017). The equity lens focuses on how to make TVET accessible to all, especially previously marginalised groups such as females and the disabled. The policy implication is that the TVET system needs to be capacitated to meet the challenges of advancing access, equity and inclusion in TVET learning whether in structured programmes, in the world of work or in everyday life (equity in both access and outcomes) (Hoosen and Mahembe, 2014).

2.6.3 Assistive technology

A tool or device that affords students opportunity to participate in educational activities is referred to as assistive technology. Assistive devices are useful technological components that are supportive to learners with impairments by accessing them visual information, thereby overcoming low levels of language and literacy (Mekhenzi *et al.*, 2018). Students with visual impairments are limited by the inherent disability, which whets the appetite to be trained in the use of adaptive technology in order for them to access print

and related information. Some of the technology makes it possible for students to access information from a computer while others function independently. To those students with more severe frailties and impairments, assistive technology enables them to access computers to learn as well as to express themselves. Such alternative tools as keyboard and mouse replace standard and ordinary and offer students an opportunity to access information from computers with minimal inconvenience. Other alternative technology include voice recognition software which converts spoken words into print information (https://www.brighthubeducation.com). A variety of other assistive technology includes instructional material aids, seating and positioning aids and sensory aids. Assistive technology enables students with special needs to access physical environments, assist mobility, to communicate effectively, to meaningfully access computers and enhanced functional skills without which general access and life will be difficult (Landsberg *et al., 2019*).

2.7   CONCLUSION

This chapter reviewed the literature on the integration of inclusive education at TVET colleges. Details of support offered to students with disabilities at TVET colleges, both internationally and nationally, were discussed. Inclusive education has been widely researched globally. However, in terms of how it is practised at TVET colleges, the field has been under-researched. The integration of inclusivity into the curriculum at TVET colleges in Limpopo Province has not been researched. The success of the accommodation of students with disabilities at TVET colleges lies in the hands of capable college staff who are well trained in the field of inclusive education. Lecturers should ensure that they accommodate a range of diverse needs of students in their lecture rooms. Therefore, supporting and empowering lecturers has become vital in the implementation of inclusive education.

CHAPTER THREE

THEORETICAL FRAMEWORK

3.1   INTRODUCTION

In this chapter, changing paradigms in education are explored. The bio-ecological system theory as expounded by Urie Bronfenbrenner is also discussed. The present study has adopted the social model of disability and the bio-ecological system theory. The social model supports the view that people with disability have a right to be fully participating citizens on an equal basis with others, while in terms of the bioecological theory, the interactions between the individual and their environment, categorised into various systems, shape their development over time.

3.2   The bio-ecological System Theory

The bio-ecological System Theory was proposed by Urie Bronfenbrenner and Stephen J Ceci in 1994 (Bronfenbrenner & Ceci, 1994). The model is the evolution from Bronfenbrenner's original theoretical model of human development called ecological system theory (Rosa & Turge, 2013). It is recognised that other key factors could influence a person's development as well, realising that the individual was overlooked in other theories of human development. In 1986, he shifted the theory from ecological systems to bioecological systems. The ecological system theory suggests that there are layers or levels of interacting systems resulting in change, growth and development such as physical, psychological, biological, social and cultural. Conversely, the ecological system theory that interfaces between the individual and their environment categorised in various systems shape their development overtime. The model was later adapted to include the chronosystem based on four establishing principles and their interactions which were Bronfenbrenner's original basis for the bioecological theory, namely, process, person, context and time. Incorporating the concepts offered by the bioecological systems theory makes it possible to understand influences that have helped to shape personal environmental interactions (Landsberg, Krüger & Swart, 2019). In the context of this study, it means that by understanding how a person develops within his/her environment system, it becomes possible to determine why certain decisions, behaviours or feelings interfere

with future development opportunities. For example, if the government fails to plan properly for the education of the entire population of learners in South Africa, students with disabilities at TVET colleges will be negatively affected.

Bronfenbrenner's bio-ecological theory of development has much relevance in the interaction between an individual's development and the system within the social context or environment. Mitchel (2005) argues that the bio-ecological model can also assist us to understand and explore inclusive education and individuals. Bronfenbrenner emphasised that a person's development is a product of a network of interactions between a person and their social, cultural, economic, political and not merely psychological, contexts (Landsberg *et al.,* 2019). The family thus plays a key role: it does so as a microsystem context in which development occurs; it does so in terms of the personal characteristics of all individuals in the family; and most importantly, it does so in terms of the interactions among family members as part of proximal processes.

3.2.1 *The microsystem*

The microsystem is the immediate environment where an individual has direct interactions with their surrounding and close interpersonal contacts such as family, school and peer group and neighbourhoods (Guhn & Goelman, 2011). The microsystem emphasises the distinctive contribution of development of proximal processes involving interactions not only with people but with objects and symbols ae well. The student interacts with the settings made up of the people that have a direct contact with him such as family, home, TVET colleges, lecturers, student support officers and friends. This system supports the child's feelings of belonging, love and support (Landsberg *et al.*, 2019). The microsystem would be students and objects with whom the student directly interacts in the classroom. Another microsystem within which the student exists is at home. In the context of this study, these variables could have a substantial contribution to students' emotional state, cognitive ability, and health behaviours, which may in turn trigger students' academic weakening (Mulisa, 2019). For example, family problems such as divorce, poor socio-economic background as well as peer pressure may have a negative effect towards the academic performance of students with disabilities and may also result in low self-esteem.

In order to manage the microsystem level properly, lecturers and the college management should also strive to understand the needs of the student, provide efficient support, and exercise the necessary inclusive practices. Furthermore, this system should provide full support to students and give them a sense of belonging.

3.2.2 The mesosystem

The mesosystem refers to the relationships that develop and exist between two or more of the microsystems at a given time in the individual's time. The system describes how different parts of an individual's microsystem are interconnected. For example, connection between home and work or school or between home and friends (Boon, Cottrell, King, Stevenson & Miller, 2012). The mesosystem incorporates multiple microsystems and includes interactions between these microsystems. Circumstances in each affect the other. For example, experiences in one microsystem such as when the needs of one are not met, such as lack of qualified trainers, non-availability of adaptive and assistive technology, suitable machinery, financial resources and adequate safety measures. Students may feel excluded, and this may influence how they interact with their families and peers. This may even impact negatively on their performance during assessments. Mulisa (2019) argues that as the mesosystem involves interactions between two or more variables in the microsystem, the ways these systems interact with each other can affect the academic outcomes of college students. As a result, informative guidance services should be easily available for new students at the onset of college entrance. Parents should also support their students and discuss college issues regularly.

3.2.3 The exosystem

This environment does not affect the individual directly. The exosystem in level includes other people and places where an individual may not interact with often, but which may influence relationships that directly influence the learner, such as parents' workplaces (Boon *et al.,* 2011). In the South African context, this level may include the education system, which in this context will be the DHET. Policy stipulates that access to proper education and training opportunities is fundamental. As a result, institutions should be

transformed in more ways than one, if equity for people with disabilities is to be fully real-ised. It is unclear how transformation in institutions and TVET colleges will be affected. Although it is very challenging to control these variables instantly, higher education pro-fessionals and personnel should be able to sincerely grasp the current socio-emotional conditions of students and treat them according to their emotional functioning.

3.2.4 The macrosystem

The macrosystem focuses on the prevailing social and cultural structure of the society (Leonard, 2011). The macrosystem level is located furthest from the individual and is the largest most remote set of people and structures which have great influence over the person. Landsburg *et al.* (2019) assert that the principle of inclusion falls within the ideo-logies of the macrosystem; and for it to become part of school culture, it should be em-brace by all microsystems, including professional services, classroom systems, families and the individual child. The macrosystem includes school policies and cultural contexts and policies within which the student lives and of which he or she has no control. There-fore, the roles of each macrosystem variable on academic issues of higher education students should be well understood, and interventions must be designed and carried out according to students' needs.

3.2.5 The chronosystem

The chronosystem is the time as it relates to events in the individual's environment. It is the dimension of time in relation to a person's development. It is made up of environmen-tal events and transitions that occur throughout a child's life, including sociohistorical events. The specific incidents tend to change or transition how the child interacts with all the rest. Interactions at this level need to occur at a fairly regular basis over an extended period of time. Time has a prominent place at the following successive levels within the episodes of proximal process: microtime, which refers to continuity versus discontinuity. Mesotime is the periodic nature of these episodes across border intervals such as days and weeks. Macrotime focuses on the changing expectations and events that occur in the larger society both within and across generations as they influence and are influenced by processes and outcomes of human influences over the life course (Bronfenbrenner &

Ceci,1994). This is the cumulative effect of the experiences of the child's life. Therefore, age differences and age-related changes should be carefully considered by higher education practitioners to properly manage students learning (Mulisa, 2019). These variables involve elements such as developmental maturities and transitions, and changes in the family's life courses. The bio-ecological model includes four principal components that are in constant interaction with each other, namely, process, person, context, time framework and a process of interaction known as proximal process. The proximal process involves reciprocal interaction between an individual and environments with persons, objects and symbols (Gilfore & Phenice, 2016). Special efforts should be made to integrate each level of the bioecological systems theory elements into educational policies and practices at higher education, ensuring that the quality of education is guaranteed.

3.2.5.1   *Proximal process*

Proximal processes serve as the primary mechanism of an individual's development and constitute the core of the model (Bronfenbrenner, 2005; Landsberg *et al*., 2019). They constitute the engines of development because it is by engaging in activities and interactions that individuals come to make sense of their world, understand their place in it, and play their part in changing the prevailing order while fitting into the existing one. Moreover, for interactions to be effective, they must occur on a regular basis and over an extended period of time so as to become more complex. Gilfore and Phenice (2016) argue that the key to understanding the proximal process and ecological processes in general is that the relationship between people and the environment are bi-directional because the interaction also includes objects or symbols, in addition to people. However, proximal processes on their own cannot produce effective developmental functioning; they are guided and fuelled by characteristics of person and context (Landsberg *et al*., 2019).

3.2.5.2   *Person characteristics*

Bronfenbrenner devoted more attention to the role of individuals and their personal characteristics into any social situation as well as their individual development. The characteristics of a person also play a role in the overall environment. Individuals, including chil-

dren, parents, family members, close friends, teachers, church members and other microsystems, bring certain biopsychological characteristics that influence proximal processes and their developmental outcomes. In the bioecological model, three types of person characteristics are identified, namely, demand, resource and force characteristics.

3.2.5.2.1   *Demand characteristics*

Demand characteristics are those that act as an immediate stimulus to another person, such as age, gender, skin colour, and physical appearance. These types of characteristics may influence initial interactions because of the expectations formed immediately. These characteristics have a capacity to provoke or discourage reactions from the social environment that either foster or disrupt the psychological processes of growth (Landsberg *et al.,* 2019).

3.2.5.2.2   *Resource characteristics*

Resource characteristics consist of biopsychological assets and liabilities that influence the capacity of the person to engage effectively in proximal processes. Bioecological resources of ability, experience, knowledge and skills are required for the effective functioning of proximal processes at a given stage of development.

3.2.5.2.3   *Force characteristics or dispositions*

Force characteristics can set proximal processes in motion in a particular developmental domain and continue to sustain their operation. Landsberg *et al.* (2019) argue that these characteristics can also interfere, limit or prevent the occurrence of proximal processes.

3.2.5.3   *Context*

Context involves the original model of development that Urie Bronfenbrenner developed in the 1970s called the ecological system theory, which explained how environmental influences continue to affect a person's development directly or indirectly. The context involves four of the five interrelated systems of the original theory that influences a person's development, namely, microsystems, mesosystems, ecosystems and the macrosystems.
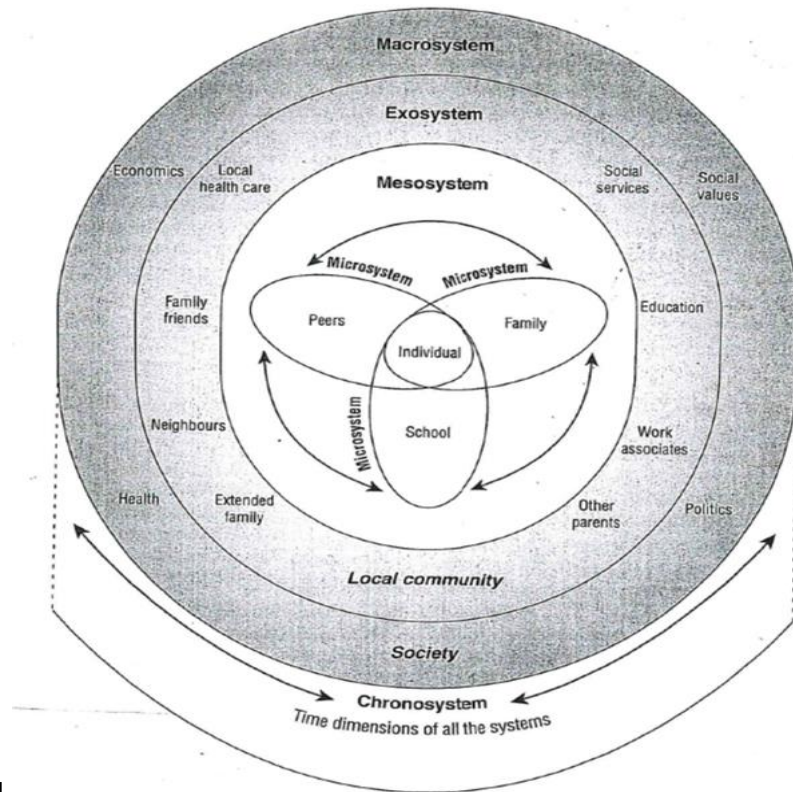
Figure 3.1. The bioecological

Extracted from Landsberg *et al.*, 2019

3.3   Changing paradigms

The movement towards an inclusive approach to education has been embedded within the principles of human rights, the promotion of social justice, the provision of quality education, and the right to a basic education for all, together with equality of opportunity (Forlin, 2012). This has led to a change in schooling from a segregated dual system of education towards, in most regions, the desire to offer a more inclusive approach. A change in social perspectives is imperative. For far too long, the problems of people with disabilities have been compounded by a disabling society that has focused upon their impairments rather than their potential (UNESCO, 1994). Generally, persons with disabilities are looked down upon, with stereotypical perceptions that regard persons with impairments as somewhat lesser human beings. In order to remove this internalised perception, a paradigm shift in social perspectives is imperative.

39

Three well-known paradigms in the field of inclusive education, namely, the medical model, the social model and the human rights model form part of the current discussion. Disability activists and advocates have been trying to frame disability and surrounding issues using a social model of disability since at least the 1980s in an effort to distance discourse from the (still) predominant medical model that rules many of our lives. This switch in models was to frame disability in a way that made it clear where many people face barriers and how those barriers can be addressed.

3.3.1 *The medical model*

This paradigm is usually characterised by a focus on disabilities or impairments, with the assumption that students with particular disabilities have more in common with each other than with differently disabled students or with those who do not have disabilities (Matthews, 2009).

According to the medical model, people with disabilities deviate from what is normal. The medical model moves from the premise that disability is a medical condition that requires health professionals (Landsberg *et al*., 2019). From the perspective of the medical model, people with disability require some or other medical intervention in order to cure or correct the disability (Retief & Letsoša, 2018). The lens of the medical model views disability as 'something gone wrong' in that disabled person, which is the source of the disability (Barnes & Mecer, 2004). Viewed from that angle, disability is a misfortune and therefore people with disability may be isolated.

The medical model assumes that a comprehensive diagnosis of physical, neurological or biological disorders should precede intervention in educational settings. This model of disability focuses on the child's condition, seeing the problem within the child, trying to find a way of treating the child to fit in with his environment (Masoumeh & Leila, 2012). As such, the impairment must be repaired or normalised for an individual to stop experiencing the disabling conditions that are seen to go hand in hand with disability, such as exclusion (Dalkilic & Vadeboncoeur, 2016).

The medical model, however, has perennially been vilified by most special education and related professionals over the years. It implies that the genesis of disorders lies within the individual not the environment (Forness & Kavale, 2001).

3.3.2 The social model of disability

The origins of the social model theory can be traced back to 1976 as propounded by The Fundamental Principles of Disability by the Union of the Physically Impaired Against Segregation (UPIAS) (Davis, 2017; Retief & Letsoša, 2018). The social model departs from the medical model of disability.

The social model views disability as a behavioural interface between people with disability and the environment in which they find themselves; it is an environment of attitudes, stereotypes, communication, physical and social barriers. This turned the tables in that the social model argues that it was the societal reaction to disability and not the disability per se that was the cause of the exclusion of people with disability (Barnes & Mecer, 2004). It is against this backdrop that the social model argues that these attitudes, societal stereotypical attitudes, physical and communication as barriers that should be removed to give persons living with disabilities an opportunity to participate in community affairs on an equal footing. The social model viewpoint accepts the reality of the impairment and the resultant effect thereof on the individual, but challenges barriers occasioned by physical, attitudinal, communication and social environment. These barriers are an impediment to people living with disabilities towards their equal participation in societal matters. Accordingly, the social model is inclined to have the society change its attitude and accommodate persons, and not for persons with impairments to fit themselves in society. It champions the view that persons with impairment have an equal right to participate in community matters like all other members of society.

This research is aligned to the Social Model of disability and accepts that disability impacts on the lives of disabled people. In order to adopt this model, TVET colleges should promote equal educational opportunities for all students by ensuring access for all, including students with disabilities. In South Africa, most educational institutions are barri-

ers in the first place because they have not been purposely built and designed to accommodate students with disabilities (Tugli *et al.*, 2014). Access to facilities in the learning environment is critical for students with disabilities, especially the mobility and visually impaired. Inaccessibility and un-adapted universal designs for the use of students with disabilities will exclude them from academic and social participation (Tugli, Klu & Morwe, 2014).

 Attention to the social model pushes us in the direction of modifying teaching environments to be as inclusive as possible (Mathews, 2009). For example, if a wheelchair user cannot get into a building, the social model would state that the problem is that there is no ramp, not that the person is using a wheelchair. https://www.allfie.org.uk/definitions/models-of-disability/social-model-disability/ 06/ 10/ 2020. In order for TVET systems to embrace this model, the physical and learning environments should be made accessible to students with a range of learning needs.

The social model of disability helps us understand how this might be done in a way that minimises the stigma historically associated with disability. CRPD specifically states that "persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability" (UN CRPD. year). TVET systems can play a crucial role in this process by enabling people with disabilities to acquire skills and qualifications required in the labour market and improve their employment prospects (ILO, 2017). Denying persons with disabilities access to equal educational opportunities due to their disabilities will deny them the necessary skills and knowledge needed in the job market.

Easy access to information will give students with disabilities a sense of belonging in the learning environment as well as an easy means of having their pertinent issues pertaining to their well-being heard and addressed.

3.3.1.1 Advantages of the social model

Tom Shakespeare lists three advantages of the social model of disabilities as follows (https://rosewilliams.myblog.arts.ac.uk)

Firstly, it propagated and built a social movement in favour of people with disabilities. It is simple to explain and easy to comprehend and sets an agenda for social change.

Second, the model views the society's attitude as a barrier, thereby setting persons with disabilities free. It places the problem of exclusion squarely in the society, which in turn pricks its (the society's) moral conscience to remove barriers and to accommodate the disabled persons.

Thirdly, the model has the effect of boosting the psychological self-worth of the people with disability and fostered a sense of unity and togetherness amongst the people with disability. It focuses on the individual and not the disability. It is a powerful tool to change societal perceptions towards persons with disabilities.

3.3.1.2   Disadvantages of the social model

The model was criticised by feminists with disability whose concern was that the social model does not take into account the personal and experiential facets that go with impairment. The model is ignorant or unable to account for the realities attached to realities, but instead places more emphasis on social and structural barriers (Cameron, 2015). Secondly, the social model is criticised for not considering subjective or individual double jeopardy or pain of impairment and disability. Thirdly, the model is accused of failing to include other necessary social components such as race, gender, age, sexual orientation, et cetera. The fourth criticism levelled against the social model is that it limits barriers to social and structural matters. This limitation ignores to take into account embedded traditional and cultural perceptions that position disabled persons as 'others'. Said differently, the community perceives impaired persons as outcasts and not part of it. The society's stereotyped concept of 'we' and 'us' is used with reference to the able bodied. By contrast, the terms 'them' and 'they' connote persons with disabilities. Thus, the model fails to take into account the 'otherness' of disabled persons. Finally, the model falls short as it is

premised on the theory that people with disabilities are oppressed. Sex and gender proponents (feminists) distinguish between medical impairment and social disability. Thus, the model is accused for not envisaging a barrier-free environment altogether. That is, a model that acknowledges many parts of the natural world will remain inaccessible to many disabled people: mountains, bogs and beaches are almost impossible for wheelchair users to traverse, while sunsets, birdsongs and other aspects of nature are difficult for those lacking sight or hearing to experience.

The social model is criticised for the assumption that once socio-structural barriers are removed, persons with disability will access services.

3.3.3   The human rights model of disability

The human rights model of disability was developed by the CRPD. This model offers a framework for disability policy that places prominence on the dignity of people with disability (Degener, 2017). The model is an embodiment of first- and second-generation human rights. It acknowledges life challenges confronting people with disabilities, and advocates that such challenges should be considered when crafting social justice policies. The model calls for the formulation of prevention policy which the model regards as an aspect of protection for people with disabilities. It offers concrete propositions for improving the lives of persons with disabilities. The model is hailed as a quest for social justice. According to Degener (2014), the human rights model is an upgrade of the social model and is instrumental in the implementation of the CRPD. The human rights model propounds that people with disabilities are versed with equal rights as all community members and urges governments throughout the globe to play a meaningful role in the upkeep and advancement of the said rights (Degener, 2014).

3.3.3.1   *Advantages of the human rights model*

The human rights model accepts that the conventional barriers are but only a fraction in the greater scheme of things. The removal of one or the other barrier will not in itself resolve the problem, but people with disabilities will still be in need of further support to access amenities of life on an equal footing with other members of society. Having noted

the shortfall, the model ameliorated the situation by placing sufficient attention on the active participation of people with disabilities, by asserting that firstly, people with disabilities are in charge (masters) of their own lives, and secondly, that they are active stakeholders in all matters affecting disability (Degener, 2017).

The human rights model recognises the rights of all children to access schools of their choice and urges governments to introduce a legislative framework to ascertain that school facilities are accessible. It demands of governments to offer any other support that the child may need for equal participation in scholastic life.

3.3.3.2   *Disadvantages of the human rights model*

The model is a proponent of Equal Opportunity policy, which policy may disadvantage people with disability as they may need more and costly resources to be able to access similar opportunities as the rest of the community. Equal Opportunity does not equate to 'equal provisions' (https://learn1.open.ac.uk/mod/oublog/viewpost.php?post=70707

The human rights model has assisted in the introduction and development of a culture of entitlement. However, it has not changed the general perceptions about disability (https://www.disabled-world.com/definitions/disability-models.php).

The additional entitlements brought about by the human rights model was a strategic boost. Nevertheless, the lives of other persons with disabilities have remained the same, in spite of the plethora of legislations. This is because the model has not affected the disability constructs. To this end, the model advances rights and promotes entitlements, but fails to seek ways and means to disassemble the disability construct in its totality (https://micrositios.iberopuebla.mx/micrositios/cu2015/docs/discapacidad).

3.4   CONCLUSION

In this chapter, Bronfenbrenner's bio-ecological theory was discussed. The study utilised the said theory on the basis that it is relevant in emphasising the interaction between an individual's development and systems' social context or environment. The model can

therefore assist us to explore inclusive education as being about the development of systems and individuals within these systems. The model can also be used as a conceptual tool for understanding classrooms, teachers' practices, school and families by viewing them as systems themselves.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 INTRODUCTION

The previous chapter has discussed the relevant literature. The excursion of this chapter is on research methodology that has guided the inquiry. The selected design of this investigation is situated within the interpretive paradigm. It was prompted by reason of the fact that the nature of this research process in the main focused on how inclusive practices are integrated at TVET colleges and the meanings which participants attach to the phenomenon. This chapter firstly focuses on paradigm assumptions. It includes a discussion of the research design used to carry out the study. The chapter lays out an account of how the qualitative research design was carried out, and an account of how selection procedures, population and sampling were employed. Then, I give description on data collection methods and instruments used. Next, I discussed the methods I used to analyse data. The discussion on quality criteria follows, sequentially. Lastly, the chapter explains how ethical considerations were ensured.

4.2 Philosophical assumptions

In the nature of things, researchers are influenced by their own opinions, worldviews, paradigms, or sets of beliefs of the research project. These inform the conduct and writing of the qualitative study (Creswell, 2007). The concept 'paradigm' is defined as a basic orientation to theory and research. It is an approach that was first perceived and conceived by Thomas Kuhnn (de Vos *et al.*, 2011:41). It entails basic assumptions, cardinal questions to be answered, research techniques to be used and examples of what scientific research entails (Neuman, 2014:96). The term paradigm includes the researcher's ontological issues that deal with the nature of reality or what exists, epistemological issues concerning the creation of knowledge, and methodological assumptions which entail the best means of acquiring knowledge about the world (Creswell, 2007; Neuman 2014, Denzin & Lincoln, 2008). Thus, every research employs one of the research paradigms as a yardstick for developing research methodology and to take on the research venture in a

manner that is most valid and appropriate. Neuman (2014) enlisted three ideal approaches as positivist social science, interpretive social sciences and critical social science. Most of the research paradigms emerge from one of the three approaches to research: positivist, interpretivist and critical theory.

4.2.1 Positivism paradigm

The positivist paradigm of exploring social reality is premised on the philosophical ideas of the French Philosopher August Comte. Positivism is the view that the only authentic knowledge is scientific knowledge, and that such knowledge can only come from positive affirmation of theories through strict scientific methods (techniques for investigating phenomena based on gathering observable, empirical and measurable evidence, subject to specific principles of reasoning. Quantitative research originates from positivism and is considered a traditional scientific method because positivists believe in empirical hypothesis testing (Ary, Jacobs, Sorensen & Walker, 2014). This 'scientific' research paradigm strives to investigate, confirm and predict law-like patterns of behaviour, and is commonly used in appropriate research to test theories or hypotheses. This is particularly useful in natural science, physical science and, to some extent, in the social sciences, especially where very large sample populations are involved (Taylor & Medina, 2013). The positivist paradigm mostly involves quantitative methodology, utilising experimental methods involving experimental (or treatment) and control groups and the administration of pre- and post-tests to measure gain scores (Taylor & Medina, 2013). The positivist approach underpins the natural scientific method in human behavioural research and holds that research must be limited to what we can observe and measure objectively (Welman, Kruger & Mitchell, 2005; de Vos *et al.,* 2011).

When having a discourse about social and behavioural sciences, quantitative researchers opine that any human behaviour can be studied and predicted quantitatively, and that behaviour can be explained using a scientific approach to research. De Vos *et al.* (2011) posit that positivism encapsulates the belief that methods and the procedures of natural sciences are applicable to social sciences. Positivism entails the belief that only those concepts that are observable, in a sense of being amenable to senses, can validly be

warranted as knowledge. Thus, true knowledge is based on experience of senses, and can be obtained by observation and experiment.

Although the positivistic paradigm continued to influence educational research for a long time in the latter half of the twentieth century, it was criticised due to its lack of regard for the subjective state of individuals. It regards human behaviour as passive, controlled and determined by external forces. Thus, human beings are dehumanised without their intention, individualism and freedom taken into account in viewing and interpreting social reality. According to the critics of this paradigm, objectivity needs to be replaced by subjectivity in the process of scientific inquiry. This gave rise to anti-positivism or naturalistic inquiry (Welman *et al.,* 2005). Interpretivism emerged as the new paradigm in response to criticisms of positivism.

4.2.2 Interpretivist paradigm

The interpretive paradigm is a model of knowledge based on the individual's own views of interpretations and experiences. It is a subjective approach towards an individual's inner world to explore one's own realities, to interpret one's own life's philosophy and the internal rules. The interpretive approach focuses on how individuals experience their world (Ritchie & Lewis, 2003). Rather than trying to be objective, researchers' professional judgements and perspectives are considered in the interpretation of data (McMillan & Schumacher, 2010). Interpretivists are concerned with understanding human behaviour from the perspectives of the people involved (Welman *et al.,* 2005; Ary *et al.,* 2014). Some of the qualitative research in social sciences use the interpretivist approach to research. The interpretive paradigm postulates that people designate meaning to aspects of social life mainly by what they perceive it to be, depending on their experiences (Neuman, 2014). According to Atkins and Wallace (2012), the interpretivist researcher investigates by focusing on case studies and people as individuals and groups, their histories, their personal accounts and their interactions.

Since the study followed an interpretive approach, I have examined the meanings which heads of department (HoDs), lecturers, campus managers and students attach to the integration of inclusive practices at TVET colleges (Limpopo Province). The study was

concerned with the understanding the world as it is from a subjective meaning of participants' experiences because the interpretive approach seeks to understand social worlds from a point of view of participants, leading to in-depth knowledge. Interpretive researchers examine meanings that participants attach to the phenomena (Creswell, 2007; de Vos, Strydom, Fouche & Delport, 2011). As an interpretive researcher, I strove to learn what is meaningful or relevant to participants, and how they experienced everyday life. The interpretive paradigm was relevant in this study since multiple methods of investigation and data gathering procedures were used to examine how inclusive practices are integrated at TVET colleges. Within the interpretive paradigm, the study followed a qualitative research method, where a multiple case study research design was adopted. Given that qualitative research occurs in natural settings, I observed classroom settings in three TVET colleges, interviewed lecturers, HoDs, campus managers and students during their normal daily activities. Furthermore, I interacted directly with participants during the data collection process. The focus of this interaction was to gain a better understanding of their interpretations and views on how inclusive education was integrated at TVET colleges.

4.2.3 Critical theory

Critical theory is a social theory inclined to critiquing and changing society as a whole. It has its origins in the so-called 'Frankfurt School' and includes the work of scholars such as Max Horkheimer, Theodor Adorno, Herbert Marcuse, and Jürgen Habermas. It differs from traditional theory, which focuses mainly on understanding or explanation of society. Ary *et al.* (2014) opine that while other forms of qualitative research have, as key purpose, the understanding of a phenomenon and the meanings people attach to events, the purpose of critical theory is to critique and challenge the status quo ante. They further explain that critical research may analyse texts or artifacts such as film or other communication forms such as drama or dance to reveal underlying assumptions. Critical theories aim to dig beneath the surface of social life and uncover assumptions that keep human beings from a full and true understanding of how the world works. According to de Vos *et al.* (2011), critical theory emerged out of the Marxist theory and was informed by presumption of centrality of class conflict in understanding community and societal structures. Participants should feel free to give their own view of their own situation and the world they live in. Often the researcher is involved in empowering members of these groups and

changing society so that participants have more power and influence (McMillan & Schumacher, 2010). The focus of the critical paradigm is to transform human beings and their environment by being personally involved in actions that would change their circumstances. Questions focus on power relationships and the influence of race, class and gender (Ary *et al.,* 2014). Critical studies use all means of data collection, concentrating on whatever will document the manner in which participants are marginalised. The purpose of critical research is to critique and change society (de Vos *et al.*, 2011). Critical research seeks to empower change by examining and critiquing existing assumptions.

4.3   RESEARCH DESIGN

A research design is a researcher's plan on how to proceed to gain an understanding of some group or some phenomenon in its context (Ary *et al.*, 2009). In the same vain, Creswell (2013) posits that research designs are procedures for research that span the decisions from broad assumptions to detailed methods for data collection and data analysis. In other words, a research design describes a flexible set of guidelines that connect theoretical paradigms; first, to strategies of enquiry, and second; to methods of collecting empirical material (Denzin & Lincoln, 2018). Qualitative researchers have a plenty of choice among different approaches or designs such as ethnography, phenomenology, grounded theory, case study and narrative biography. Their choice may be influenced by the purpose of the study, the nature of the research question, skills and resources available to the researcher (de Vos *et al.*, 2011).

Qualitative research, according to Creswell (2009), is a means of exploring and understanding the meaning which individuals or groups ascribe to a social or human problem. Qualitative research focuses on phenomena that occur in natural settings, which involves capturing and studying the complexity of those phenomena. According to Leedy and Ormrod (2014) and McMillan and Schumacher (2010), the researcher must apply a variety of techniques in their research process to attain a deeper understanding of the phenomena. Qualitative research seeks to understand and interpret human and social behaviour as it is lived by participants in a particular social setting (Ary *et al.,* 2014). In qualitative research, the role of the researcher is to gain a deep, intense and 'holistic' overview of the context under study. In other words, qualitative research assumes that

human behavioural patterns are shaped by a particular context (Ary *et al.,* 2014; Gray, 2009). This study is aligned with the explanation provided by Ary *et al.* (2014). In this study, the qualitative approach was used to explore, understand and give meaning to participants, as pointed out earlier, on how inclusive practices are integrated at TVET colleges.

4.3.1 Case study design

Within the qualitative research approach, there are several research designs namely, ethnography, phenomenology, grounded theory, case study and narrative biography. In the present study, I have used a case study design in order to collect considerable amount of data on how inclusive education is carried out at TVET colleges. In a case study, the researcher collects extensive data on individuals, programmes or events on which the investigation is focused (Leedey & Ormrod, 2014). A case study is an empirical inquiry within its real-life context, especially when the boundaries between phenomena and context are clearly evident (Yin, 2003). Case study research is a qualitative approach where the investigator explores a bounded system or multiple bounded systems over time; the exploration and description of the case takes place through detailed, in-depth data collection methods involving multiple sources of information that are rich in context (de Vos, *et al.*, 2011; Creswell, 2007). It means that the researcher must give a description of the context of the study clearly. A case study design is suitable for learning more about a little known or poorly understood situation (Leedy & Ormrod, 2002). The study, thus, employed a multiple case study approach.

4.3.2 Multiple case study

In a multiple case study, one topic is selected but the researcher selects multiple case studies to demonstrate the selected issue (Creswell, 2007). In multiple case study, several cases are selected to further understand a phenomenon, population or general condition. For the purpose of this investigation, the study employed a multiple case study design where several cases are studied to form a collective understanding of the issue (Simsons 2009). According to McMillan and Schumacher (2010), when a number of cases are combined in a single study, the investigation may be called a multiple or collective case study. Similarly, in the context of the present study, a collective case study of three

TVET colleges in Limpopo Province was combined in a single study. The case that was examined in this study was how inclusive practice could be integrated into the curriculum at TVET colleges. A multiple case study may be selected to study several programmes from several research sites or multiple programmes within a single site (Creswell, 2013). In this case, a multiple case study was preferred because analytic benefits of investigating more than one TVET college may be abundant and conclusions more powerful than those coming from one TVET college (Denzin & Lincoln, 2010). According to Yin (2003), analytic benefits of two or more cases may be considerable, and conclusions more powerful than those coming from one case alone. Typically, case studies use multiple methods to collect data (McMillan & Schumacher, 2010). The exploration and description of how inclusive practices are integrated at TVET colleges took place through detailed and in-depth semi-structured interviews, observations and document study as sources of information.

A design is defined as "the logical sequence that connects the empirical data to a study's initial research questions and, ultimately, to its conclusions," (Yin (2002:20). He further suggests four types of design that case study researchers can make use of. They include single holistic design, single embedded design, multiple holistic design and multiple embedded design. Holistic designs require one unit of analysis, whereas embedded designs require multiple units of analysis. Yin is of the opinion that apprentice researchers should select the design which provides them with the maximum instrumentality to answer their research questions, and to consider strengths and limitations of each design and the pitfalls to be avoided when implementing each the designs (Yazan, 2015).

4.3   POPULATION AND SAMPLING

It is important to understand that population is defined as the total number of possible units or elements that are included in the study (Gray, 2006). Welman, Kruger and Mitchell (2005) explain population as the study object and that it consists of individuals, groups, organisations, human products and events or conditions to which they are exposed. In a similar vein, Ary *et al.* (2010) recount that population is defined as all members of any well-defined class of people, events or objects. A research problem therefore relates to a specific population and the population encompasses the units of analysis about which the researcher wishes to make conclusions in line with my choice of the paradigm, approach

and design I opted for purposive sampling. The study was conducted at TVET colleges in Limpopo Province, which is situated at the north-eastern corner of South Africa and shares borders with Botswana, Zimbabwe and Mozambique. It forms a link between South Africa and countries further afield in sub-Saharan Africa. Limpopo Province has five municipal districts, and within each district there is one TVET college with satellite campuses. The TVET colleges are located in various districts of Limpopo Province. The colleges are as follows: Vhembe, Capricorn, Sekhukhune, Waterberg and Mopani. The target population of this study comprised five TVET colleges, out of which three were sampled, in Limpopo Province. In this case study, I collected extensive data from students, lecturers, HoDs, campus managers, student support officers, documents, teaching and learning methods on how inclusive practices were integrated at TVET colleges.

Purposive sampling is suitable to select distinct cases that are especially informative (Neuman, 2014). Qualitative researchers use their experience and knowledge to select a sample that they believe can provide the relevant information about the topic or setting (Ary *et al.*, 2010). In this study, the purposive sampling technique was used to select participants from each category of the population. These participants were selected on account of particular characteristics within their respective functions. Maximum variation (heterogeneous) as a form of purposive sampling was adopted as a strategy to maximise a diverse range of cases relevant to the present study (Emmel, 2013). Creswell (2014) posits that the purpose of maximum variation is to document diverse variation and to identify important common patterns. I selected a sample on the basis that it was a representative sample of the population as a whole (Gray, 2009). That is, sampling was studied in an effort to understand the population from which it was drawn (de Vos et. al, 2011). In this case, HoDs, campus managers and student support officers from each TVET college were selected. Lecturers and students with disabilities were selected from the population as they were representative and informative about how inclusive education was integrated at TVET colleges in Limpopo Province. In other words, the selected participants were chosen because they were likely to be knowledgeable about integrating inclusive practices at TVET colleges.

4.3.1 Sample Size

TVET College	Campus manager	Head of Department	Student Support Officers	Lecturers	Students
Capricorn	1	1	1	3	3
Vhembe	1	1	1	3	3
Mopani	1	1	1	3	3

Table 4.1:   The number of participants in the study

Participants comprised three college HoDs, three campus managers, three student support officers, nine lecturers and nine students with disabilities. The total number of participants was twenty-seven. It is common practice in qualitative research not to employ a large sample size. In the nature of qualitative research, there exist no barometer, measure of sufficiency, mathematical formula or academic equation available to establish a sample size in qualitative research (Emmel, 2013). It means that there is no general rule about the number of participants to include in a qualitative study (Ary *et al.*, 2010). According to McMillan and Schumacher (2010), qualitative samples can range from one to forty. In the present study, as mentioned earlier, campus managers were expected to provide information on motivation, inclusive practices, and curriculum as well as on policy matters. HoDs were asked questions about resources, lecturer support and courses enrolled by students. Student support officers provided information on their role in supporting students with diverse needs. Lecturers provided information on their qualifications, professional development, teaching and learning methods, including assessment strategies. Students provided information about barriers that they encounter, as well as support provided for their diverse learning needs.

4.4   DATA COLLECTION

Qualitative data collection methods serve the primary purpose of collecting textual data for research and analysis. For the purpose of this study, various methods of qualitative data collection were selected from the qualitative methodology within which this research was anchored and combined. Triangulation was emphasised in this context in order to reduce researcher bias, thus bringing more than one source of data including document study, semi-structured interviews and observations. Ary *et al.* (2010) postulate that a combination of data sources such as interviews, observations, relevant documents and the use of different methods increase the likelihood that the phenomenon under study is being understood from various points of view.   To strengthen the triangulation factor in this case, students with disabilities, lecturers, HoDs, student support officers and campus managers were interviewed. According to Leedy and Ormrod (2014), qualitative researchers often use multiple forms of data in any single study. Data were collated according to the following phases:

Phase one: Document analysis

Document analysis involves the study of existing documents either to understand their substantive content or to illuminate deeper meanings which may be revealed by their style and coverage (Ritchie & Lewis, 2003). Bowen (2009) postulates that documents provide background and context, additional questions to be asked, supplementary data, a means of tracking change and development, and verification of findings from other data sources. Qualitative researchers may use written documents or other artefacts to gain an understanding of the phenomenon under study (Ary *et al.,* 2010; Henning, Van Rensburg & Smith, 2004). I analysed documents in order to examine how inclusivity is integrated into the curriculum at TVET colleges in Limpopo Province. Document study included policies on inclusivity, timetables and assessment plans, including tests and examination question papers. Documents were evaluated in order to verify the data on the integration of inclusive practices that was collected from semi-structured interviews and observations.

Phase two: Semi-structured interviews

Semi-structured interviews were used to gain a detailed picture of participants' beliefs about how inclusive practices are integrated at TVET colleges. According to Man (2016),

semi-structured interviews rely on a detailed guide. However, there is room for deviation from the guide. It is important to cover most of the guide for comparative purposes. In semi-structured interviews, an interview protocol used as a guide and questions may not be asked in the same order; the interviewer initiates questions and follow up probes in response to the interviewee's descriptions and accounts (Roulston, 2010:14). I conducted semi-structured interviews following a predetermined interview guide. An interview schedule was used to guide the interviews rather than to dictate them (de Vos *et al.,* 2011:352). I interviewed students, HoDs, campus managers, student support officers and lecturers individually and followed up with probes in order to find a detailed description of what has been said. Participants explained how inclusivity is integrated into the curriculum at their respective institutions. The interview sessions were determined by participants' role in the institution and differed from person to person. The minimum period for the interviews was one hour. I used a voice recorder during the semi-structured interviews in order to capture the conversations.

Phase three: Observation

Classroom observation was the third method that I used to collate data. Students and lecturers were observed in their natural setting, in this case, lecture rooms. I wanted to gain insights into the kind of methods the lecturers used to integrate inclusivity into the curriculum by making personal observations. Ary *et al.* (2010) posit that observation is a basic method of obtaining data in qualitative research. They further explain that observations rely on narrative or words to describe the setting, behaviours and interactions. Through observation, I was able to see and hear what was occurring naturally at TVET colleges (McMillan & Schumacher, 2010). Lecture room observation helped me to answer my research question on what measures are in place to integrate inclusivity into the curriculum at TVET colleges in Limpopo Province. Observations took place in keeping with the purpose of the study. During Lecture room observations, I was able to see how lecturers support students with disabilities in an inclusive setting, and the interaction between students and the lecturers. This helped me to see exactly what they were doing first-hand rather than relying on what they said they were doing during the interview sessions. Observational evidence was useful in providing additional information about the topic being studied (Yin, 2003). I played a role of a non-participant observer, thus recording what was

observed without interacting directly with participants. This type of observation was uti-lised in order to gain a deeper understanding of TVET colleges in Limpopo Province and participants' behaviour without influencing them. The disadvantage of this method was that participants were aware that they were being observed. This may have influenced their behaviour and interactions. Classroom observation data were coded, transcribed and integrated with themes emerging from the semi-structured interviews. During obser-vation, I recorded teaching and learning methods, presentation of lectures and availability of resources in the field notes. An observation checklist (Appendix L) was used as guid-ance.

4.5   DATA ANALYSIS

Data which were collected through document analysis were analysed inductively. This technique used a set of codes to reduce volumes of print materials into more manageable data from which I identified patterns and gained insight (McMillan & Schumacher, 2014). I acknowledged that inductive content analysis required in-depth reading and re-reading of material (Bowen, 2015). I   began by organising raw data through open coding process. Through this process, I reviewed the material, notes were made and the headings in the text were written. This process required repeated reading of the material, after which I transcribed notes and headings onto a coding sheet (Mc Millan& Schumacher, 2014). In the next step, I grouped the data, and reduced the number of categories by combining similar headings into broader categories (McMillan & Schumacher, 2014). Through this process, I generated knowledge and increased understanding of the material. Data ob-tained through semi-structured interviews were analysed using thematic analysis. This is one of the most common form of analysis in qualitative research (Bowen, 2015). It em-phasises pinpointing, examining and recording patterns or themes within data. Themes were therefore transformed into categories (Creswell, 2014). Thematic analysis created codes and meaningful patterns (Marshall & Rossman). I familiarised myself with data, generated initial codes, searched for themes among codes, reviewed themes, defined and named them, and produced the final report.

 Data which were obtained through observations were analysed through thematic analy-

sis. I started with transcription of the written notes which were recorded during observation in the classroom. I read the written notes in order to establish similar themes that emerged before, during and after observations. I made sure that each text is noted to establish common and different issues. Texts with common or different themes were noted. I re-wrote the noted text in separate documents which represent emerging themes (Bowen, 2015). In this observation analysis, I avoided picking and choosing instances of behaviour out of context.

4.6   TRUSTWORTHINESS

4.6.1   Credibility

Credibility or truth value involves how well I established confidence in the findings based on research design, participants and context (Ary, Jacobs, Sorensen & Walker, 2014). Credibility ensures that the subject under study has been accurately identified and described (Marshall & Rossman 2011). This is the alternative to internal validity in which the goal is to demonstrate that the enquiry was conducted in such a manner as to ensure that the subject has been accurately identified and described. In this study, the following strategies as prescribed by McMillan and Schumacher (2010) were used to determine trustworthiness:

Multimethod strategies: Several data collection techniques were used to allow triangulation in data collection and data analysis in order to increase the credibility of findings. In this study, I conducted semi-structured interviews with lecturers, HoDs, campus managers, student support officers and students with disabilities who were supported at TVET colleges in Limpopo Province. Data from observations and document analysis were also used to enhance credibility.

Member checking: This was done in order to confirm observations and participants' meanings with individuals through casual conversations in informal situations. Member checking was also done within an interview as topics were rephrased and probed to obtain more complete and subtle meanings.

Participant review: Participants were asked to review the transcripts of the data obtained from them so that they could modify any information from the interview data for accuracy. The data obtained from each interviewee was analysed for a comprehensive integration of findings.

4.6.2   Dependability

Dependability is concerned with the consistency or stability of results in qualitative research. It is the extent to which the same general results would occur with different sets of people or in different settings or time periods (Ary *et al.*, 2014). Guidelines for data collection and data analysis were properly described in order to make it possible for other people to evaluate the quality of the study.

4.6.3   Confirmability

Triangulation was emphasised in this context to ensure that the research was free of bias (Ary *et al.*, 2014), bringing more than one source of data including document study, semi-structured interviews and observations. Furthermore, students, lecturers, HoDs and campus managers were interviewed to strengthen the study's usefulness for other settings (Marshall & Rossman, 2011). I provided a complete audit trial in order to enable another researcher to arrive at the same conclusion given the same data and context.

4.7   ETHICAL CONSIDERATIONS

4.7.1   Permission to conduct the study

Relevant persons and authorities, including the Ethical Committee of the University of Limpopo were consulted for permission to conduct the research. To this end, I requested permission in writing from the authorities (Creswell, 2009).

4.7.2   Informed consent and voluntary participation

I gave participants a detailed exposition of the purpose and procedure of the study, and their consent was sought. Moreover, I informed the participants that their involvement in the research was entirely voluntary (Neuman, 2014). It was made clearer to them that should they elect to withdraw from the research, their information would not

be used anywhere in the study. The participants furnished me with their written consent prior to the semi-structured interviews (Creswell, 2009).

4.7.3 Confidentiality and anonymity

Confidentiality and anonymity of participants was maintained. To ensure that both confidentiality and anonymity principles were not violated, I recorded data pseudonyms rather than participants' actual names in the research (Creswell, 2009). Participants were assured on aspects of human dignity, protection against harm, as well as protection of information from public disclosure (Neuman, 2014).

4.8 CONCLUSION

In this chapter, I described the research methodology applied in this study. The chapter began by explaining the research methodology and proceeded to expand on the research paradigm that I followed. The relevant section explained the research design that was adopted. I then showed how I selected participants. Following that, I described how I collected data, after which I described how I analysed it. Moving further, the chapter described the procedure followed in the analysis of data. Thereafter, the criteria used to ensure dependability of data collection instruments and credibility of findings were discussed. The chapter ends with the description of research ethics taken into consideration when undertaking the research. In the forthcoming chapter, I present the findings and provide interpretations about them.

CHAPTER FIVE

PRESENTATION OF FINDINGS

5.1 INTRODUCTION

The study, being qualitative in nature, was resourceful in information gathering, relevant to the determination on how inclusive practices are integrated at TVET colleges in Limpopo Province. While chapter four of the study has dealt with the research methodology, presented in this chapter is an analysis of the collected data, so as to substantiate the voice of participants. In the final analysis, this leads to an immersed understanding of the integration of inclusive education at TVET colleges. The collated information and synthesis of classroom observations, semi-structured interviews and document analysis are integrated to provide a holistic understanding of the educational support given to students with disabilities at TVET colleges. In order to be in pole position to answer the research questions, classroom observations, semi-structured interviews and document analysis were used to collect data.

5.2 FINDINGS

The presentation of findings has been organised according to the population segments (campus managers, HoDs, lecturers, student support officers and students with disabilities) from whom data were collected. Campus managers provided information on motivation, inclusive practices, and curriculum as well as on policy matters. HoDs provided information on resources, lecturer support and courses enrolled by students. Student support officers provided information on their role in supporting students with diverse needs. Lecturers provided information on their qualifications, professional development, and teaching and learning methods, including assessment strategies. Students provided information about the barriers they encounter, as well as the support provided for their diverse learning needs.

The discussion and the reporting of findings begun by presenting an analysis of data collected from campus mangers, and findings from HoDs and student support officers

followed next, with findings from students with disabilities presented last. This was according to the sequence of the data collection process followed in this study. The quotes from participants which are cited in the presentation and analysis of findings are captured verbatim. The results and analysis of data were presented and discussed according to five identified themes of how the integration of inclusive practices were carried out. The themes are:

- The concept of inclusive education
- Factors hindering inclusive practices
- Motivation to implement inclusive practices
- Matters related to students' special needs
- Colleges' State of readiness
- Measures

5.3 UNDERSTANDING OF INCLUSIVE EDUCATION

Participants were asked to indicate their understanding of inclusive education. They explained the concept in different ways. However, inclusive education is perceived globally more broadly as a reform that supports and welcomes diversity (UNESCO, 2001). Diversity refers not only to disability but acknowledges and respects differences in learners, whether due to age, gender, ethnicity, language, class, HIV or other infectious diseases (Department of Basic Education, 2001). According to UNESCO (2009), inclusive education is a process of strengthening capacity of the education system to reach out to all learners and can thus be understood as a key strategy to understand Education for All.

5.3.1 Managers' understanding of the concept inclusive education

Campus managers displayed some understanding of what inclusive education entails, yet in varying degrees. They explained it as a system wherein all types of students are catered for and a system which does not discriminate according to disability. They further explained that students with disabilities are integrated into the mainstream education, combating exclusion and giving learners with disabilities an opportunity to learn. Campus manager 1 Explained:

Inclusive education refers to the system wherein all types of students are catered for. It refers to the system wherein it doesn't look at the physic in terms of intellectual capability, it is the system that does not discriminate

Campus manager 3 explained:

Inclusive education means including students with disabilities integrating them into the mainstream so that they do not feel excluded in teaching and learning taking into consideration their disability and giving them an opportunity to learn.

However, one campus manager felt that inclusive education does not include those with intellectual disability. The participant felt that people with intellectual impairments should be accommodated in separate institutions. Campus manager 2 explained:

Everybody being included in teaching and learning, gay and lesbians, disabled, except those with intellectual disability. It means that everybody should be given an opportunity to learn irrespective of their disability or their culture.

5.3.2 HoD's understanding of inclusive education

HoDs also gave their version of how they understand the concept of inclusive education. They view it as a child's right and that students with disabilities should be educated together with their non-disabled counterparts without any discrimination.

HoD 1 said:

Inclusive education, they say is a child's right not a privilege that all children with disabilities should be educated with non-disabled children of their own age to have access to education. There should not be any discrimination.

HoD 2 explained:

Inclusive education includes all learners even those with disability are taught together with those without disability.

Having been provided with the above contributions, HoD 2 argued exceptionally that the concept inclusive education was unfamiliar to her. Yet she attempted to give a version of her explanation.

> *Is the first time that I heard about the word. But does it mean that it includes students no matter what their learning barriers they have or have to do with applying for concessions for students?*

5.3.3   Lecturers' understanding of inclusive education

Lecturers' explanations showed that they had an idea of what inclusive education was all about. They understand inclusive education as inclusion of all learners that are in the classroom irrespective of their disability and that it is about ensuring access to a quality education to all students by effectively meeting their diverse needs. Below are some of the definitions given by the lecturers:

Lecturer 1, college C explained:

> *According to me is all about including all the learners that are in the class so that everybody could be covered on what you are giving to them and you don't leave any student out irrespective of their disability and other things, so everybody needs to be included.*

Lecturer 3, college A explained:

> *Including all kinds of children including those that are disabled. Either disabilities or impairments.*

Lecturer no 2, college A said:

> *Inclusive education is about how we develop our classroom programmes and activities so that the students participate together and is about ensuring access to a quality education to all students by effectively meeting their diverse needs in a way that there is responsive, respectful and supportive.*

5.3.4 Student support officers' understanding of inclusive education

Student support officers also explained their understanding of inclusive education as dealing with exclusion in our education system. Their version indicated that students with disabilities should be allowed to study with the normal ones and that they should be accommodated in mainstream schools without discrimination. Student support officer 1 explained.

> *My understanding is that students who are disabled should be allowed to study together with the normal ones. So, they shouldn't be discriminated that they do not qualify to do this or this. Because though you find that they don't have a hand to type you may find that they have something to help them do that.*

Student support officer 3 briefly said:

> *Is that you have to accommodate all the students without any discrimination of any kind.*

Student Support officer 2 explained*:*

> *I take it that it's dealing with exclusion in our education system, accommodating the students with disabilities in the mainstream schools. So that we teach them together.*

5.3.5 Students' understanding of inclusive education

Some students were unfamiliar with the concept inclusive education and mentioned that they did not know what it is.

Student 2, college A:

> *I don't know the word inclusive education.*

On the contrary, other students understood inclusive education and were able to explain briefly what it meant. Some of the students did not know the concept of inclusive education but were able to explain issues of inclusive education. Some understood it as having to do with students with disabilities who learn with other students who don't have a disability. Student 3, college B explained:

> *I don't know. Everyone needs to be educated. Even though they are disabled. When we talk about inclusive education is where we combine different students, those who have disabilities like myself with other people who don't have disabilities.*

Some students explained inclusive education by relating it to their own situation. Student 1, college 2, who is deaf added:

> *Education is important to everyone and even deaf learners must also learn so they need to understand that the deaf people also need education and they also have to work after they pass their education. I also understand that they should include all learners irrespective of their disability. So, they must be taught together.*

Student 2, college B who is blind added:

> *Is when people with disability learn together with those people who can see.*

5.4   FACTORS HINDERING THE INTEGRATION OF INCLUSIVE EDUCATION

Campus managers, HoDs, lecturers and student support officers identified several barriers constraining the integration of inclusive education at TVET colleges. They mentioned a few that they find more disturbing.

5.4.1 Inaccessible physical environment

An accessible built environment is required in an institution that has enrolled students with disabilities in order to cater for their mobility needs. It has been discovered that the infrastructure at the colleges that were investigated was not conducive for students with disabilities. This has negatively affected free movement of students who require assisted

mobility, such as those in wheelchairs, crutches and those with visual disabilities. Various physical obstacles hindered their mobility in these institutions. In the case of persons with disabilities, reasonable accommodation and training allowances are the minimum requirements to enable them to take up and complete training courses, along with accessible TVET infrastructure (ILO, 2017). Poorly designed infrastructure was of great concern to participants, as it created difficulties for students with disabilities to access the buildings. Students who experience mobility challenges are faced with the burden of inaccessible physical environments. As a result, certain students who are dependent on wheelchairs for mobility struggle to access some classrooms. It was mentioned that most buildings did not have ramps. Mugor *et al.* (2014) also revealed that disabled students could not access some of the school buildings since they were built without considering disabled students' needs. Double storey buildings without elevators were said to be contributory to inaccessibility to classrooms by students with disabilities. Oftentimes, elevators were routinely dysfunctional. Campus manager 1 stated that:

> *It's a variety of factors. Firstly, it's infrastructure accessibility. When you have students on wheelchairs that can't access certain classrooms. We still have to make the ramps to make our classrooms more accessible. We are in the process of addressing that through the grants that we get from the department.*

Infrastructural challenges affected students in a negative way and led to student dropout in some instances. A student was reported to have left one of the colleges because he was unable to move around the college precinct in his wheelchair. The college premises were not accommodative of the student's needs. HoD 3 argued:

> *One student left because there are no ramps and he used a wheelchair. The college was not conducive for his needs.*

Lecturer 2, college B explained:

> *…Another barrier is the way our infrastructure is structured, most of them are not constructed in such a way that they make it easier for people with disabilities to*

can access, you'll find a single storey or a double storey building which is not hav-
ing ramps. A person who is using a wheelchair cannot easily access such kind of
a building.

Lecturer 2 college A added:

Challenge of accessing the buildings.

Student support officer explained:

I'm not sure because we get instruction not to admit other disability because of the
infrastructure. It was no designed to accommodate students in wheelchairs. We
once had a wheelchair and it was difficult because we don't have ramps. Only the
ablution facilities can accommodate disabilities. Some of the classes are not ac-
cessible.

Student 3, college B raised her concern as follows:

I need someone to push me. My wheelchair cannot move everywhere. Somewhere
there are no ramps. I'm able to access one classroom. Others need ramps. I'm
able to participate like any other person.

Blind students also experienced mobility issues. This is what student 2, college 2 had to
say:

… Hey, I'm experiencing a barrier I don't know this campus when I'm alone. It
means that I must ask someone to help me. You see myself I went to the nearby
university to do computer but in that place on the doors they have written with
braille (braille signage) that this is the office of so and so. And when it comes to
mobility, there is no one who trains us here.

Lecture rooms that were observed proved to be inaccessible for students who experience
mobility challenges because there were no ramps. In cases were ramps were available,
they were not properly built. Some lecture rooms also had steps that students should use

to enter. The walkthroughs in the lecture rooms were not the same for the three colleges under investigation. Some lecture rooms were congested and could not allow space for easy passage whenever needed. However, some of the lecture rooms had enough space for free movement of wheelchairs and walking aids.

5.4.2 Insufficient professional development

The paucity of training in supporting students with disabilities was a common factor amongst college staff members, including management. Some staff members only attended a single workshop that could not sufficiently equip them to cater for the needs of students with disabilities. Campus managers use their own discretion and some feel that they need more training. Lecturers' lack of knowledge regarding teaching methods to support students with disabilities hampered the effective integration of inclusivity at the TVET colleges under investigation. Given the precarious position they found themselves in, lecturers acknowledged that they need to be trained first in order to carry out their new role of supporting students who experience barriers to learning in their lecture rooms. Lecturers are not able to use equipment since they were never exposed to such equipment let alone received any form of training. Most of the lecturers confirmed not having undergone any form of training in inclusive education. Campus manager 3 reiterated:

> *None. Only one workshop and the issue were discussed but it was not enough, I need more training.*

Campus manager 2 said:

> *I never went for training. I only attended the one about the deaf not to distract them it was just one day.*

Campus manager 1 indicated:

> *None I'm just using my own understanding.*

At college B, there was some effort to equip the staff on sign language and how to handle deaf students. HoD 2 explained:

We were trained how to communicate with deaf students by teachers from the local special schools. Every Thursday we have lesson and during the weekend. We've just started only last week

HoD 1 argued:

Attended workshops.

Lecturer 2, college C said:

No training at all.

On the contrary, Mugor *et al*. (2014) established that according to disabled students that they had interviewed, lecturers seemed to be highly trained on handling disabled learners. According participants, there is a college in another province relatively more advanced than others in carrying out inclusive practices. In order to attain knowledge and benchmark, management and a few lecturers from respective colleges visited the said college. Lecturer 2, college B argued:

Personally, I have not undergone any formal training. We visited college Motheo last year in Bloemfontein. They are way ahead of us in as far as inclusive education is concerned. We went there to benchmark and to see how they are dealing with issues relating to IE. I also went to a workshop on inclusive education. We went to another college that is a bit advanced than us. Learning from those who are ahead of us pertaining to issues of inclusive education.

Only one lecturer from college C has reported to have obtained Advanced Certificate in Education: Special Needs Education. Lecture 3, college C

I have ACE in special needs education.

Student support officers indicated different qualifications. Only one was studying inclusive education at the time of the investigation. Student support officer 2 mentioned that:

71

No, it's just that I did Psychology up to Psychology 3.

Student support officer 2 explained:

We attended disability summit conference clip conference, basic sign language training, benchmarking. Busy with honours in inclusive education.

Student support officer 1 said:

None. I'm a teacher and I've also done safety management and on top of that I've done office management. The position of the student support position requires a teacher.

The inclusion of students with disabilities at TVET colleges requires lecturers to acquire skills to respond to their new role of supporting these students in their lecture rooms. In this case, some staff members acknowledged that they have a very shallow understanding of inclusive education. Consequently, they have not effected changes regarding their methods of teaching in order to assist students with disabilities. They also indicated that they were compelled to admit these students at their colleges even though they were not prepared for the role. However, they admitted that they do not have the capacity to teach and to assist these students. In a study conducted by McIntosh and Mupinga (2015), lack of professional development for teachers working with special needs students found to be, amongst others, an issue that needed improvement. They desired to first be capacitated so that they can effectively support students with a range of diverse needs. When all is said and done, they will be accountable for the results of the students. Lack of knowledge about and sensitivity to disability issues on the part of some educators, staff and students can make it difficult for students with disabilities to access educational services equally (Ahmed, 2016).

Amongst the subjects offered at TVET colleges is Computer Training. It is one subject in which lecturers expressed a challenge, especially when it comes to teaching students with visual impairments. Students with visual impairments include blind and partially sighted students. Such students experience difficulty in computer laboratories and that is

frustrating to lecturers. In a study conducted by Mphgoshe *et al*. (2015), the challenge arose as blind students were given equal timeframe as other students during their computer lessons. Lecturer 2, college A explained:

> *The current barrier that we have now is that we don't have resources, lack of training. We don't have any knowledge or idea how to teach them or how to handle their situation. Especially the hard one is teaching computer. Some of them are partially sighted. Especially in computer. We don't know how to help them or how to teach them. Challenge of accessing the buildings.*

Blind students have enrolled for Marketing, a subject which entails, amongst other things, interpretation of graphics. To this end, blind students make use of a software called JAWS, which is a computer screen reader programme that allows visually impaired users to read the screen with a text- to- speech output or Braille display. According to lecturers, they only make use of the text-to-speech version of the programme. The limitation with the software is that it does not interpret graphics. For this reason, it is of minimal assistance to students in so far as graphics are concerned. Adding to this constraint, lecturers themselves were not able to use the software due to their lack of training. HoD 1 asserted:

> *…Our lecturers currently are not trained for these kinds of students. We are struggling and the software that we are using, JAWS, does not interpret the graphics so you find that our students have registered for marketing and marketing has a lot of graphics. The very same JAWS is also not able to read the pop-up menus.*

Lecturer 2, college B shared the same sentiments with the above participant:

> *...I, as the lecturer, am not able to use JAWS. I'm only helped through student support. I would love to get training on that and to also get basic training on braille. In my view I think if I can get that it can also increase my knowledge on how to work better for the success of students that are having this type of a disability. I believe there is a need.*

5.4.2   Limited resources

Since technical institutes rely on materials and tools for training, and their short supply would negatively affect the acquisition of practical skills (Kamevor & Kassah, 2015). The inadequacy of resources was a perennial challenge experienced by TVET colleges that were investigated. It was also observed that resources were not sufficient to cater for the needs of students with disabilities. Some of the learners were struggling because some resources were not provided in computer rooms as needed. Partially sighted students required computer screen protectors, large print keyboards, braille keyboards, embossers, note takers and screen magnifiers. Such necessities were not available in computer rooms. Campus managers bemoaned the cost of the requisite facilities that cater for students with disabilities as expensive. Campus managers acknowledged the resources that needed to be bought for the students, including specialised computers, specialised calculators, laptops and braille machines. Textbooks for blind students needed to be brailed. Due to lack of exposure to equipment required by students who experience visual challenges, some lecturers are not even familiar with the gadgets, and yet they were supposed to offer support to students. Lecturer 2, college B went on to say:

> *I have a student that is partially sighted; there is this instrument, I have seen it, that is used by the partially sighted. I don't know what we call that very instrument. But I have seen others as I was going to different places giving it to their students to use.*

Student support officer 3 also intimated that their college could not admit students with physical disability because of lack of resources. She retorted:

> *Our institution was chosen to take students who are not seriously physically challenged because we don't have infrastructure that can accommodate them. So, we only take the partially sighted. The other disabilities we don't have because we don't have resources for them.*

It was observed that colleges that were investigated were not uniformly resourced. However, the resources that these colleges had in common included computers, talking computers, laptops, JAWS software and braille machines. At college B, the student support officer mentioned the resources as follows:

We have a temporary disability centre for students, where there are braille printers, computers with JAWS, bar readers, enlargers, and laptops given to blind students. Two interpreters for the deaf student, not enough but we are using what we have. The deaf and blinds are more equipped than other disabilities because they are the majority of the disabled students.

Campus manager 2 added:

JAWS, soft copies of textbooks, students are able to use the soft copies on their laptops via JAWS so that they can be able to listen during their spare time, special scanner for activities that convert into JAWS readable format. We've got headsets for them and laptops.

At another college, the lecturers complained about the unavailability of resources. Lecturer 3, college A said:

We only have the JAWS programme. We don't have the braille machine, zoom text, talking calculator and the bar reader.

The HoD 2 from college B shared the same sentiments. He argued:

Presently we just have laptops and software that JAWS can read. Soft copies of their textbooks that is installed on their computers. We need braille machines, magnifying glasses for the partially sighted.

It seemed as though all colleges under investigation had their focus on students with visual impairment when purchasing equipment for students with disabilities. However, it was mentioned at one college that it was the deaf who were catered for more than other disabilities. Another addition from campus manager 2:

Braille machines. We have computers, talking computers, laptops so that they can be able to use them at home. For the deaf, interpreters are there.

Students presented their own version with regard to the insufficiency of resources according to their disabilities. They had a general feeling that resources at the colleges were not adequate to cater for their diverse needs. Students with physical disabilities indicated their concern about lack of specialised chairs in computer rooms. Deaf students mentioned that they only have interpreters and protested that it was only the lecturer had textbooks. Student 1, college B said:

If they can give us the text book or the lecturers can give us the notes so that we can learn because most of the time the lecturers read from the text book and it is difficult for us to grasp what they are saying because they are too fast. So, the resources that they are having is only textbook. We use only the textbook as the deaf.

In the lecturer room, different lecturers use services of the same interpreter for different modules. In their study, Glazer and van Pletzen (2012) revealed that interpreters' signing of interactive classroom discourse is lack of synchrony which has negative implications for deaf students' access to learning and classroom procedure. In addition, it is often clear that the interpreter does not have adequate proficiency in the discourse of business communication in English, leading to inaccuracies in her signing. The interpreter may not be conversant with some of the subject matter. For this reason, it is the wish of deaf students that lecturers learn sign language in order to impart knowledge first-hand, without making use of the interpreter. Student 1, college B reiterated:

Us as the deaf we are being helped because we have the interpreter in the class. The interpreters are helping us by interpreting what the lecturers are teaching us. The interpreter and the lecturer must work hand in hand because the lecturers do not know how to use sign language. We're encouraging the lecturers also to learn sign language so that we can communicate together without using an interpreter.

Totally blind students also had their own concerns regarding lack of resources. As was observed, it is a common practice that students who are totally blind record lessons in lecture rooms albeit the fact that this practice presents with some challenges. Any form of noise may interfere with the recording which creates a barrier for the blind student. Student 2, college B had the following to say:

> *Lecturers are giving lectures in a good way, but the challenge is when we come to books. We don't have books in this college which is so painful. When I want to read it means that I must go to my phone on the table and start to record a person who is giving a lecture because there are different physical barriers regarding recordings. Maybe a car entering the college, that sound of a car is giving us a physical barrier. Or maybe if other students are outside because here, we are divided in different causes. If someone comes late to class and I'm busy recording a lecture, the person who comes late will be disturbing the recording. Those recordings are our books.*

Most of the observations were done in computer rooms. In computer rooms that were observed, there were computers, overhead projectors and smart boards. However, there were no specialised equipment to cater for students who were partially sighted such as specialised keyboards. Students who are partially sighted struggled to see on the smartboard as well as on the keyboard. There were dark blinds on windows and poor lighting in computer rooms. Despite such efforts, students who are partially sighted were not catered for because the lights on the monitors also affected their sight. Most of the students struggled to follow the instructions of the lecturer. In some instances, computers were not enough to cater for all the students because some of the computers were not working.

5.4.3 Uncertainty about teaching methods

There were no uniform teaching methods that the lecturers used. Due to lack of training on inclusive education, lecturers could not adapt their teaching methods according to the needs of students with disabilities. Some lecturers' responses referred to their general teaching methods and did not consider students with disabilities. Lecturer 3, College C explained:

Sometimes we use the telling method, question and answer method. We are using the projectors here. I have to tell them first or teach them first and then if they don't understand they can just tell me, and I can explain again and if they understand we could go on.

Lecturer 2, college C added:

Learner centred. I like to involve my learners when I teach especially the theory subjects not the computer, I ask the questions and give the scenario. With computer I open up the projector. I teach them as other students because I was never trained.

On the contrary, some of the lecturers were able to take students with disabilities into consideration during their lectures. Lecturer 1, college C argued:

Since I work with the computer those ones I put them next to me so that I can manage to see their screens time and time again and they can also manage to see my screen when I present a lesson so that they don't struggle to see what is presented to them.

Another lecturer 3, college A stated:

I talk much so that some can be able to record what I'm saying. I'm having the totally blind.

Students had mixed feelings whether or not methods of teaching and learning were suitable for their needs. Some students felt that the teaching methods did accommodate their situation. Some of the lecturers were able to take students with disabilities into consideration during their lectures. However, this was done on a trial and error basis.

Student 1, college C stated:

Sometimes their teaching methods are okay.

78

However, some of the students with disabilities felt acutely excluded in terms of how they are taught in the computer room. Lecturers used conventional methods of teaching and on occasions, they demonstrated computer lessons practically in a way that did not accommodate students' range of diverse needs. Students with visual impairments complained about how the lecturer's instructions could not make sense to them as they are not able to see the interactive lesson on the smart board. One blind student felt strongly about how they are taught in the computer room. Student 2, college B protested:

> *A person who is teaching computer doesn't have a full knowledge of how to teach people like us because she is busy explaining things by clicking and we don't know how to click. If they provide us with books is better.*

Another student 3, college A who is partially sighted added:

> *No, especially during computer lessons.*

5.5   MOTIVATION TO IMPLEMENT INCLUSIVE PRACTICES

Even though it seemed difficult for lecturers to sustain high morale while supporting students with diverse learning needs, lecturers appreciated students with disabilities. It has been revealed that campus managers found it difficult to motivate the staff in order to carry out inclusive practices. This has been aggravated by the fact that lecturers believe that students who experience barriers to learning may retard progress in their lecture rooms.

5.5.1 Motivation to Lecturers

Lecturers at the colleges expressed their motivation from quite different angles. Some of them mentioned that they are motivated by their fellow lecturers from other colleges that are advanced in the implementation of inclusive practices. This statement was confirmed when HoD 1 reflected:

We invite a guest lecturer to teach and for the (local) lecturers to observe. We have taken lecturers to another college that is more advanced with inclusive education to go and observe how things are done.

Lecturers themselves are motivated differently by students in their lecturer rooms. Lecturer 1, college B argued:

I have realised that the disabled students are the ones that are doing better than the ones that are not disabled. They perform good than the normal ones. Their passion motivates me.

Some lecturers said that they are propelled by the love they have for people with disabilities. They explained that their love for the students with disabilities is something that helps them to stay motivated in their new task of supporting these students. They felt that the more you loved the students, the more they appreciated them. Lecturer 2, college B from another college explained:

That for me it is personal because I love people and to me people are just people irrespective of the disability that they might be having. A person with a disability to me is a normal person just like any other person. To have a courage to train disabled people to be self-dependent.

Lecturer 1, college B added:

The motivation that I have is from within because I love being with them because I've never worked with disabilities students and these ones they are my first and It's fun. I always tell my other students that they need to push hard because they are privileged, these (ones) got everything they can do everything on their own but those ones are not able to do things on their own; that motivates me to work closer to them.

Other lecturers are motivated by students themselves. But at the same time, they are sympathetic to them. Lecturer 3, college A mentioned that:

I have passion and I feel pity for the students and just imagining that if it was my child in that situation. I've just accepted them as they are.

Although some lecturers indicate how they are motivated to carry out inclusive practices, some contradictory statements emerged from the findings. There seems to be challenges in staying motivated.

5.5.2 Motivation for student support officers

As far as staying motivated is concerned, student support officers mentioned that they are self-motivated. The role they play in supporting the students made them to spend more time with the students and have learned to accept them. Student Support officer 1 stated that:

As a person I feel that I'm not perfect and I might be disabled in other way and me spending time with those students made me realise that there might be things that they can do better than me. And that makes me accept them and feel that these people they are just like us. I used to see them when they play sport, I can see that they are very good.

Student support officer 2 said:

Personally, I'm motivated. I have a disabled child, because I worked very close with them at a special school. The university also motivate us. Blind SA, Deaf SA awareness meetings. A day like casual day is a special day for us.

5.5.2 Challenges related to motivation

It is important that everyone working in a TVET centre - from managers to administrators, trainers and other staff – understand what is required for disability inclusion to work in practice for people with different types of disability and educational background (ILO, 2017). It is often difficult for college managers to motivate staff to carry out inclusive practices. Campus managers pointed out that most lecturers display resistance due to lack of

knowledge regarding students with disabilities. Lecturers indicated that they are not comfortable to teach students that they (lecturers) are not be able to support and assist. They also feel that in their lecture rooms, students with disabilities impede their progress in so far as teaching and learning are concerned. Campus manager 1 asserted:

> *It is very difficult. With the physical disabilities we don't have much of a problem but with the blind ones the teaching methodologies. It's difficult. As the college we were not prepared, we were pushed by the premier's office that we must take them. We tried to defend ourselves that we were not trained but they said you were given the opportunity to train the lecturers. To motivate the lecturer, you just have to tell them that there is no way we can get out of this, you just have to teach them. The lecturers constantly come to my office to complain, complaining that the blind students are slow in learning and they retard our pace of teaching. You also get complains from the students as well that other students are teasing us in class and the lecturers, they don't want to listen to us, they become very much unsettled in the classroom,*

Lecturer 2, College B recalled:

> *…I remember when we had our first blind student, you could see that amongst us as lecturers there is fear. Asking ourselves how are we going to lecture these people? They do not see. Are they not going to perform pathetically in my subject and affect my pass rate?*

It is this anxiety of failure that seemed to be one of the sources of discouragement amongst lecturers. Consequently, motivating staff members appeared to be a mammoth task for campus managers to perform. Campus manager 1 stated that:

> *You just have to tell them that there is no way we can get out of this; you just have to teach them. The lecturers constantly come to my office to complain, complaining that the blind students are slow in learning and they retard our pace of teaching.*

Even lecturers themselves indicated their lack of motivation. However, they have displayed mixed feelings about their source of motivation to carry out this daunting task of supporting students with disabilities. Lecturers tend to compare their respective situations with other advanced colleges. This comparison erodes their confidence, thereby demoralising them. In addition, lecturers ascribe their low morale to inadequate assistive material and their lack of training in inclusive education. Lecturer 2, college C revealed:

> *I am not motivated at all since I don't have resources because I've never been trained for that. Because for us to teach it we have to be trained. Last year I went to another college in another province, they've got resources. A lot of them for students with disabilities. They even have interpreters in the classrooms for deaf students. For us it's not going to work out. It's demotivating.*

On the contrary, at college B, the campus manager had a different view. Campus manger 2 asserted:

> *We had a meeting that was called an awareness meeting where we called everyone for they kind of understand that doing an inclusive education, to try and motivate them to teach this students, what we did was to have programmes., There's a programme now that were running for 30 minutes we teach them how to interpret like how to use sign language, we also have a workshop that is coming around May were they are supposed to be trained in to how to teach and how to handle the disabled students. Mind you we just started this year with blind students. An external person will be conducting the workshop, it will be in Pretoria.*

5.6   MATTERS RELATED TO STUDENTS' SPECIAL NEEDS

5.6.1   Non-disclosure of disability

It is a requirement in the registration form that students must disclose their disability, if any. However, most students ignore this portion during registration. It was also established during the investigation that some students do not disclose their disability status during registration. As a result, such students risk being deprived of certain benefits that

they are entitled to, such as bursaries. Staff members reported that another unsettling factor is that some students, depending on the type of disability, are not always honest about their disability when they fill admission forms. Most of the time, students leave the part unfilled. Staff members assume that some students may be ashamed of their disability. Some presuppose that students are unaware that their status is classified as disability. Another concern by staff members is that when they are not informed about students' disability status, it affects their planning. Students with disabilities that are not obviously visible such as epilepsy and albinism tend not to disclose their condition. Student support officers reported that most of the time, staff discover that a student suffers from epilepsy when he or she gets epileptic seizures in their presence. Campus manager 3 explained:

> When students complete their registration forms there's a portion that they need to fill to disclose their disability that is our first point of departure. Depending on the type of disability students may not be frank about their disability because some are really ashamed of their disability. Sometimes it may happen that they don't fill in that portion. Sometimes they just don't know that their status is classified as disability. The student support officer will pick it up if the student did not disclose because she is in constant relationship with students.

HoD 1 explained:

> …Students with disability do not pitch on the special days that are dedicated for their registration. They only come with all other normal students in January and most of them do not disclose that they hey have a disability and this affect the process of purchasing special equipment for them because we never have the statistics. So, we place orders late.

HoD 2 said:

> The challenge is that they don't want to disclose that they have challenges. This is a general challenge. We only find out during assessment.

The non-disclosure is a common practice in all colleges that were investigated. At college B, a student support officer 2 indicated that:

> *One of the students with albinism said I'm not disabled. The other thing is that some don't know that they must disclose, some, especially with epilepsy don't disclose because they don't have visible physical impairments and we can only discover when they get an attack...*

Students with albinism present with visual challenges, which some staff members might not be aware of. As a consequent of non-disclosure, the college staff will not be in a state of preparedness to assist the students. Such an undesirable state of affairs leaves the colleges in logistical disarray, for at another point in time, arrangements will have to be made to meet the needs of the students, often times on an urgent basis. Unbeknown to the students, the non-disclosure is disadvantageous and prejudicial to themselves. In the final analysis, it is always prudent for the college to be in the know of a student's disability even though they (the colleges) have meagre and limited resources, asserted participants. Lecturer 2, college B confirmed:

> *…There is a form were students must indicate any form of disability that they might be having. The greatest problem that we have is that other students are not honest when filing up the form. There is a smaller degree of students who disclose that they are disabled. We only discover them in the class.*

HoD 2 said:

> *The challenge is that they don't want to disclose that they have challenges. This is a general challenge. We only find out during assessment.*

Lecturer 2, college B expressed it in the following words:

> *Through observations, there is a form where students must indicate any form of disability that they might be having. The greatest problem that we have is that other*

students are not honest when filing up the form. There is a smaller degree of students who disclose that they are disabled. We only discover them in the class.

Student support officer 2 explained:

Students don't disclose that they are disabled. They don't indicate in the form. Some don't know they must disclose. Especially those with epilepsy. We come across them when you are walking around. One of the students with albinism said I'm not disabled. The other thing is that some don't know that they must disclose, some, especially with epilepsy don't disclose because they don't have visible physical impairments and we can only discover when they get an attack. During registration we let them bring confirmation later from the hospital. They should be assessed so that we can help them. We have to consider the issue of concession.

It is not uncommon that people hide an infirmity or disability under the cloak of 'culture'. One campus manager was quick to confirm that in some communities, a disability is considered a taboo and therefore kept a secret from the general public. Campus manager 2 disclosed:

… Some don't disclose especially those with epilepsy. Culturally you don't tell people that you have a disability.

In another college, a student with a spina bifida condition did not disclose her condition. This failure to disclose later caught up with her. It transpired that the student met with challenges during bath times. At that time, college authorities were in an unenviable position as they did not know what assistance to offer to the student in question. Student support officer 1 expressed her concern as follows:

There's another one with spina bifida who did not disclose, and she is so secretive about it and it also poses problems at the hostels when she has to bath and there's a serious problem because she is using nappies and this has affected her self-esteem as well.

A student with a visible physical impairment and epilepsy confessed to have denied his epileptic condition even when he had experienced seizures during lessons in the presence of others. Student 1, college A explained:

> *I am epileptic and I use medication. I get epileptic attacks during the night. And they took me to hospital. It happened after waking up. It's only the student support officer who knows. They lecturers do not know.*

Not all students fail to disclose, though. Those that are open with their respective conditions tend to be at an advantageous position. There are some bursary schemes which offer preferential treatment to disabled students. This was affirmed by some college authorities. Student support officer 3 disclosed:

> *They come with letters from doctors to confirm their disability. Most students disclose because they should get a bursary.*

At college C, things concerning disclosure are done differently from the other two colleges. Lecturers are responsible for identifying students with disabilities. On campuses, lecturers should report to management about students with disabilities so that proper procedures should be followed in order to assist the students. HoD 3 explained:

> *They (lecturers) are told to ask the students in the beginning of the year if there is anybody who needs some assistance for concessions. The lecturers are the ones that are responsible for identifications of students with disabilities and they should report to the management so that proper procedures could be followed in order to assist the students. Guardian lecturer. Each group has a guardian lecturer.*

5.6.2 Miscommunication

Regardless of those students who disclosed their disabilities timeously, information does not filter down to lecturers, who make their own discoveries in the lecture room about one or the other physically visible disability. Lecturer 2, college C argued:

Sometimes you find that they cannot tell us up there, but when they come, I can
see that this one needs special attention because of the eyesight, others because
the other hand is not working. We can just see them even if they did not tell us
about them.

5.6.3 Enrolment of students with disabilities

The generally prevalent mood in colleges that were investigated was that staff was in-
clined to dissuade students with disabilities from enrolling for programmes that require a
measure of physical strength, or programmes that are considered dangerous or unsafe.
As a result, most students with disabilities at the time of the investigation were enrolled in
the main in Marketing, Office Administration, Business Management and Management
Assistant. According to Malle *et al.* (2015), some administrators believe that students with
disabilities are unsuitable for acceptance in some fields of study such as automotive,
manufacturing, construction and electricity. Participants referred to the office related
courses as 'soft skills'. Campus manager 1 said:

First of all they need to write an assessment test. To determine what courses the
students can enrol. But it is misleading. You cannot allow a student in crutches to
do engineering. Like a student with cp. You cannot take them to hospitality. We
usually direct them to soft skill like human resource marketing, office admini,
transport logistics, business management, etc. It is dealing with computers; they
are not using the dangerous equipment we should also look at their safety. The
courses which will lead you to white collar jobs.

Sometimes college management had no knowledge of where to enrol some of the stu-
dents with disabilities. They worked on trial and error basis. However, more effort was put
into placing other students with disabilities. As a result, the colleges tried to consult other
institutions regarding this matter. Campus manager 2 explained:

Marketing and office administration and management assistant for Blinds, and al-
binism and deaf is management assistant. Those with physically and epilepsy are
all over. We needed assistant in determining where can put them. We spoke to

special schools. When did our research we found out that we can't put blind students in workshops...?

HoD 2 clarified:

Most of them are in office administration. The blinds are in Marketing and the deaf are in Management Assistant. Physical disabilities are in Office Administration. The reason is, these are programmes where they work in offices and they don't require physical strength.

There were students who wanted to choose their own courses, but staff members advised them otherwise. HoD 1 confirmed:

Some when they come they want to do hospitality and we know hospitality works with fires so we cannot expose them to that because they will get burned, some want ITC, they won't cope even in courses were they use sharp tools, they come with the interest of doing this courses, we advise them to do office based jobs.

Lecturer 2, college B answered:

Mainly registered in marketing and office administration. Resources are the reason, like the deaf students in management assistant.

Student support officer 2 said:

The blind students are in marketing, the deaf students are in office administration and management assistant. Physically disabled are distributed across the programmes. The deaf and the blinds are in this programme because we requested to put them in the same programme so that we can manage them. Some are instructed by their parents to choose certain courses. Sometimes it is difficult for them to do engineering because they are a lot of practical work, but we leave them to register but when they ate failing there they come back to the relevant programmes. (Office admin). They got the right to choose but we have to advice.

One of the colleges enrolled a group of deaf learners for the first time in the year of in-vestigation for pilot purpose. The college decided that in order to manage deaf and blind students, they enrolled them in the same programme. The choice of this pilot project was motivated by the immediate availability of resources and the relative ease with which the subjects may be kick-started. Campus manager 2 explained:

> …*But for deaf we thought because we're are just starting, we looked for pro-grammes that could have resources quickly. So, we looked at Office Administration and find that the one subject which need to be taught is Computers. But that is our starting point for us to be comfortable first, that is piloting.*

At times, parents also played a role in influencing the choice of courses for their disabled children. According to campus mangers, courses such as engineering are not preferred for students with disabilities as they require more physical energy. It is reported that stu-dents with disabilities who register for engineering sometimes struggle and return to courses such as Office Administration, which are referred to as relevant courses for the disabled by participants.

> …*Some are instructed by their parents to choose certain courses. Sometimes it is difficult for them to do Engineering because they are a lot of practical work, but we leave them to register but when they are failing there, they come back to the rele-vant programmes like Office Administration. They got the right to choose but we have to advice.*

5.6.4   Assessment strategies

Given the assortment of disabilities obtaining amongst students at TVET colleges, it is imperative that colleges cater for a range of diverse learning needs. According to college managers, colleges should apply for concessions from the DHET for students with barri-ers to learning. Students are given extra time during examinations and are allocated 15 minutes for every hour. This applies to all students with disabilities at the colleges for as long as they have disclosed their conditions and authorities are aware of their disabilities.

Students need to produce a letter from the doctor certifying that he or she has one or other impairment. Campus manger 1 highlighted:

...Other disabilities we apply for concession from DHET. Instead of writing for three hours, this one writes for four hours.

HoD 3 added:

We identify the student and then we apply for a concession through the department where we get permission to enlarge the scripts. They give us a medical letter to confirm their challenge. They are given extra time.

For each type of disability, there are different kinds of needs. It is noteworthy that all identified students with disabilities are allocated a separate venue during examination where their respective peculiar needs are catered for.

5.6.5 Concessions

According to one of the document that was analysed, the *National Policy on the Conduct, Administration and Management of the Assessment of the National Certificate (Vocational),* students who experience aural impairments; mathematical disorders such as dyscalculia; visual impairments; deafness; cerebral palsy; epilepsy; or other disability may be granted additional time during examinations. However, the additional time may not exceed 15 minutes per hour per question paper. In line with the above policy, the colleges applied for concessions on behalf of students based on evidence that the students provide from hospital or doctor.

5.6.6 Examination procedure for students with visual impairments

For the purpose of catering for students with visual impairments during examinations, question papers for students who are partially sighted, including those with albinism are printed in large font. For students who are totally blind, the question papers are brailed. However, in other instances, students make use of a scriber in their examination.

5.6.7 Examination procedure for students with hearing impairments

Unlike blind students, deaf students are given standard question papers as it is believed that these types of students are ordinarily able to interpret questions. HoD 2 explained:

> *For the blinds we have audio visual machine that we use when we asses them, for the deaf we use ordinary question papers. We prepare them their own venue. All the disabilities in one place. They are given extra time. The blinds use their own devices, the braille, there is also a machine I don't know its name.*

HoD 1 clarified:

> *Our lecturers currently are not trained for these kinds of students. we are struggling and the software that we are using JAWS does not interpret the graphics so you find that our students have registered for marketing and marketing has a lot of graphics the very same JAWS is not able to read the popup menus.*

5.7 TVET COLLEGES' STATE OF READINESS

5.7.1 Policies

The Department of Higher Education and Training has developed policies on inclusive education. The said policies outline how students with disability should be catered for at institutions of higher learning. TVET colleges are also expected to have inclusive education policies that guide their institutions on diverse learning needs, including disability matters. Participants were asked about polices that deal with matters relating to inclusive education in their institutions. Participants from the management side indicated that they were still busy drafting their policies, and at the time of the investigation, these policies were reported to be incomplete. The reason proffered was that the inclusive education programme was still new at TVET colleges. It appeared that only management participated in the drafting of the policy documents as lecturers were unaware of and unfamiliar with any policy draft. Campus manger 1 indicated that:

We don't have a policy. We are still new in this programme.

Campus manager 2 explained:

We have adapted from DHET because wave just started. The policies that were having are from DHET.

HoD 1 argued:

Draft student disability policy is there.

On the side of lecturers, the programme was operating without references to policies. They relied on common sense. Some of them did not even know whether the policy existed or not. Lecturers made similar comments. Lecturer 2, college C:

I know nothing about that. I don't think we have a disability policy.

Lecturer 3, college A commented:

So far, I don't know of any policy.

Student support officers also expressed their opinions on draft policies. Student support officer 1 commented:

We are still in the process of developing a policy. We only have the draft policy.

Students were afforded opportunity to opine on policy. They responded to questions according to their understanding of policy. Student 2, college B who is blind explained:

Up to so far, the policy of our college is trying to cater for us with our needs that we are requiring. Like when we come to question papers, they do it with braille. It is trying. Like maybe okay, again this policy of our college, whether you are disabled or not, you are allowed in this college. It shows humanity. Inclusivity is provided for.

Student 2, college A said:

> *The college is not well prepared for us, the students with disabilities. Even at the residence we are not well catered for. Since I came here, I have never heard of a policy that accommodates us.*

Contrary to the above contributions, one of the colleges was able to provide me with their disability policy even though they mentioned that it was still a draft. The policy aligned itself with the *United Nations Convention on the Rights of Persons with Disabilities* signed into South African law in June 2007, the *Policy Framework for Disability in the Post-School Education and Training System,* and *White Paper No 6: Special Needs Education: Building An Inclusive Education And Training System.*

In a study conducted by Mugor *et al*. (2014), results also reveal that disabled learners in TVET are not provided with enough time to finish their assignments and practical tests, among other exams. Student 3, college B asserted:

> *They give me more time during exams. During examination they add 45 minutes for a three-hour paper.*

5.7.2 Staff training

No formal training programme for staff was readily available at the time of the investigation. Lecturers visited another college that is comparatively more advanced in inclusive education practices. The purpose of the visit was to piggyback, observe and benchmark on how students with disabilities are supported. Nonetheless, the visit could not equip them with sufficient exposure to inclusive education practices. Lecturer 2, college B:

> *…. We went to another college that is a bit advanced than us. Learning from those who are ahead of us pertaining to issues of inclusive education.*

For some staff members, arrangements were made that they attend a workshop on inclusive education. It appears that a single workshop is inadequate to equip staff with suffi-

cient knowledge. It has been revealed that the workshops that lecturers had an opportunity of attending were not designed to equip them for their new role of supporting students with disabilities in their lecture rooms. Even then, some lecturers never attended workshops, for one or other reason. Others attended a few sessions, but not enough to empower them for the intended purposes. Lecturers are desirous of being trained. Lecturer 2, college 3 said:

> *Only one workshop and the issue were discussed but it was not enough, I need more training.*

At one of the colleges, where students with hearing impairments were enrolled, sessions on sign language training were underway. The college strove to involve people from other institutions who are knowledgeable about different disabilities to assist lecturers on how to provide support to students with diverse learning needs. Student support officer 2 highlighted:

> *There's a programme now that we're running for 30 minutes. We teach them how to interpret… like how to use sign language. We also have a workshop that is coming around May where they are supposed to be trained on how to teach and how to handle the disabled students. We just started this year with blind student; an external person will be conducting the workshop. It will be in Pretoria.*

At college B, the student support officer was noticeably very active and organised outside bodies to assist in the training of staff. She argued:

> *As of now I've arranged training with the blind organisation to train the lecturers and for braille. Time and again, I take the lecturers for conferences. We've got also plans to be trained by the university. I also encourage lecturers to register on their own. We've arranged basic sign language training with the current interpreters.*

5.7.3 Prospects of inclusive education

Students with disabilities require an environment that is suitable for their needs in order for them to be supported appropriately and efficiently. It is important for any institution to

be prepared and ready before they can admit students with disabilities. TVET colleges that were investigated were struggling to make ends meet for students with disabilities. As mentioned earlier, infrastructure at TVET colleges was not adequate to cater for a range of students with disabilities such as the physically disabled and those with visual impairments that were presently enrolled at the colleges. College management indicated their frustration in this regard, though they do hope for the better. Campus manager 3 revealed:

> *It's a variety of factors. Firstly, its infrastructure, accessibility. When you have students on wheelchairs that can't access certain classrooms. We still have to make the ramps to make our classrooms more accessible.*

During investigation, it was discovered that staff members inclusive of campus managers, HoDs, student support officers and lecturers had not undergone any form of training. This is indicative of colleges' state of lack of readiness for their new role of accommodating students with disabilities. One campus manager 3 explained further:

> *We are in the process of addressing that through the grants that we get from the department. The second one is capacity in terms of human resource. The lecturers do not have the capacity, to teach and to deal with this disabled student. Because there is no use taking in a student who is totally deaf while we don't have the lecturer or assistant to support the students. The issue of the instruments that we would need to support and to assist the students with such as braille and other tools that are needed. Those are the three reasons.*

Participants felt that they were forced to admit the students even though they were not ready to do so. Campus manager 1 proclaimed:

> *We haven't done anything to the curriculum. We have a very shallow understanding of inclusive education. They've be forced down our throats.*

5.7.4   Measures to integrate inclusive education into the curriculum

Regardless of challenges encountered by TVET colleges in terms of supporting students with disabilities colleges under investigation have made respective concerted efforts to implement inclusive practice as far as practically possible. Management of the three colleges seemed to have a common understanding that experts from other institutions could provide support for lecturers and educate them on inclusive education. Campus manager 1 said:

> *We are initiating a memorandum of understanding with other organisations for people with disabilities to provide support to our lecturers.*

Campus manager 2 pointed out:

> *We've got partnership with the nearby university to come and assist with those things that our lecturers are unable to do.*

In the same breath, as mentioned earlier, management is making strides to ameliorate conditions of students with disabilities during examinations. They apply for concession on behalf of students with disabilities who experience barriers to learning. The students are then afforded extended time when they write their examinations. Students with disabilities have different needs according to their level and type of disability in general, particularly during examination. Some of the efforts taken by the college staff during examination are mentioned by different stakeholders. HoD 2 articulated:

> *Providing things like brailed question papers for the blind students and there are interpreters for the deaf students.*

Student support officer 2 explained:

> *We ask for concession from the department. We take them to the hospital for confirmation of the disability. If they do not disclose, they get disadvantaged with the bursaries.*

5.7.5 Supportive role of student support officers to students

Generally, the role of student support officers is to give support to students. At times, they end up giving support to staff in order for the latter to provide the relevant support to students with barriers to learning. Student Support office 1 elaborated:

> *My role generally is to give support to students though at times I end up giving support to the staff so that they can deliver services to the students. But my main duty is to give student support being at entry level where we do recruitments for students then on course where I give them academic support, financial support, health and wellness, social support, even when they exit, I still give them an exit point support. Our support starts immediately after the first assessment where we have to progress which is called Plato. So, with plat the programme assist students to learn English and mathematics. The second one is the tutoring programme, where the senior lecturers will have to recruit the tutors. These tutors assist in giving extra class to students who are not coping in class. Academically that what we do. With vocational subjects that's where we get tutors to give them extra classes.*

The role of student support officers is to ascertain that needs of students are maximally met. In order for the officers to effectively execute their task, *inter alia*, of procuring learning material such as books, talking calculators and computer braille machines, they interface with lecturers to better understand what support the latter need to meaningfully assist students. Student support officer 2 explained:

> *I have meetings with the lecturers so that they can just tell us what they want that can assist them. Sometimes I go to workshops with them depending on the invite. I do have departmental meetings with the lecturers. Not all the departments are having students with disabilities. Even with departments that do not have students with disabilities I do presentations.*

Paradoxically, although their task is to offer support to students and lecturers alike, student support officers are themselves not formally trained in matters of inclusive education. There is no uniform criterion of appointing student support officers, but specialisation in

one or other field seemed to have been of added advantage. In one college, the student support officer was a teacher by profession, and qualified in safety management. In another, the support officer was a qualified psychologist, while in the third college, the officer was a former teacher recruited from a local special school.

Inherent in their job, student support officers get emotionally attached to students with disabilities to the extent that they feel disconcerted when other staff members treat them differentially. This differential treatment manifests itself when the students in question request resources such as laptops. Student Support officer 1:

> *My biggest challenge is when the staff does not treat the disabled students like the other normal students for instance if I have to request laptops for the students, they will tell them go to the student support officer.*

5.7.6 Support provided to students regarding their learning needs

A lecture room is the domain of lecturers. It is their strong belief that students should be supported on both social and academic fronts. Evidently, TVET colleges under investigation exerted more effort in supporting students with disabilities in spite of the deficiency of expertise for the task at hand. The partially sighted, blind, deaf and students with physical impairments were given support according to their unique and individual needs during lessons, including examinations. The staff tried to strike a delicate balance by guarding against isolating students with disabilities from their non-disabled counterparts. Student support officer 3 asserted:

> *We increase the font for all their print materials and give them more time during exams. We encourage them to learn together. Students don't come to report any problems. We mix them with other students so that they are not isolated, and they do feel accepted.*

College staff is keen and ready to support students with disabilities wherever they encounter learning. Student support officers are always at the disposal of students whenever the need arises. They always arrange extra classes to assist students who experience learning barriers. Student support officer 2 pointed out that:

When they have challenges, they come and tell me. Like in a meeting, that is where they tell me the challenges. Sometimes I go out and get somebody like the special school staff. They understand IE better. I'm going to write a motivation so that they get extra classes because the time that they have during the week is not that sufficient for them.

Colleges under investigation have made respective concerted efforts to assist students with visual impairments such as the blind, short sighted and inclusive of those with albinism. To this extent, a special software, JAWS, has been installed in computers to assist those who are totally blind. JAWS is a computer screen reader programme that allows blind and visually impaired users to read the screen with either a text-to-speech output or by a refreshable braille display. Student support officer 1 asserted:

…. Presently what we do we ensure that we give them computer that have got JAWS especially the blind ones and again we enlarge the question papers for those who are partially sighted. We also give them extra time when we do assessments…

A similar account was given by student support officer 3:

We increase the font of our materials for students with partially eyesight problems and we request them to sit in front. During examination we do concessions where we request time added for them.

5.7.7   Supportive measures to ensure effective inclusive practices

The management of the colleges stated that there is some form of support given to lectures and HoDs. Campus manager 1 proclaimed:

We take them to colleges where they have running these programmes of disabilities. We supply them with resources.

With regard to preparing brailed materials for students who are blind, there was an indication of support given by the management.

We've got a specialised team that deals with that. They would go to lecturers; lecturers give us notes and the team makes sure that the notes are brailed, when the machine is not working there are people who takes care of that who would know what to do. Print books in braille by another organisation for the blinds.

Some HoDs acknowledged that being allowed to visit other colleges, inviting guest lecturers and the involvement of nearby special schools are alternative ways of showing support by management. HoD 2 explained:

We are supported because we are also sent to other colleges to benchmark how they are handling this issue of disability. Also, a workshop from our local special school that come and workshop us.

On the contrary, other lecturers disputed that no assistance is provided for them as far as supporting students with disabilities is concerned. Lecturer 1, college 2 asserted:

They don't support us. Normally they don't provide for what we request. It's up to the lecturer to see what to do.

Lecturer 2, college 1 added:

We never had support. We are on our own. No one tells us what to do when we are having a problem. Sometimes these students come to class hurt or crying and you don't know what to do.

5.8   CONCLUSION

The study was purposed to establish how the integration of inclusive education at TVET colleges was carried out. The findings detailed in this chapter mirrored the views of participants. The chapter reflects a thorough presentation and analysis of investigation arising from the data collated through classroom observations, semi- structured interviews and document analysis. The revelation of findings is indicative that TVET colleges are not yet ready to cater for the needs of the assortment of students with disabilities. The reason for this unpreparedness is that the colleges in question are generally ill-equipped for their new role of accommodating these students. Insufficient or poverty of knowledge on the part of management and staff is a contributory factor to the colleges' state of un-readiness. Out of the synthesis of the study emerged themes that addressed the research questions which were developed from related literature and which framed the investigation. These themes sought to clarify how management and staff at TVET colleges supported students with disabilities in their lecture rooms. The study revealed that resources available at colleges, albeit at bare minimal, did not address the integration of inclusive education effectively on account of lack of training on the part of staff. Even under these constrained circumstances, some colleges are trying the best they can to support students with disabilities in their lecture rooms through limited resources at their disposal.

CHAPTER SIX

SUMMARY, IMPLICATIONS AND PROPOSED MODEL

6.1   INTRODUCTION

The purpose of this study was to investigate how inclusive practices were integrated at Technical and Vocational Education and Training Colleges with intent to develop an inclusive education model. The study investigated the problem of integration of inclusive practices and was carried out at TVET colleges in Limpopo Province. The study has examined the problem from the perspective of campus managers, HoDs, lecturers, student support officers and students.

This chapter provides the summary of important aspects which the study has addressed, conclusive meanings of what the discovered findings articulate, recommendations on what TVET systems can focus on in its attempt to integrate inclusive practices and what further research on the same phenomenon should be focused on. Thereafter, it provides the summary of key factors that have been discussed in the entire study. This will be followed by conclusions gathered from findings and literature, both upon which recommendations are given. Conclusions and recommendations have been drawn from findings which have been uncovered from this study and discourses inherent in preceding studies.

6.1   SUMMARY OF THE STUDY

The purpose of this study was to establish how inclusive practices were integrated at Technical and Vocational Education and Training (TVET) colleges.

Chapter one dealt with the introduction and background to the study and highlighted the research problem, research questions, research purpose and research methodology. Chapter two provided the literature review on global trends on diverse learning needs as well as disability inclusion in South African TVET systems. The world, albeit a global village, differs in approach to addressing general matters of education, especially issues of inclusive education. Global indicators are that aspects of access, retention, progression

and participation of students with disabilities within higher education institutions have enjoyed minimal attention (Ahmed, 2016). Compounding the situation are reports of key constraints to TVET performance, namely, insufficient and inequitable access, poor quality and low market relevance, weak institutional capacity and disproportional investment gaps (The Asian Development Bank (ADB), 2017).

Chapter three on the other hand provided theoretical frameworks that influence the movement towards an inclusive approach. The social model and Bronfenbrenner's bioecological theory have both served as the theoretical framework in which the study is anchored and the degree to which they are relevant and salient to guide the research process. The social model suggests that most educational institutions are barriers in the first place because they have not been purposely built and designed to accommodate students with disabilities (Tugli *et al.*, 2014). In order to adopt this model, TVET colleges should promote equal educational opportunities for all students by ensuring access for all, including students with disabilities. On the other hand, Bronfenbrenner's bioecological theory emphasised that a person's development is a product of a network of interactions between a person and their social, cultural, economic, political and not merely psychological, context (Landsberg *et al.*, 2019). In the context of this study, this means that by understanding how a person develops within his/her environment system, it becomes possible to determine why certain decisions, behaviours or feelings interfere with future development opportunities. For example, if the government fails to plan properly for the education of the entire population of learners in South Africa, students with disabilities at TVET colleges will be negatively affected. Chapter four dealt with the methodology that was applied in the study. Data were collected from key informants (campus managers, HoDs, lecturers, student support officers and students with disabilities) and the actual lectures were observed at the colleges utilising observation checklists. Using purposive sampling, TVET colleges were chosen on the basis of their involvement in inclusive education.

Throughout the different stages of the research process, the ethical consideration aspect was addressed. I requested permission to conduct research at the three colleges under investigation and it was granted. Issues of confidentiality and anonymity were also addressed during data collection and data analysis. Participants were given pseudonyms

instead of their real identities. Sources that were cited in-text were acknowledged and listed in the references section of the study. During data collection, triangulation was used in order to increase the credibility of the data through interviews, document analysis and observations.

Chapter five presented findings and discussions of the qualitative data on how inclusive practices were integrated at Technical and Vocational Education and Training colleges. Data were generated through document analysis, semi-structured interviews and observations. During the analysis of data, the following five themes of findings on integration of inclusive practices were identified:

- Understanding of inclusive education
- Factors hindering the integration of inclusive education
- Motivation to implement inclusive practices
- Matters related to students' special needs
- Colleges' state of readiness

6.1.1 Understanding of inclusive education

With regard to understanding of inclusive education, campus managers, HoDs, lecturers and student support officers appeared to understand what it entails. However, there was a lot of uncertainty pertaining to how inclusive practices should be carried out. For example, lecturers at the three colleges under investigation indicated that they have little knowledge on how to support students with disabilities in their lecture rooms. For inclusive education to be effective for all children, it is necessary for change to take place in teacher education programmes. All teachers need to develop a common, broad-based understanding of inclusion (UNESCO, 2009). Students understood inclusive education at varying degrees though some of them did not know the concept at all. Some students were able to indicate that inclusive education is about students with disabilities learning together with those that are able bodied.

6.1.2 Factors hindering the integration of inclusive education

Pertaining to factors hindering the integration of inclusive education, it was revealed that factors such as inaccessible environment, insufficient professional development, limited resources and uncertainty about teaching methods created some form of challenges in the integration of inclusive practices. For example, infrastructure at the three colleges did not have enough ramps for wheelchair users and blind students. At college B, student 3 indicated that her wheelchair cannot move everywhere because some places do not have ramps. Blind students complained that there was no signage to help them find their way around the campuses. In Ethiopia Malle and Saloviita (2015), in their investigation of the inclusion of students with disabilities in formal TVET found that the physical environments of TVET colleges, such as buildings, walkways and other essential structures, were not accessible to persons with disabilities, particularly to persons with visual and physical impairments. For example, an inclusive educational system based on a social model of disability implies the need for structural change in the education system, particularly in special education (Dalkilik & Vadeboncoeur, 2016). Furthermore, findings of this study support the theory in that the bioecological model has much relevance in emphasising the interaction between an individual's development and the systems within the social context or environment. This theory suggests that what happens in one system affects and is affected by other systems. For instance, lack of ramps to compliment stairs or unavailability of elevators in multi-levelled building makes accessibility to such buildings more onerous for students with disabilities.

Insufficient professional development, especially on inclusive education matters was found to be another challenge. For example, lecturers mentioned that they have not undergone any training in inclusive education. This finding is consistent with other findings in other countries. In Zimbabwe, Mcintosh and Mupinga (2015) found that teachers working with special needs students lacked professional development opportunities. The research was based on vocational education and training opportunities for students with disabilities in Southern Africa. By reason of the fact that they have not being trained in inclusive education, lecturers could not adapt their teaching methods according to the needs of students with disabilities. For example, when the lecturer instructed students to

click, blind learners could not carry out the instruction because they do not know what is to 'click' or and could not even visualise how to 'click'. This finding is in contrast with the resolution of DHET (2013) that a more integrated approach to adapting teaching and learning methodologies and approaches is necessary. According to UNESCO (2008), in an inclusive education system all teachers need to have positive attitudes towards learner diversity and an understanding of inclusive practices developed through both initial training and on-going processes of professional development.   Bronfenbrenner's bioecological theory mentions the microsystem as the immediate environment where an individual has direct interactions with their surrounding and close interpersonal contacts such as family, school, peer group and neighbourhoods (Guhn & Goelman, 2011). Lecturers are part of students' microsystem and need to be well trained in inclusive education matters in order to understand the needs of students with disabilities and to provide adequate support in their lecture rooms.

6.1.3 Motivation to implement inclusive practices

As indicated before, factors emanating from motivation to implement inclusive practices include motivation to lectures, motivation for student support officers and challenges related to motivation. Lecturers have displayed different reactions towards their level of enthusiasm in this regard.

6.1.4 TVET colleges state of readiness

Factors discovered under TVET colleges' state of readiness were policies, staff training and prospects of inclusive education. Colleges were in the process of drafting policies to cater for students with disabilities. However, at the time of investigation, policy documents were incomplete. Inclusive education policies of investigated colleges were still at draft stages and as such not yet in use or operational. For example, lecturers could not refer to any policies or drafts applicable in the implementation of inclusivity in TVET institutions. An example with regard to prospects of inclusive education is that staff at the three colleges did not receive any formal training at the time of the investigation. In addition lecturers visited another college that was considered advanced in matters of inclusivity to observe how students with disabilities are supported.

6.1.5 Matters related to students' special needs

Matters related to students' special needs emerged from factors such as non-disclosure of disabilities, miscommunication and enrolment of students with disabilities.

It has been discovered in the present study that some of the students do not disclose their disabilities. It is discovered late in the year that they have some form or other of impairment. For example, lecturers and other staff members would only discover the condition during an epileptic seizure that may occur in their presence. This finding is incongruent with the statement made by DHET (2013), that it is recognised that students with disabilities do not always disclose their disabilities, and that this problem needed to be addressed.

Example of miscommunication is evident even for students who disclosed in the form at the time of enrolment. Such disclosure may not reach the knowledge of lecturers timeously or at all. Investigation concluded that the discord is caused by the breakdown in the flow of information between administrative and lecturing staff.

Regarding the enrolment of students with disabilities, it has been established that students are not always at liberty to choose their own programme of study due to the nature of their impairment. For example, the staff at the three colleges consider programmes that require a measure of physical strength such as engineering and hospitality dangerous for students with disabilities. As a result, such students are advised to enrol in courses that are referred to as 'soft skills' such as Marketing, Office Administration, Business Management and Management Assistant. This finding is consistent with other findings in other settings. International Labour Office Gender, Equality and Diversity (GED) (2013) asserted that in some settings, people with disabilities are given certain types of disabilities based on stereotypical thinking on the nature of disability. On the contrary, in Kenya, a study conducted by Mugor *et al.* (2014) on assessing barriers to accessibility of TVET institutions by disabled people suggested that there is improvement in the number of disabled students pursuing engineering. With regard to assessment, it was revealed that students with disabilities are given extra time during examination; this only applies to students who have disclosed their disabilities. An example of this is that college managers

108

apply for concessions to DHET for students who experience barriers to learning and that students bring a letter from a doctor or hospital to prove that they have a disability. During examination, a separate venue is prepared, and all disabilities write in one place. A study conducted by Moisa and Phasha (2017) on access to curriculum for students with disabilities at higher education institutions had slightly different results. The study found that, partially sighted wrote tests and examinations elsewhere and as a result, accommodations of students with disabilities differ. However generally applied accommodation by the institution is time extension during tests and examinations and that their examination takes place in the laboratory.

As mentioned earlier, measures to enhance inclusive education at TVET colleges was another theme that emerged from the analysis of findings. Factors related to this finding included measures to integrate inclusive education into the curriculum, supportive role of student support officers, support provided for students regarding their learning needs and supportive measures to ensure effective inclusive practices. An example of measures to integrate inclusive education into the curriculum is that management is making strides to ameliorate conditions of students with disabilities during examinations. College management applies for concession on behalf of students who experience barriers to learning. Students with disabilities are then afforded extended time when they write their examinations.

Generally, the role of student support officers is to give support to students. At times, they end up giving support to staff in order for the latter to provide the relevant support to students with barriers to learning.

Pertaining support provided for students regarding their learning needs, the staff tried to strike a delicate balance by guarding against isolating students with disabilities from their non-disabled counterparts.

With regard to supportive measures to ensure effective inclusive practices, lecturers disputed that no assistance is provided for them as far as supporting students with disabilities is concerned.

6.3   IMPLICATIONS OF THE STUDY

Based on the findings of the present study, the following recommendations are suggested:

6.3.1   Disability Awareness

Inclusion of students with disabilities in TVET   colleges is still a new phenomenon amongst different stakeholders. As a result, supporting and accommodating students with disabilities at TVET colleges remain a challenge. Disability awareness in a college setup requires students and staff to be knowledgeable of the needs of students with disabilities in order to manage, integrate and support them effectively. It is important for the whole college community to be mindful that students have different needs. For the same reason, the community should acknowledge that students with disabilities have equal rights with their non-disabled counterparts; as such, inclusive practices need to be adapted in order to give effect to that right. Days that are celebrated in the country, such as International Day of Persons with Disabilities should be celebrated in colleges with more vigour in order to instil a culture of acceptance of disability among college students and staff.

6.3.2   Registration process

It has been discovered that most students with disabilities fail to disclose their physical statuses. Registration forms should include the needs of students in terms of assistive devices and mobility needs and the kind of support needed for a particular student. Students with disabilities should state their needs on the onset during registration to enable college authorities to be aware of their needs at the earliest possible moment. It should also be categorically stated that the purpose of disclosing a disability is important for the college in order to provide efficient support for students with disabilities. The knowledge of the reason and purpose of disclosure may reduce anxiety amongst students with disabilities and set them at ease that the disclosure of their disability is for a good cause and is requested with good intentions.

6.3.3 Accessibility

It is a fact that most colleges were constructed without putting people with disabilities in mind. As a result, students with disabilities at TVET colleges are confronted with inaccessible structural environments. It is recommended that colleges should assess their built environment continuously and should address barriers in a strategic and incremental manner that enables students with diverse needs to function optimally within the campus environment. Accessibility is not only limited to the built environment. There should be universal access, and colleges should strive for inclusion of students in the broader learning experience for those with disabilities.

6.3.4 Staff development

Lack of capacity for staff members has been established as one of the hindrances to inclusivity at TVET colleges. Lecturers are expected to support students with disabilities using different assistive equipment while lecturers themselves do not have the expertise to operate such devices. According to Kemvor and Kassah (2015), it is recommended that staff members, lecturers in particular, should be trained in matters of inclusive education, including different assortment of impairments as well how to operate respective assistive devices. It is imperative that lecturers should have a clear understanding of students with disabilities in their lecture room situations. This may include learning about types of impairments and their implications for learning, characteristics, accommodations and classroom adaptions for different impairments and the use of assistive technology. Experts in the field of inclusive education may be invited to colleges in order to impart knowledge about different forms of impairment and suitable strategies to apply in order to provide effective and efficient support.

6.3.5 Access to the curriculum

The findings of the study suggested that students with disability were given a proverbial Hobson's choice with regards to programmes of study. Thus, they had a very narrow choice and were not at liberty to choose their own programmes of study on account of their disabilities. It is important for college management to equip themselves with appropriate knowledge or to consult other experts about the matter before they conclude that

a student is not suitable for a particular course and not the other. Adjustments and adaptations should be made in workshops in order to suit the needs of students with disabilities.

6.3.6 Collaboration

Collaboration with other professionals can be useful at TVET colleges. Other professionals such as speech therapists, physiotherapists and occupational therapists should be included in inclusion programmes in order to assist students with disabilities.

6.4   TOWARDS THE ALL- INCLUSIVE STUDENT ASSISTIVE MODEL OF TVET (AISA)

Teaching - learning barriers

Adapting to suitable teaching methods

Identifying individual student barriers

Student with disabilities

Fully empowered student support officers

Well prepared management team on inclusivity

Support systems

Educational setting
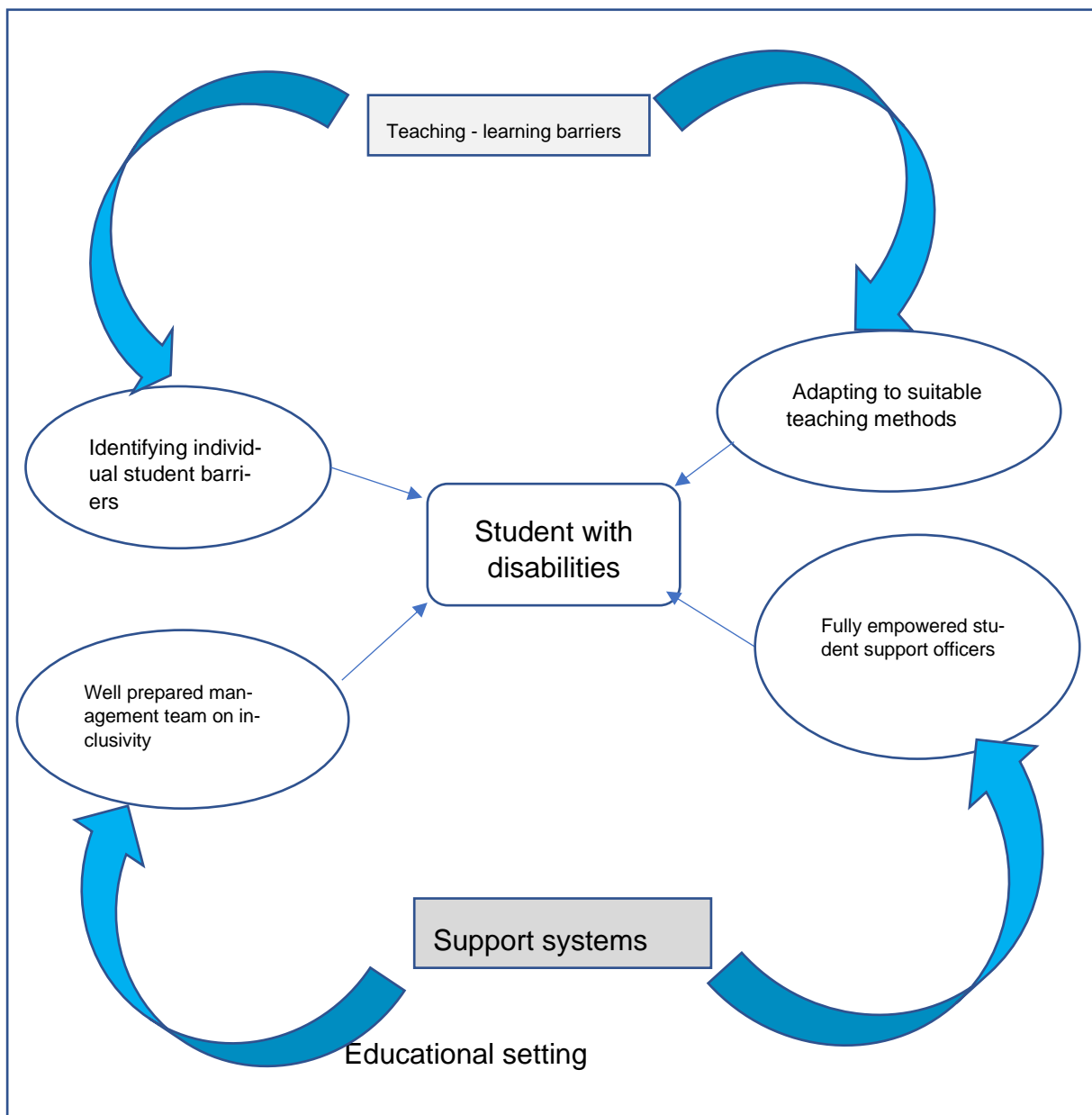
Figure 6.1 The All-inclusive Student Assistive Model

6.4.1 The dimensions of the All-Inclusive Student Assistive Model

This section explains components which constitute the proposed AISA model namely: the student, educational setting, individual student's barriers, individual lecturers' challenges, support system challenges, including management's, and student support officers' circumstances that may affect students' effective support.

6.4.1.1 The student with disabilities

The All-Inclusive Student Assistive Model is a participation-centred technique that focuses on the involvement of all students in TVET instruction and curriculum. The model provides different strategies of supporting the inclusion of students with disabilities by changing the way technical and vocational training curriculum is delivered. The AISA presumes that the student with disability is not fully accommodated in the educational setting and is striving to fit into the environment in order to participate in learning programmes. The student needs to be fully included into the educational setting and needs affective assistance in order to reach his full potential.

6.4.1.2 The student and the educational setting

The AISA model views the educational setting of the student as the most important environment where the student should participate in the educational process. In the case of TVET college settings, the educational setting might be a lecture room, a workshop or computer room. Whereas teaching and learning barriers include individual students' barriers and lecturers' challenges which affect students' effective participation, college support system challenges include challenges from the management side and challenges faced by student support officers. The college support system challenges are those factors emanating from the college where the student is enrolled. In terms of the AISA, the educational setting can be adapted to suit students' participation according to their needs, such as when students are allowed to enrol in courses of their choice alongside their non-disabled counterparts; modifications are made to support inclusive practices in order to allow students with disabilities to participate in programmes that are viewed not to be suitable for their conditions, such as hospitality and engineering. In order to achieve maximum participation of all students in the learning programmes, students, lecturers, the

management and student support officers should work together towards one common goal. Students with disabilities should be instructed by lecturers who have full understanding of the disabilities and common challenges that the students may encounter when engaged in different types of activities in the workshop. Students should not be barred from participation in certain programmes merely on account of a disability.

6.4.1.3   *Identifying individual student barriers*

In the AISA model, circumstances surrounding the individual student may deny him full access to participation which could emanate from the student's individual barriers. Individual student barriers are those challenges that are experienced by the student personally such as an impairment, socio-economic barriers, low self-esteem and stress, amongst others. Identifying individual student barriers may promote awareness and strategies on how to handle students with disabilities may be sought. Such awareness is needed and may lead to solutions such as adapting to suitable teaching methods, acquiring skills in the usage of assistive technology and eliminating negative attitudes towards students with disabilities.

6.4.1.4   *The college support systems*

The model postulates that TVET colleges make up a world of hope that students are looking up to in order to give them relevant skills for their future and to change their livelihoods for the better. The college support system challenges include management unpreparedness to implement inclusive practices, lack of motivation to lecturers, lack of knowledge on the part of the college management team and insufficient knowledge on the part of student support officers. Such challenges have ripple effects to the full inclusion of students with disabilities in the educational setting, thereby hindering successful participation of students in learning programmes. This could include awareness of disability in the college as a whole. It should not be taken for granted that the college population will accept diversity at once, since everyone is from their unique background. There have been a number of awareness campaigns on disability around the globe and in South Africa, but this is not common in TVET settings. Experts from different fields, particularly individuals who are living with some form of disability can be invited on such events to

come and address the college community about their success stories. Students with disabilities may feel accepted due to such events.

6.4.1.6 Theoretical principles

In this model, a student with disability who is susceptible to exclusion and who needs to be supported is in the middle position. Every preventative course of action should be implemented, keeping in mind all the needs of such a student. The model is based on the theory that students abandon the course of education and training due to lack of sufficient support and equal participation in the learning process. Arrows that point to the middle position, which is the student with disability demonstrate aspects solutions that eliminate exclusion . The student with a disability in this regard is connected to all the features that form the whole model. This indicates that there are several barriers surrounding the student with a disability which are caused by teaching- learning barriers and the support system challenges. This can affect the student's effective support.

6.4.1.7   Implications of the model

This model indicated that students with disabilities experience exclusion due to different challenges at TVET colleges. It indicates that disability inclusion can be achieved if proper measures can be put in place. It has been revealed in the study that students with disabilities are afforded access to certain limited types of training based on the nature of their disability due to the belief that people with disabilities need to enrol in courses that do not require physical strength. However, the module is important for TVET institutions, which want to reduce exclusion of students with disabilities by providing intervention strategies of disability inclusion in TVET systems. This requires TVET institutions, students, lecturers, student support officers, management and other professionals to work together and develop an inclusive culture and become conscious to the fact that an interdependent relationship amongst all role players is vital.

6.4.1.8   *Uniqueness of the model*

The AISA model has come up with strategies to combat exclusion through increased participation. Participation can be achieved at a point of registration when students are completing forms. The registration form should categorically specify that disclosure of disability is for the benefit of students themselves. Students' needs such as mobility assistance, assistive devices and learning adaptations should be indicated in the registration forms in order to assist college management to be aware of these needs from the beginning. Further identification of students with disabilities in the college could be done on the first month of attendance through student support officers and lecturers. Finding out the types of disabilities and number of affected students at the beginning of the year will be beneficial to the college in terms of planning for the support of students with disabilities. As a result, adaptations in classrooms and workshops, awarding of bursaries and the necessary funding will be made on time to avoid delays in the support of students with disabilities. This includes providing accessibility to the environment, buildings, information, learning materials and assistive devices.

6.5 LIMITATIONS OF THE STUDY

The study has limitation in scope as it was conducted only in Limpopo Province. Only three TVET colleges were investigated in this regard. The findings may be unique if they were compared to campus managers, heads of departments, lecturers, student support officers and students from different provinces in South Africa. The results of the study may, therefore, not be generalised to a larger, country-based population.

Regardless of the limitations, I am convinced that the research has achieved its goal. The challenges that the study has revealed with regard to the integration of inclusive practices in TVET colleges, appeared to be a general problem in most of the literature. Campus managers, HoDs, lecturers, student support officers and students in this study had experienced such challenges. Most TVET colleges across the continent experienced the same challenges.

6.6 SUGGESTIONS FOR FURTHER RESEARCH

This study found that there is a gap between the integration of inclusive practices and the accommodation of students with disabilities in lecture rooms. The literature in the present study suggests that the integration of inclusive practices at TVET colleges has been researched on a limited scale. This study makes the following suggestions for further research:

- The study focused largely on students with disabilities in TVET settings, therefore additional research is needed to include gender mainstreaming in TVET colleges.
- In-service training for lecturers and the training programmes for the student support officers should be carried out and researched in order to create positive inclusive practices in addressing diverse leaning needs in higher education institutions.

6.7   CONCLUSION

Inclusive education has provided students with impairments an opportunity to study at TVET colleges together with their non-disabled peers. However, there is still more to be done in supporting these students. This study has investigated how inclusive practices were put in place at TVET colleges with regard to supporting students with disabilities. The introduction of inclusive education was received with a lot of misconceptions and uncertainty among college staff. During this process, TVET colleges were expected to cater for students with disabilities alongside their non-disabled counterparts. There are still challenges facing this sector. Lecturers feel the most frustration as they are directly involved with students. Thus, proper training in this regard may contribute to positive results.

This study has provided a model that caters for the inclusion of students with disabilities at TVET colleges.

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126

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APPENDIX A

University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 3935, Fax: (015) 268 2306, Email: anastasia.ngobe@ul.ac.za

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TURFLOOP RESEARCH ETHICS COMMITTEE
ETHICS CLEARANCE CERTIFICATE

MEETING: 06 March 2019

PROJECT NUMBER: TREC/37/2019: PG

PROJECT:

Title: Integrating inclusivity into the curriculum at Technical and Vocational Education and
               Training Colleges in Limpopo Province.

Researcher: LP Sako

Supervisor: Dr JM Mamabolo

Co-supervisor/s: Prof. MJ Themane

School: Education

Degree: PhD in Community and Continuing Education

PROF P MASOKO
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics
Council, Registration Number: REC-0310111-031

Note:

i) This Ethics Clearance Certificate will be valid for one (1) year, as from the abovementioned date. Application for annual renewal (or annual review) need to be received by TREC one month before lapse of this period.

ii) Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee, together with the Application for Amendment form.

iii) PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.

Finding solutions for Africa

APPENDIX B

P.O. BOX 676

POLOKWANE

0700

29 March 2019

The College Principal

Letaba TVET College

1 Claude Wheately St

Abor Park

Tzaneen

0850

Sir/Madam

PERMISSION TO CONDUCT ACADEMIC RESEARCH WITHIN PUBLIC TVET COLLEGES

I hereby seek permission to conduct research within the public TVET colleges in Letaba District, Limpopo Province. I am a registered student at the University of Limpopo, who wishes to conduct academic research towards a PhD degree, under the College Lecturer Education Project (CLEP).

The title of my thesis: Integration of inclusivity into the curriculum at Technical and Vocational Education and Training Colleges in Limpopo Province.

The aims of the study are as follows:

- To find out the diverse learning needs of the students at TVET colleges.
- To determine the barriers that hinder the integration of inclusivity at TVET colleges in Limpopo Province.
- To develop a model to integrate inclusivity into the curriculum at TVET colleges.

A qualitative design will be used to conduct the research. The methods of data collection will be in the form of document analysis, interviews and lecture/classroom observations. Participants in the study will be students with diverse learning needs, female students, lecturers, HoDs and campus managers. Interviews will be audiotaped with the consent of the participants. The principles of confidentiality, anonymity and privacy will be adhered to. Thanking you in advance.

Yours Sincerely,

....

Lorna Sako

APPENDIX C

P.O. BOX 676

POLOKWANE

0700

29 March 2019

The College Principal

Capricorn TVET College

16 Market Street

Polokwane

0699

Sir/Madam

PERMISSION TO CONDUCT ACADEMIC RESEARCH WITHIN PUBLIC TVET COLLEGES

I hereby seek permission to conduct research within the public TVET colleges in Capricorn District, Limpopo Province. I am a registered student at the University of Limpopo, who wishes to conduct academic research towards a PhD degree, under the College Lecturer Education Project (CLEP).

The title of my thesis: Integration of inclusivity into the curriculum at Technical and Vocational Education and Training Colleges in Limpopo Province.

The aims of the study are as follows:

- To find out the diverse learning needs of the students at TVET colleges.
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Yours Sincerely,

……………………….

Lorna Sako

APPENDIX D

P.O. BOX 676

POLOKWANE

0700

29 March 2019

The College Principal

Vhembe TVET College

Stand no 203

Unit A, Sibasa

0970

Sir/Madam

PERMISSION TO CONDUCT ACADEMIC RESEARCH WITHIN PUBLIC TVET COLLEGES

I hereby seek permission to conduct research within the public TVET colleges in Vhembe District, Limpopo Province. I am a registered student at the University of Limpopo, who wishes to conduct academic research towards a PhD degree, under the College Lecturer Education Project (CLEP).

The title of my thesis: Integration of inclusivity into the curriculum at Technical and Vocational Education and Training Colleges in Limpopo Province.

The aims of the study are as follows:

- To find out the diverse learning needs of the students at TVET colleges.
- To determine the barriers that hinder the integration of inclusivity at TVET colleges in Limpopo Province.
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Yours Sincerely,

....

Lorna Sako

APPENDIX E

Letaba Technical and Vocational Education Training College

CENTRAL OFFICE	GIYANI CAMPUS	MAAKE CAMPUS	TZANEEN CAMPUS	MODJADJI CAMPUS
1 Claude Wheatley Streel				
Private Bag X4017	Private Bag X9570	Private Bag X4035	P O Box 192	Privale Bag X4017
		Tzaneen 0850	TUNE-EN 0850	TUNE-EN 0850
TZANEEN 0850	GIYANI 0826			
Tel: (015) 307 5440/3955	Tel: (015) 812 3221/0354	Tel: (015) 355 3429/30	Tel: (015) 307 4438	Tel: (015) 307 5440/3955
Fax: (015)3072204	Fax: (015) 812 1270	Fax: (015) 355 4138	Fax: (015) 3074439	Fax: (015)3072204
E-mail:	E-mail:	E-mail:	E-mail:	E-mail:
centralofice@lelcol.co.za	giyanicampus@letcol.co.za	maakecampus@letcol.co.za	tzaneencampus@letcol.co.za	modjajdicampus@letcol.co.za

Enquiries: MB Mabale

09 May 2019

The Reacher

Lorna Sako

University of Limpopo

SOVENGA

0727

Dear Madam,

PERMISSION TO CONDUCT ACADEMIC   RESEARCH WITHIN PUBLIC TVET COLLEGES

1 . The above matter and you letter dated 29 March 2019 have reference.

2. Kindly be informed that Letaba TVET College has approved your application to conduct research in its campuses.

3. It is compulsory that research ethics, particularly the principle of voluntary participation, must be adhered to at all times.

4. You are advised to make arrangement with the participants in order to discuss the research schedule and to seek their consent to take part in the study. This has to be done through the Campus Manager, Mr Mathevula on 082 735 0936 or mathevulamd@letcol.co.za.

5. You are requested to share the final report with the college after completion of your study. The College wishes you the best in your studies.

Kind regards

P Mashele

COLLEGE PRINCIPAL

Date 09/05/201

APPENDIX F
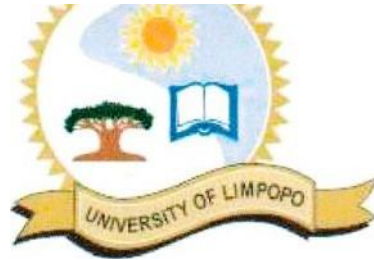
University of Limpopo

Department of Linguistics, Translation and Interpreting

School of Languages and Communication Studies

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Tel: (015) 268 3707, Fax: (015) 268 2868,

16 December 2020

Dear Sir/Madam

SUBJECT: EDITING OF THESIS

This is to certify that the thesis entitled "integrating inclusive practices at Technical and Vocational Education and Training (TVET) colleges in Limpopo Province.' by LP Sako has been copy-edited, and that unless further tampered with, I am content with the quality of the thesis in terms of its adherence to editorial principles of consistency, cohesion, clarity of thought and precision.

Kind regards

Prof. SJ Kubayi (DLitt et Phil - Unisa)

Associate Professor

Finding solutions for Africa

APPENDIX G

CONSENT FORM

CONSENT TO PARTICIPATE IN THE RESEARCH STUDY

I ……………………………………………………….……………. hereby give consent to participate in the research study conducted by Ms. L.P. Sako entitled: Integrating inclusivity into the curriculum at Technical and Vocational Education and Training Colleges in Limpopo Province.

- I agree to participate voluntarily in the study.
- I agree to audio-recording of my information.
- I am free to withdraw from the project at any time

Signature: ……………………………

APPENDIX H

INTERVIEW SCHEDULE FOR CAMPUS MANAGERS

1. What is your understanding of inclusive education?
2. What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?
3. What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
4. How do you motivate HoDs and lecturers to carry out inclusive practices?
5. What resources are available to cater the needs of students with diverse learning needs?
6. What policies are in place to cater for inclusivity into the curriculum in your institution?
7. What type of training have you undergone in order to integrate inclusive education into the curriculum?
8. Which teaching and learning methods are employed to integrate inclusivity into the curriculum?
9. What are the diverse learning needs among students at your college?
10. How are students assessed to determine their special needs?
11. In which programmes are students with diverse learning needs enrolled?
12. What measures are put in place to integrate inclusive education into the curriculum?
13. What type of support are HoDs and lectures provided with to ensure effective inclusive practices?

APPENDIX I

INTERVIEW SCHEDULE FOR HEAD OF DEPARTMENTS (HoDs)

1. What is your understanding of inclusive education?
2. What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?
3. What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
4. How are you motivated to carry out inclusive practices?
5. What resources are available to cater the needs of students with diverse learning needs?
6. What policies are in place to cater for inclusivity into the curriculum in your institution?
7. What type of training have you undergone in order to integrate inclusive education into the curriculum?
8. Which teaching and learning methods are employed to integrate inclusivity into the curriculum?
9. What are the diverse learning needs among students at your college?
10. How are students assessed to determine their special needs?
11. In which programmes are students with diverse learning needs enrolled?
12. What measures are put in place to integrate inclusive education into the curriculum?
13. What type of support are lectures provided with to ensure effective inclusive practices?

APPENDIX J

INTERVIEW SCHEDULE FOR LECTURERS

1. What is your understanding of inclusive education?
2. What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?
3. What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
4. How are you motivated to carry out inclusive practices?
5. What resources are available to cater the needs of students with diverse learning needs?
6. What policies are in place to cater for inclusivity into the curriculum in your institution?
7. What type of training have you undergone in order to integrate inclusive education into the curriculum?
8. Which teaching and learning methods are employed to integrate inclusivity into the curriculum?
9. What are the diverse learning needs among students at your college?
10. How are students assessed to determine their special needs?
11. In which programmes are students with diverse learning needs enrolled?
12. What measures are put in place to integrate inclusive education into the curriculum?
13. What type of support are lectures provided with to ensure effective inclusive practices?

APPENDIX K

INTERVIEW SCHEDULE FOR STUDENTS

1. What is your understanding of inclusive education?
2. How do the available policies cater for your diverse needs as students?
3. How are your curricula needs provided for as students?
4. What barriers do you encounter regarding access and participation?
5. How do you as students overcome barriers that hinder inclusivity?
6. What resources are available to cater for an inclusive curriculum?
7. Are the teaching and learning methods suitable for your learning needs?
8. What type of support are provided to you to ensure sufficient inclusive practices?

APPENDIX L

OBSERVATION CHECKLIST

Observer's Name: ……………………….

 Place ………………………….

 Lecturer's Name: ……………………………

Date …………………….

 Number of students ……………………………….

The built environment	
Walk throughs	
Resources	
Sitting arrangements	
Teaching and learning process	
Assessment	

APPENDIX M

CAMPUS MANAGERS' INTERVIEWS

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Campus manager 1

Interview Setting: The interview was conducted in the office of the campus manager at College A at 10:45 am on Thursday, 02 May 2019.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Inter-viewer	What is your understanding of inclusive education?
Campus manager 1	Inclusive education refers to the system wherein all types of students are catered for. It refers to the system wherein it doesn't look at the physic in terms of intellectual capability, it is the system that does not discrimi-nate.
inter-viewer	What are the barriers that hinder the integration of inclusivity into the cur-riculum in your institution?

Campus manager 2	I think mostly is the learning resources. Learning resources is a broad LTM learning and teaching materials, well trained staff lecturers and also the infrastructure. Human resource even the curriculum itself. Ill pickup one disability being blind, and one programme being Marketing uses a lot of visuals, pictures. These visuals ... when the teacher is teaching in class, he needs to interpret the pictures. And the blind student's ned to imagine the picture, with our normal students, they are able to see and add on the interpretation, but for a visually impaired person it becomes difficult because. Most of them want to do marketing you find that for them to actually it is very difficult; they complain that they tire very easily. They say that instead of one-hour period they can be given 30 minutes,
Inter-viewer	What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
Campus manager 1	Blinds, short sighted, for the blind we have that computer that talks and their keyboards. In terms of the blinds we've got devices for them. We bought them laptops. During assessment period we do have people who read question papers for them. For those who are short sighted have a programme called JAWS. Their screen is expanded. The nearby university assisted us a lot on this matter. We no longer use braille because students think is an outdated thing. We use technology. Their resources

	are very much expensive. We don't just take them as they come, they must qualify to be in the college. Other disabilities we apply for concession from DHET. Instead of writing for three hours this one writes for 4 hours.
Inter-viewer	How do you motivate HoDs and lecturers to carry out inclusive practices?
Campus manager 1	It is very difficult. With the physical disabilities we don't have much of a problem but with the blind ones the teaching methodologies. Its difficult. As the college we were not prepared, we were pushed by the premier's office that we must take them. we tried to defend ourselves that we were not trained but they said you were given the opportunity to train the lecturers. To motivate the lecturer, you just have to tell them that there is no way we can get out of this, you just have to teach them. The lecturers constantly come to my office to complain, complaining that the blind students are slow in learning and they retard our pace of teaching. You also get complains from the students as well that other students are teasing us in class and the lecturers, they don't want to listen to us, they become very much unsettled in the classroom.

Inter-viewer	What resources are available to cater the needs of students with diverse learning needs?
Campus manager	Already answered. We also have cerebral palsy, there is a boy with cerebral palsy; they provide something for him, but I don't know what. I can't remember what support he gets. .
Inter-viewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
Campus manager 1	We don't have a policy. We are still new in this programme.
Inter-viewer	What type of training have you undergone in order to integrate inclusive education into the curriculum?

Campus manager	None. I'm just using my own understanding.
Inter-viewer	Which teaching and learning methods are employed to integrate inclusivity into the curriculum?
Campus manager 1	We haven't done anything to the curriculum. We have a very shallow. Understanding of inclusive education. They've be forced down our throats.
inter-viewer	What are the diverse learning needs among students at your college?
Campus manager 1	A flexible curriculum. Which is ring-fenced. It is a readymade curriculum. The old buildings do not have lifts and ramps. We make it appoint that all this physically challenged students attend their classes at ground floor. Where we have a lift, it becomes a challenge where the lift is not working.

Inter-viewer	How are students assessed to determine their special needs?
Campus manager 1	First of all, they need to write an assessment test. To determine what courses the students can enrol. But it is misleading. You cannot allow a student in crutches to do engineering. Like a student with cp. You cannot take them to hospitality. We usually direct them to soft skill like human resource marketing, Office admini, Transport logistics, Business management, etc. It is dealing with computers; they are not using the dangerous equipment we should also look at their safety. The courses which will lead you to white collar jobs.
Inter-viewer	In which programmes are students with diverse learning needs enrolled?
Campus manager 1	Soft skills: Marketing and Office Administration and Management Assistant for blinds and albinism and deaf is Management Assistant. Those with physically and epilepsy are all over.

	What measures are put in place to integrate inclusive education into the curriculum?
Campus manager 1	We bought laptops for the partially sighted students. During assessment period we do have people who read question papers for them. For those who are short sighted have a programme called JAWS. Their screen is expanded.
Inter-viewer	What type of support are HoDs and lectures provided with to ensure effec-tive inclusive practices?
Campus manager 1	We take them to colleges where they have been running these programmes of disabilities and they are well established. We supply them with re-sources.

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Campus manager 2

Interview Setting: The interview was conducted in the office of the campus manager College B at 11:00 am on Tuesday, 14 May 2019

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Campus manager 2	IE for me, we're e talking everybody being included in teaching and learning gay and lesbians disabled except those with intellectual disability. They should go to people who are experts. It means that everybody should be given an opportunity to learn irrespective of their disability or their culture.
interviewer	What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?

Campus manager 2	The barriers will be resources. Resources are expensive. We ned to buy specialised computers, specialised calculators all those resources. Aces because right now we got deaf students. Can you imagine when a car come, and the deaf person does not hear. We need signage that tells everyone or the one that is deaf that there's a car, aces I mean the ramps because for wheelchair students we need to have ramps. For the double storey classrooms, we still have a building that is still under construction where wheelchairs could move from one storey to another, aces to classrooms irrespective of their disabilities. So, I would say resources. DHET does not give us a brailed question paper, they expect us to braille it. In cases where the braille machine is not working, we then experience difficulties
Interviewer	What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
Campus manager 2	Blind students were unable to use braille, we are also allowed to have a scriber for them. With deaf students we have interpreters. Wave appointed two interprets who are assisting us.

Inter-viewer	How do you motivate HoDs and lecturers to carry out inclusive practices?
Campus manager 2	We had a meeting that was called an awareness meeting where we called everyone for they kind of understand that doing an inclusive education, to try and motivate them to teach this students, what we did was to have pro-grammes., There's a programme now that were running for 30 minutes we teach them how to interpreted like how to use sign language, we also have a workshop that is coming around May were they are supposed to be trained in to how to teach and how to handle the disabled students. Mind you we just started this year with blind students. An external person will be conducting the workshop, it will be in Pretoria.
Inter-viewer	What resources are available to cater the needs of students with diverse learning needs?

Campus manager 2	Braille machines We have computers, talking computers, laptops so that they can be able to use them at home. For the deaf interpreters are there.
Inter-viewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
Campus manager 2	We have adapted from DHET because wave just started. The policies that were having are from DHET.
Inter-viewer	What type of training have you undergone in order to integrate inclusive education into the curriculum?
Campus manager 2	I never went for training. I only attended the one about the deaf not to dis-tract them it was just one day.

Inter-viewer	Which teaching and learning methods are employed to integrate inclusivity into the curriculum?
Campus manager 2	The lecturer will go and teach, and the interpreter will be there. We ned to have more extra classes. Because some disabled students take long to understand. We've got partnership with the nearby university to come and assist with those things that our lecturers are unable to do. For blind students they are taught differently because their computers talk.
Inter-viewer	What are the diverse learning needs among students at your college?
Campus manager 2	Partially sighted, totally blinds, enlarge fonts, concession to be given more time, read during exam read the case study for them, deaf need sign language. Some don't disclose especially those with epilepsy. Culturally in Tshivenda you don't tell people that you have a disability.
	How are students assessed to determine their special needs?

Campus manager 2	We take them to the hospital. Also, when we do the concession, they also ned evidence from the hospital. To give us a report of what special ned they have, those are the ones that assess because we don't have that special expertise.
Inter-viewer	In which programmes are students with diverse learning needs enrolled?
Campus manager 2	Marketing and office administration and management assistant for Blinds, and albinism and deaf is management assistant. Those with physically and epilepsy are all over. We needed assistant in determining where can put them. We spoke to special schools. When did our research we found out that we can't put blind students in workshops? To use a grinder and other tools. But deaf we thought because we're just starting which programmers can have resources quickly. So, we looked at office administration and find that the one subject which need to be taught is computers and interpreters. But that is our starting point for us to be comfortable first, that is piloting

	What measures are put in place to integrate inclusive education into the curriculum?
Campus manager 2	It has been answered as the interview went along
Inter-viewer	What type of support are HoDs and lectures provided with to ensure effective inclusive practices?
Campus manager 2	We've got a specialised team that deals with that. They would go to lecturers; lecturers give us notes and the team makes sure that the notes are brailed, when the machine is not working there are people who takes care of that who would know what to do. Print books in braille by another organisation

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Campus manager 3

Interview Setting: The interview was conducted in the office of the campus manager at College C at 10:40 am on Monday, 20 May 2019.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Inter-viewer	What is your understanding of inclusive education?
Campus manager 3	IE means including students with disabilities integrating them into the mainstream so that they do not feel excluded in teaching and learning taking into consideration their disability and giving them an opportunity to learn
inter-viewer	What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?
Campus manager 3	It's a variety of factors. firstly, its infrastructure, accessibility. When you have students on wheelchairs that can't access certain classrooms. We still have to make the ramps to make our classrooms more accessible.

	We are in the process of addressing that through the grants that we get from the department. the second one is capacity in terms of human resource. The lecturers do not have the capacity, to teach and to deal with this disabled student. Because there is no use taking in a student who is totally deaf while we don't have the lecturer or assistant to support the students. The issue of the instruments that we would ned to support and to assist the students with such as braille and other tools that are needed. Those are the three reasons.
Inter-viewer	What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
Campus manager 3	Partially sighted. We increase their font size
Inter-viewer	How do you motivate HoDs and lecturers to carry out inclusive practices?

Campus manager 3	Luckily, we have an obligation to support and assist students with disabilities. Lecturers understand and they know that they ned to support and to assist the students that why they must sit I n front. There is a little bit of resistance which is caused by lack of capacity because they would not want to be given students whom they'll not be able to support and assist. They want to be capacitated first so that when they receive these kinds of students, they are able to optimally support them. Because at the end of the day they will be accountable for the results of the students.
Inter-viewer	What resources are available to cater the needs of students with diverse learning needs?
Campus manager 3	Currently we do not have resources and this is the reason that we do not take them.

Inter-viewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
Campus manager 3	The student support officer can answer that question.
Inter-viewer	What type of training have you undergone in order to integrate inclusive education into the curriculum?
Campus manager	None. Only one workshop and the issue were discussed but it was not enough, I need more training.
Inter-viewer	Which teaching and learning methods are employed to integrate inclusivity into the curriculum?

Campus manager 3	With the use of ICT, we can bridge that a gap.
	What are the diverse learning needs among students at your college?
Campus manager 3	Partially sighted.
Inter-viewer	How are students assessed to determine their special needs?
Campus manager 3	When students complete their registration forms there's a portion that they need to fil to disclose their disability, that is our first point of depar-ture. Depending on the type of disability students may be frank about their disability because some are really ashamed of their disability. Some-times it may happen that they don't fil in that portion. Sometimes they just don't know that their status is classified as disability. The triples of-ficer will pick it up if the student did not disclose because she is in con-stant relationship with students.

Inter-viewer	In which programmes are students with diverse learning needs enrolled?
Campus manager 3	They are spread across the courses because our courses do not require any physical strength
Inter-viewer	What measures are put in place to integrate inclusive education into the curriculum?
Campus manager 3	We're still to put ramps, we are initiating a memorandum of understanding with other organisations for people with disabilities to provide support to our lecturers. This still has to be done. Presently we don't have.
Inter-viewer	What type of support are HoDs and lectures provided with to ensure effective inclusive practices?

Campus manager 3	So far, the isn't.

APPENDIX N

HEAD OF DEPARTMENTS' (HoDs) INTERVIEWS

Interviewer (Researcher): L.P Sako (Student)

Interviewee: HoD 1

Interview Setting: The interview was conducted in the office of the HoD at College A at 9h00 am on Tuesday, 07 May 2019.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Inter-viewer	What is your understanding of inclusive education?
HoD 1	IE for me, we're e talking everybody being included in teaching and learning gay and lesbians disabled except those with intellectual disability. They should go to people who are experts. It means that everybody should be given an opportunity to learn irrespective of their disability or their culture.
inter-viewer	What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?

HoD 1	In most cases is the process of purchasing for their special resources and another thing is recruitment of these type of students. It's like the message is not reaching them on time. Students with disability do not pitch on the special days that are dedicated for their registration. They only come with all other normal students in January and most of them do not disclose that they hey have a disability and this affect the process of purchasing special equipment for them because we never have the statistics. So, we place orders late. Our lecturers currently are not trained for these kinds of students. we are struggling and the software that we are using JAWS does not interpret the graphics so you find that our students have registered for marketing and marketing has a lot of graphics the very same JAWS is not able to read the popup menus.
Inter-viewer	What are the assessment strategies used to cater for a diverse range of learning needs amongst students?

HoD 1	We apply for concession from the department. We enlarge question papers for students with albinism. We also apply it even during formal assessments.
	How do you motivate lecturers to carry out inclusive practices?
HoD 1	We invite a guest lecturer to teach and the lecturers to observe. We have taken lecturers to another college that is more advanced with inclusive education to go and observe how things are done.
Interviewer	What resources are available to cater the needs of students with diverse learning needs?
HoD 1	Braille machines We have computers, talking computers, laptops so that they can be able to use them at home. For the deaf interpreters are there.

Inter-viewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
HoD 1	Draft student disability policy
Inter-viewer	What type of training have you undergone in order to integrate inclusive education into the curriculum?
HoD 1	Attended workshops
Inter-viewer	Which teaching and learning methods are employed to integrate inclusivity into the curriculum?
HoD 1	Guest lecturers, per tutoring. Experts from SANAP
	What are the diverse learning needs among students at your college?

HoD 1	Blinds, partially blind, scoliosis. Wheelchair users, dwarfism. They are mostly disadvantaged when it comes to resources
	How are students assessed to determine their special needs?
HoD 1	When they fil the form there is a section allocated for them to disclose.
Inter-viewer	In which programmes are students with diverse learning needs enrolled?
HoD 1	Marketing NCV, human resources -nated, public admini. Some when they come they want to do hospitality and we know hospitality works with fires so we cannot expose them to that because they will get burned, some want ITC they won't cope even in courses were they use tools like metaconids, they come with the interest of doing this courses, we advise them to do office based jobs. In terms of gender there are no restrictions.

	What measures are put in place to integrate inclusive education into the curriculum?
HoD 1	A scriber is appointed during examination, concession.
Inter-viewer	What type of support are HoDs and lectures provided with to ensure effective inclusive practices?
HoD 1	Visits to other colleges, inviting guest lecturers.

Interviewer (Researcher): L.P Sako (Student)

Interviewee: HoD 2

Interview Setting: The interview was conducted in the office of the HoD College B at 9h00 am on Monday, 13 May 2019 at 10:20.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Inter-viewer	What is your understanding of inclusive education?
HoD 2	Inclusive education includes all learners even those with disability are taught together with those without disability.
inter-viewer	What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?
HoD 2	We've got a challenge of resources. We don't have resources just because when we enrol these students, they were just enrolled without being prepared.

Inter-viewer	What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
HoD 2	For the blinds we have audio visual machine that we use when we asses them, for the deaf we use ordinary question papers. We prepare them their own venue. All the disabilities in one place. They are given extra time. The blinds use their own devices the braille, there is also a machine I don't know its name.
inter-viewer	How do you motivate lecturers to carry out inclusive practices?
HoD 2	We are motivated because we are also sent to other colleges to bench-mark how they are handling this issue of disability. Also, a workshop from our local special school that come and workshop us. And it is helpful.

Inter-viewer	What resources are available to cater the needs of students with diverse learning needs?
HoD 2	Presently we just have laptops and software that JAWS can read. Soft copies of their textbooks that is installed on their computers. We need braille machines, magnifying glasses for the partially sighted.
Inter-viewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
HoD 2	*Eish"*, for now we don't have them.
Inter-viewer	What type of training have you undergone in order to integrate inclusive education into the curriculum?
HoD 2	We were trained how to communicate with deaf students by teachers from the local special schools. Every Thursday we have lesson and during the weekend. We've just started only last week.

Inter-viewer	Which teaching and learning methods are employed to integrate inclusivity into the curriculum?
HoD 2	I can't answer that one because ai don't give lectures.
Inter-viewer	What are the diverse learning needs among students at your college?
HoD 2	Blinds partially sighted, physical disabilities, crutches and wheelchair us-ers.
Interview	How are students assessed to determine their special needs?
HoD 2	The challenge is that they don't want to disclose that they have chal-lenges. This is a general challenge. We only find out during assessment

Inter-viewer	In which programmes are students with diverse learning needs enrolled?
HoD 2	Most of them are in office administration and marketing is blinds man-agement assistant is the deaf. Physical disabilities are in office admin-istration. The reason is this are programmes where they work in offices and they don't require physical strength. Just one student experienced challenges in Engineering and came back to Office administration and they assume that it will be like that for all of them.
inter-viewer	What measures are put in place to integrate inclusive education into the curriculum?
HoD 2	We want to enrol more students. for some years to come we will be hav-ing more students. we are also trying to get more resources.

Inter- viewer	What type of support are HoDs and lectures provided with to ensure effec- tive inclusive practices?
HoD 2	Attending workshops that deal with inclusive education, trained how to deal with disabled students. There is someone who is dealing with disability is- sues, who is able to organise workshops. I don't know what we call her, this is new to us and she was appointed this year.

Interviewer (Researcher): L.P Sako (Student)

Interviewee: HoD 3

Interview Setting: The interview was conducted in the office of the HoD College C at 11h40 am on Monday, 20 May 2019.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Inter-viewer	What is your understanding of inclusive education?
HoD 3	Is the first time that I heard about the word. But does it mean that it includes students no matter what their learning barriers they have or have to do with applying for concessions for students.
inter-viewer	What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?
HoD 3	Blindness. Hearing, not totally deaf. Just using a hearing aid. Dwarfism. We had them before. There are no ramps. One student left because

	there are no ramps and he used a wheelchair. The college was not conducive for his needs.
Inter-viewer	What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
HoD	We identify the student and then we apply for a concession through the department where we get permission to enlarge the scripts. They give us a medical letter to confirm their challenge. Extra time.
inter-viewer	How do you motivate lecturers to carry out inclusive practices?
HoD	They are told to ask the students in the beginning of the year if there is anybody who needs some assistance for concessions. The lecturers are the ones that are responsible for identifications of students with disabilities and they should report to the management so that proper procedures could be followed in order to assist the students. Guardian lecturer. Each group has a guardian lecturer.

Inter-viewer	What resources are available to cater the needs of students with diverse learning needs?
HoD 3	We are not 100% equipped. There was a software programme for computer which is talking
Inter-viewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
HoD 3	National policies.
Inter-viewer	What type of training have you undergone in order to integrate inclusive education into the curriculum?
HoD 3	Nothing.

Inter-viewer	Which teaching and learning methods are employed to integrate inclusivity into the curriculum?
HoD 3	Individual assistance where necessary.
Inter-viewer	What are the diverse learning needs among students at your college?
HoD 3	Limbs. Eyesight
Interview	How are students assessed to determine their special needs? Filling of forms where're students should indicate whether they have a disability
Inter-viewer	In which programmes are students with diverse learning needs enrolled?
HoD 3	Office administration mostly.

inter-viewer	What measures are put in place to integrate inclusive education into the curriculum?
HoD 3	We received a memo from central office instructing us to look for people with disabilities, but it was two years ago. We do not have lecturers with inclusive education background.
Inter-viewer	What type of support are HoDs and lectures provided with to ensure effective inclusive practices?
HoD 3	We still lack in that department.

APPENDIX O

STUDENT SUPPORT OFFICERS' INTERVIEWS

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Student Support Officer 1

Interview Setting: The interview was conducted in a separate office which was allocated for the interviews at College A at 9h00 am on Monday, 06 May 2019.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Student Support Officer 1	My understanding is that students who are disabled should be allowed to study together with the normal ones. So, they shouldn't be discriminated to sit that they do not qualify to do this or this. Because though you find that they don't have hand to type you may find that they have something to help them do that.
interviewer	What is your role as the students support officer in the institution?

Student Support Officer 1	My role generally is to give support to students though at times I end up giving support to the staff so that they can deliver services to the students. But my main duty is to give student support being at entry level where we do recruitments for students then on course where I give them academic support, financial support, health and wellness, social support, even when they exit, I still give them an exit point support. Our support starts immediately after the first assessment where we have to progress which is called Plato. So, with plat the programme assist students to learn English and mathematics. The second one is the tutoring programme, where the senior lecturers will have to recruit the tutors. These tutors assist in giving extra class to students who are not coping in class. Academically that what we do. With vocational subjects that's where we get tutors to give them extra classes.
Interviewer	What are the strategies used to cater for a diverse range of learning needs amongst students?
Student Support Officer 1	Maybe on a Saturday… (pause)… to have them as a college we still have a challenge with the support of students who are disabled because we just

194

stated last year. Presently what we do we ensure that we give them computer that have JAWS especially the blind ones and again we enlarge the question papers for those who are partially sighted. We also give the extra time when we do assessments. Those are the things that we are already doing but we still feel we ned to do more. In order to having everybody passing their level well because when we check last year most of the didn't perform well. Because we don't have all the necessary resources that they need in order to compete their studies. Blinds, partially blind, wheelchair users, crutches. Hard of hearing, albinos, cerebral palsy.

Those with Epilepsy, but they don't disclose and, in our registration, records we don't have them because they didn't disclose that they are having epilepsy. When we ask the why they did not disclose some will just say that they were not aware that they must disclose some will still deny that they have epilepsy so in our registration records we are unable to identify them. We only discover when they have an epileptic attack. Sometimes they are attended by the friends. Even the ones with physical disabilities there are those who refuse to give the medical certificates. There's another one with spina bifida who did not disclose and she is so secretive about it and it also poses problems at the hostels when she has to bath and there's a serious problem because she is using nappies and this has affected her self-esteem as well.

	What are the challenges that you encounter as a student support officer?
Student Support Officer 1	My biggest challenge is when the staff does not treat the disabled students like the other normal students for instance if I have to request laptops for the students, they wilt el them go to the student support officer. I understand that they were not trained. I was also not trained. I'm the one who is burdened with all the challenges that the lecturers meet.
Interviewer	What resources are available to cater the needs of students with diverse learning needs?
Student Support Officer 1	Presently we just have laptops and software that JAWS can read. Soft copies of their textbooks that is installed on their computers We need braille machines, magnifying glasses for the partially sighted.
Interviewer	What policies are in place to cater for inclusivity into the curriculum in your institution?

Student Support Officer 1	We are still in the process of developing a policy we only have the draft policy.
Interviewer	What type of training have you undergone in order to support students with diverse learning needs?
Student Support Officer 1	None. I'm a teacher and I've also done safety management and on top of that I've done office management. the position of the student support position requires a teacher
Interviewer	How do you support students with regards to their learning needs?
Student Support Officer 1	As I said before, we give them computers that have JAWS especially the blind ones and again we enlarge the question papers for those who are partially sighted. We also give the extra time when we do assessments

	What are the diverse learning needs among students at your college?
Student Support Officer 1	Blinds, partially sighted and physical disabilities.
	How are students assessed to determine their special needs?
Student Support Officer 1	They must fill a form during registration but most of them do not disclose their disabilities.
Interviewer	In which programmes are students with diverse learning needs enrolled?
Student Support Officer 1	Marketing and office admini and the partially sighted, only one is in engi-neering.

	What measures are put in place to integrate inclusive education into the curriculum?
Student Support Officer 1	I'm not involved even though we were just told that we should register these students
Interviewer	What type of support are lectures provided with to ensure effective inclusive practices? How do you support the lecturers?
Student Support Officer 1	Besides ensuring that they have the resources that they ned I sit down with the and talk to them and again organise the extra classes. Challenges that lecturers have with students are referred to me.

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Student Support Officer 2

Interview Setting: The interview was conducted in the HoD's office at College B at 8h20 am on Tuesday, 14 May 2019.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Student Support Officer 2	I take it that its dealing with exclusion in our education system, accommodating the students with disabilities in the mainstream schools. So that we teach them together.
Interviewer	What is your role as the students support officer in the institution?
Student Support Officer 2	I support the students. I try by al means to get the materials for them like books, talking calculators, computers brail machine I make sure that the lecturers are supporting them. I have meetings with them so that they can just tell us what they want that can assist them. We want the challenges that they come across on daily basis so that we can assist them. Students also to tell us their challenge. Sometimes I go to

	workshops with them depending on the invite. I do have departmental meetings with the lecturers. Not all the departments are having students with disabilities. Even with departments that do not have students with disabilities I do presentations.
Interviewer	What are the strategies used to cater for a diverse range of learning needs amongst students?
Student Support Officer 2	We have got partnership with the nearby university, so with the blinds we find someone from the disability unit to come and assist us together with the students when it comes to jaws. We also call people from the nearby special schools to train us with basic sign language. We invite the nearby hospital.
Interviewer	What are the challenges that you encounter as a student support officer?
Student Support Officer 2	Personally, I'm motivated. I have a disabled child because I worked very close with them at a special school. The university also motivate us. A day like casual day is a special day for us.

Interviewer	What resources are available to cater the needs of students with diverse learning needs?
Student Support Officer 2	We have a temporary disability centre for students. where there are brail printers' computers with jaws, bar readers, enlargers, laptops given to blind students. Two interpreters for the deaf students. not enough but we are using what we have. The deaf and blinds are more equipped than other disabilities because they are the majority of the disabled students.
Interviewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
Student Support Officer 2	It's there are but I ned permission from the authorities. It has ben drafted and waiting signatures from the council.

Interviewer	What type of training have you undergone in order to support students with diverse learning needs?
Student Support Officer 2	We attended disability summit conference clip conference, basic sign language training, benchmarking. Busy with honours in inclusive education.
Interviewer	How do you support students with regards to their learning needs?
Student Support Officer 2	When they have challenges, they come and tell me. Like in a meeting that is where they tell me the challenges. Sometimes I go out and get somebody to as it like the special school staff. They understand IE better. I'm going to write a motivation so that they get extra classes because the time that they have during the week is not that sufficient for them.
Interviewer	What are the diverse learning needs among students at your college?

Student Support Officer 2	Mobility, stairs, no ramps. Wheelchair users use ground floor. Negative attitudes and discrimination. Stigma.
Interviewer	How are students assessed to determine their special needs?
Student Support Officer 2	Students don't disclose that they are disabled. They don't indicate in the form. Some don't know they must disclose. Especially those with epilepsy. We come across them when you are walking around. One of the students with albinism said I'm not disabled. The other thing is that some don't know that they must disclose, some, especially with epilepsy don't disclose because they don't have visible physical impairments and we can only discover when they get an attack. During registration we let them bring confirmation later from the hospital. They should be assessed so that we can help them. We have to consider the issue of concession.
Interviewer	In which programmes are students with diverse learning needs enrolled?

Student Support Officer 2	The blind students are in Marketing, the deaf students are in Office administration and Management assistant. Physically disabled are distributed across the programmes. The deaf and the blinds are in this programme because we requested to put them in the same programme so that we can manage them. Some are instructed by their parents to choose certain courses. Sometimes it is difficult for them to do engineering because they is a lot of practical work, but we leave them to register but when they are failing there they come back to the relevant programmes. (Office adman). They got the right to choose but we have to advice.
Interviewer	What measures are put in place to integrate inclusive education into the curriculum?
Student Support Officer 2	We ask for concession from the department. We take them to the hospital for confirmation of the disability. If they do not disclose, they get disadvantaged with the bursaries.

Interviewer	What type of support are lectures provided with to ensure effective inclusive practices? How do you support the lecturers?
Student Support Officer 2	As of now I've arranged training for the lecturers and for sign language training for 21 officials. Time and again I take the lecturers for conferences. We've got also plans to be trained by the university. I also encourage lecturers to register on their own, wave arranged basic sign language training with the current interpreters.

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Student Support Officer 3

Interview Setting: The interview was conducted in Student Support Officer office at College C at 11h10 am on Monday, 20 May 2019

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Student Support Officer 3	Is that you have to accommodate all the students without any discrimination of any kind.
Interviewer	What is your role as the students support officer in the institution?
Student Support Officer 3	Is to ensure that all the neds of the students in terms of their education are met.
Interviewer	What are the strategies used to cater for a diverse range of learning needs amongst students?

Student Support Officer 3	We increase the font of our materials for students with partially eye-sight problems and we request them to sit in front. In term of examination we do concessions where we request time added for them
Interviewer	What resources are available to cater the needs of students with diverse learning needs?
Student Support Officer 3	Our institution was chosen to take students who are not seriously physically challenged because we don't have infrastructure that can accommodate them. So, we only take the partially sighted. The other disabilities we don't have because we don't have resources for them.
Interviewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
Student Support Officer 3	We have a disability policy.

Interviewer	What type of training have you undergone in order to support students with diverse learning needs?
Student Support Officer 3	No, it's just that I did Psychology up to Psychology 3.
Interviewer	How do you support students with regards to their learning needs?
Student Support Officer 3	We increase for all their materials and give them more time during exams. We encourage them to learn together. Students don't come to report any problems. We mix them with other students so that they are not isolated, they do feel accepted.
Interview	How are students assessed to determine their special needs?

Student Support Officer 3	They come with letters from doctors to confirm their disability. Most students disclose because they should get a bursary. With previous student with epilepsy, we only discovered when she got an attack.
Interviewer	In which programmes are students with diverse learning needs enrolled?
Student Support Officer 3	Students choose whatever they want to do
Interviewer	What measures are put in place to integrate inclusive education into the curriculum?
Student Support Officer 3	I'm not sure because we get instruction not to admit other disability because of the infrastructure. It was no designed to accommodate students in wheelchairs. We once had a wheelchair and it was difficult because we don't have ramps. Only the ablution facilities can accommodate disabilities. Some of the classes are not accessible.

Interviewer	What type of support are lectures provided with to ensure effective inclusive practices? How do you support the lecturers?
Student Support Officer 3	Lecturers are not yet trained. That is another reason why we cannot accommodate students with disabilities. The lecturers and students were complaining. Currently the college is nit in a position to accommodate students with disabilities.

APPENDIX P

LECTURERS' INTERVIEWS

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Lecturer 2, College B

Interview Setting: The interview was conducted in the HoD's office at College B at 10:50 am on Monday 13 May 2019.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Lecturer 2 College B	In my view inclusive education is opening up opportunities for teaching and learning to all people irrespective of people's disabilities, being physical or otherwise because people are not disabled physically only. So, such people also need to be catered in whatsoever being them institutions of higher learning even at institutions at lower level
Interviewer	What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?

Lecturer 2 College B	In my view there are and they are plenty, I'll just give you a few that are very critical. First and foremost, lack of resources, learners with disability in my class mostly they are blind. We don't have braille textbooks. And that makes it very difficult. And other materials like. I have a student that is partially sighted thee is this instrument I have seen it that is used by the partially sighted. I don't know what they call what we call that very instrument. But I have seen others as I was going to different places giving it to their students to use. For them to read quite clearly. Another challenge is the way our infrastructure is structured, most of them are not constructed in such a way that they make it easier for people with disabilities to can aces, you'll find that a single storey or a double storey building which is not having ramps. That a person who is using a wheelchair can easily access such kind of a building. The issue of fear amongst we people who are supposed to give lectures to these students who are having disability, that all of us did not receive a formal training on how can we work with people that are having different forms of disabilities. And this fear when I'm observing from a distance, it makes a lot of us, mainly the lecturing staff not to be receptive of these kinds of students. I remember when we had our first blind student, you could see that amongst us as lecturers there is fear. Asking ourselves how are we going to lecture these people? They do not see. Are they not going to perform pathetically in my subject and affect my pass rate? This is my view They are still not accepted the way we accept normal.

214

	Speak focusing on blind students because I've been having them for the past two years.
Interviewer	What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
Lecturer 2

College B | We are now having a bit of materials, like now when I have to give my students that are blind a test. We are able through student support can send student support a soft copy of a student's test or assignment who is blind to be able to write that test at ease. So that they can braille it.

Currently all my students who are blind are having computers that are having jaws, so through that at least it simplifies their life because it is user-friendly to students that are blind. I as the lecturer am not able to use jaws. I'm only helped through student support. I would love to can get training on that and to also get basic training on braille. In my view I think if I can get that it can also increase my knowledge on how to work biter for the success of students that are having this type of a disability. I believe there is a need. |

Interviewer	How are you motivated to carry out inclusive practices?
Lecturer 2 College B	That for me it is personal because I love people and to me people are just people irrespective of the disability that they might be having. A person with a disability to me is a normal person just like any other person. To have a courage to train disabled people to be self-dependent.
Interviewer	What resources are available to cater the needs of students with diverse learning needs?
Lecturer 2 College B	So far, I don't think we have much resources if any. A person who is wheelchair bound. What kind of resources are we having to try and support that very person to see to it that his education is going on smoothly like the education of others? That is the area where in I think as the college, we still ned to work so hard to see to it that such kind of resources are there. If you go to the student resource centre, you'll realise that we have very few resources. We have only fewer resources that can be used by blind students and other instruments are just not there. Were as good as not having nothing in my view.

Interviewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
Lecturer 2 College B	We do have the white paper in inclusive education but from where I'm seated is it being implemented. Yes, to a very minimal scale. This our third year of having this kind of students who are having severe kinds of disabilities. I believe it is going to be better as we move better this year, I have seen the college registering students that are not able to speak, the deaf students. at college level we don't have any. So far, the policy is still a draft.
Interviewer	What type of training have you undergone in order to integrate inclusive education into the curriculum?
Lecturer 2 College B	Personally, I have not undergone any formal training. We visited college Motheo last year in Bloemfontein. They are way ahead of us in as far as inclusive education is concerned. We went there to benchmark and to see how they are dealing with issues relating to IE. I also went to a workshop on inclusive education. We went to

	another college that is a bit advanced than us. Learning from those who are ahead of us pertaining to issues of inclusive education. .
Interviewer	Which teaching and learning methods are employed to integrate inclusivity into the curriculum? .
Lecturer 2 College B	No specific methods.
Interviewer	What are the diverse learning needs among students at your college?
Lecturer 2 College B	I'm in marketing and al marketing students in my view they seriously need to be much advanced with the use of recent technologies because in marketing at some point when we are to sell our product, we have to it through social media platforms. Where are lagging behind as far as technology is concerned.

Interviewer	How are students assessed to determine their special needs?
Lecturer 2 College B	Through observations, there is a form were students must indicate any form of disability that they might be having. The greatest problem that we have is that other students are not honest when filing up the form. There is a smaller degree of students who disclose that they are disabled. We only discover them in the class.
Interviewer	In which programmes are students with diverse learning needs enrolled?
Lecturer 2 College B	Mainly registered in marketing and office administration. Resources are the reason, like the deaf students in management assistant.
Interviewer	What measures are put in place to integrate inclusive education into the curriculum?
Lecturer 2 College B	So far, we work closely in collaboration with the office of the premier, because they have more expertise.as far as disability is concerned. And the nearby university

Interviewer	What type of support are lectures provided with to ensure effective inclusive practices?
Lecturer 2 College B	Being workshopped even though on an advanced level. Sign language for thirty minutes.

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Lecturer 1, College B

Interview Setting: The interview was conducted in the HoD's 11:30 am on Monday, 13 May 2019

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Lecturer 1 College B	IE is when we are having students that are not actually having the able to have the ability as us that's normal and know that what you are teaching them is something that they are able to articulate in a way that you are able to help them.
Interviewer	What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?
Lecturer 1 College B	I cannot say we have because we have textbooks and the minimum resources we have. We have facilities and they are using the curriculum as other students. they ned attention.

Interviewer	What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
Lecturer 1 College B	Giving them assessment to check whether they have understood and whether is their thinking capacity. To check whether they are able to be competitive outside the classroom.
Interviewer	How are you motivated to carry out inclusive practices?
Lecturer 1 College B	The motivation that I have is from within because I love being with them because I've never worked with disabilities students and these ones they are my first and its fun I always tell my other students that they ned to push hard because they are privileged, these got everything they can do everything on their own but those ones are not able to do thin g on their own, that motivates me to work closer to them.

Interviewer	What resources are available to cater the needs of students with diverse learning needs?
Lecturer 1 College B	Textbooks
Interviewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
Lecturer B College B	I don't know about any policies. I think what I know is that they ned to be treated fairly like other students.
Interviewer	What type of training have you undergone in order to integrate inclusive education into the curriculum?
Lecturer 1 College B	The only training, we went was just to familiarise ourselves with these types of students. and how to handle them what is their disability needs for us to be able to cope with them. The person who trained us was from the deaf organisation.

Interviewer	Which teaching and learning methods are employed to integrate inclusivity into the curriculum?
Lecturer 1 College B	The main one is discussion
Interviewer	What are the diverse learning needs among students at your college?
Lecturer 1 College B	Disability
Interviewer	How are students assessed to determine their special needs?
Lecturer 1 College B	They do have tests that are given, and the results determine which programme is going to suit them.
Interviewer	In which programmes are students with diverse learning needs enrolled?

Lecturer 1 College B	Marketing and office administration, because in the engineering sight I'm not sure which section it is.
Interviewer	What type of support are lectures provided with to ensure effective inclusive practices?
Lecturer 1 College B	I would say the small workshops. Weekly workshops that why I say small.
Interviewer	What measures are put in place to integrate inclusive education into the curriculum?
Lecturer 1 College B	The curriculum is flexible (doubtful)
Interviewer	What type of support are lectures provided with to ensure effective inclusive practices?

Lecturer 1 College B	I would say the small workshops. Weekly workshops that why I say small.

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Lecturer 1, College A

Interview Setting: The interview was conducted in computer class at College A at 08h30 am on Friday, 03 May 2019

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Lecturer 1 College A	My understanding with inclusive education is that all students must attend and must be welcomed by their neighbourhood school and also attend regular class and be supported to learn to contribute and to participate in all aspects of life in the school situation.
Interviewer	What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?
Lecturer 1 College A	Lack of resources, lack of knowledge and lack of support, pertaining to training. In most cases we go to our HODs and check who can assist us. unfortunately, with them they are also struggling they are not trained.

Interviewer	What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
Lecturer 1 College A	I have blinds and the physically disabled. The physically disabled one is not much of a problem, but the blinds are given laptops. We scan the question papers and, we have downloaded the programme and when we want to give them assessment, we take them to the IT people and they download for us into the laptops they write then we print. It is an audio programme.
Interviewer	How are you motivated to carry out inclusive practices?
Lecturer 1 College A	It's tough, I'm new and is the first time I met this type of students. I was just given the students that these are your students and when you have a problem you'll go to other lecturers and check if they can assist but they are also struggling. Because they are not trained.

Interviewer	What resources are available to cater the needs of students with diverse learning needs?
Lecturer 1 College A	Laptops with special programmes. Lifts in one of the buildings the ones that I know. Some do not have laptops yet. Some have the laptops that are not programmed. As a lecturer you need to know the programme that the students are using. We need to be trained on those programmes.
Interviewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
Lecturer 1 College A	None
Interviewer	What type of training have you undergone in order to integrate inclusive education into the curriculum?
Lecturer 1 College A	None

Interviewer	Which teaching and learning methods are employed to integrate inclusivity into the curriculum?
Lecturer 1 College A	Group teaching whereby the other learners will be able to help them, discussion peer, they are able to take part the only problem is the writing.
Interviewer	What are the diverse learning needs among students at your college?
Lecturer 1 College A	Sometimes you find that emotionally they are not okay. Even if we try to accommodate them. They become emotionally unstable due to their special neds. Those in wheelchairs use lifts but usually they ned someone to push them around. They are dependent on other students
Interviewer	How are students assessed to determine their special needs?

Lecturer 1 College A	Already answered
Interviewer	In which programmes are students with diverse learning needs enrolled?
Lecturer 3 College C	Marketing is having many students.
Interviewer	What measures are put in place to integrate inclusive education into the curriculum?
Lecturer 1 College A	The curriculum is not flexible for the blind learners. The curriculum is general, and we just adapt
Interviewer	What type of support are lectures provided with to ensure effective inclusive practices?

Lecturer 1 College A	There is lack of support. Sometimes when you want to help the learners who are disabled you must move around searching for people to come and assist you.

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Lecturer 3, College C

Interview Setting: The interview was conducted in the computer class at College C at 10:00 am on Wednesday, 22 May 2019

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Lecturer 3 College C	Inclusive education is when you are busy teaching you have to check the learners; others are disabled others are not. The teaching method cannot be the same because others are special have to attend them seriously, so that they can just understand.
Interviewer	What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?
Lecturer 3 College C	We are always busy. As I'm teaching the fundamentals, fundamentals demand a lot of work. We need to give them tests and we have to mark., we have assignments and the projects. From January I can tell you we had

	four up until now and is lot of marking so meaning we don't have enough time to teach the students, because you may find that others don't understand. You find that they are having their difficulties and they are not the same at all so we have to attend them because they must al pas at the end. We are having lot of work especially fundamentals.
Interviewer	What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
Lecturer 3

College C | As I told you that these learners are not the same, others are disabled others are having hearing problems, others can just hear clearly is fine, but you can see that if learners are looking at you for a long time you can see that they don't understand. I have to go that particular student and ask if maybe he or she understood or not. If that particular student didn't understand, I have to start from the beginning so that that student also deserves to pass at the end. I have to agent to him or her. Because I can just teach them and if there is someone e who does not understand I have to start from the beginning. |

Interviewer	How are you motivated to carry out inclusive practices?
Lecturer 3 College C	I'm not motivated at all since I don't have resources because I've never been trained for that. Because for us to teach it we have to be trained. Last year I went to Motheo college, they've got resources. A lot of them for students with disabilities. They even have interpreters in the class-rooms for deaf students. For us it's not going to work out. It's demotivating.
Interviewer	In terms of the student who is partially sighted how do you deal with her?
Lecturer 3 College C	I can see that they are having the spectacles, I can ask them if maybe they see or what, many of them can tell me that they se, but most of the time you find that you increase the font because everything must be visi-ble, if you are using the font of ten it must be 12, if it's not fine 14 up until that student is satisfied.
Interviewer	Are you not having special keyboards?

Lecturer 3 College C	No. we don't have one that use braille. The student with visual impairment fails because she is slow even if you give her extra time. The other thing is that we are having a problem with learners because if we tell them to come and practice to increase their sped. They don't want to come and there is nothing that we can do because they are adults. But we are trying. Especially after school we tell them to come and practice because we will be with them.
Interviewer	What resources are available to cater the needs of students with diverse learning needs?
Lecturer 3 College C	I can say no we don't have. Because as I told you we didn't see anyone who needs special attention like that. But I'm having everything that I need in my class, that I'm supposed to use. The network is there're if we give students assignment, they can just goggle, using the computers because we're having the network.
Interviewer	What policies are in place to cater for inclusivity into the curriculum in your institution?

Lecturer 3 College C	(She just laughed) … Even if it is there, I didn't see it can be there but I never saw it.
Interviewer	What type of training have you undergone in order to integrate inclusive education into the curriculum?
Lecturer 3 College C	I have ACE in special needs education. Concerning disability, no.
Interviewer	Which teaching and learning methods are employed to integrate inclusivity into the curriculum?
Lecturer 3 College C	Learner centred. I like to involve my learners when I teach especially the theory subjects not the computer, I ask the questions and give the scenario. With computer I open up the projector.

	What are the diverse learning needs among students at your college?
Lecturer 3 College C	Partially Sight, under- developed limbs, dwarfism
Interviewer	How are students assessed to determine their special needs?
Lecturer 3 College C	Sometimes you find that they cannot tell us up there, but when they come, I can see that this one needs special attention because of the eyesight, others because the other hand is not working. We can just see them even if they did not tell us about them. We just met them in the class.
Interviewer	In which programmes are students with diverse learning needs enrolled?
Lecturer 3 College C	Office administration and the fundamentals

Interviewer	What measures are put in place to integrate inclusive education into the curriculum?
Lecturer 3 College C	None
Interviewer	What measures are put in place to integrate inclusive education into the curriculum?
Lecturer 3 College C	I never heard of that. There is nothing in place
Interviewer	What type of support are lectures provided with to ensure effective inclusive practices?
Lecturer 3 College C	The HoD told me to give support to learners because of my training

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Lecturer 1, College C

Interview Setting: The interview was conducted in the computer class at College C at 10:10 am on Wednesday, 20 May 2019

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Lecturer 1 College C	According to me is all about including all the learners that are in the class so that everybody could be covered on what you are giving to them and you don't leave any student out irrespective of their disability and other things.so everybody ned to be included.
Interviewer	What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?
Lecturer 1 College C	They don't give us the correct instruments like the screen protectors, correct chairs for those who need special chairs. They promise that they will provide up until it is the end of the year. Some of them are struggling to sit.

Interviewer	What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
Lecturer 1 College C	It depends on the disability. With the issue of eyesight, we increase the font. With the issue of one hand we increase the time. Every hour is covered by 15 minutes.
Interviewer	How are you motivated to carry out inclusive practices?
Lecturer 1 College C	I've realised that the disabled students are the ones that are doing better than the ones that are not disabled. They perform god than the normal ones. Their passion motivates me.
Interviewer	What resources are available to cater the needs of students with diverse learning needs?
Lecturer 1 College C	We don't have. Not at all.

Interviewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
Lecturer 1 College C	I'm not good with policies. But I know that we apply for extra time for disabled students when they write examinations so that they do not fail. Concessions
Interviewer	What type of training have you undergone in order to integrate inclusive education into the curriculum?
Lecturer 1 College C	Never
Interviewer	Which teaching and learning methods are employed to integrate inclusivity into the curriculum?

Lecturer 1 College C	Since I work with the computer those ones I put them next to me so that I can manage to see their screens time and time again and they can also manage to see my screen when I present a lesson so that they don't struggle to see what is presented to them.
	What are the diverse learning needs among students at your college?
Lecturer 1 College C	Eyesight, dwarfism, deformed limbs
Interviewer	How are students assessed to determine their special needs?
Lecturer 1 College C	It is finalised by the triple s and the management. They don't even tell you about the students. at first it was very scary for me
Interviewer	In which programmes are students with diverse learning needs enrolled?

Lecturer 1 College C	All the courses that we have in our campus.
Interviewer	What measures are put in place to integrate inclusive education into the curriculum?
Lecturer 1 College C	No
Interviewer	What type of support are lectures provided with to ensure effective inclusive practices?
Lecturer 1 College C	They don't support us. Normally they don't provide for what we request it up to the lecturer to see what to do.

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Lecturer 2, College A

Interview Setting: The interview was conducted in a separate office at College A at 11:05 am on Friday, 03 May 2019.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Lecturer 2 College A	Inclusive education is about how we develop our classroom pro-grammes and activities so that the students participate together and Is about ensuring aces to a quality education to all students by effectively meting their diverse neds in in a way that there is responsive, acceptive and respectful and supportiveness.
Interviewer	What are the barriers that hinder the integration of inclusivity into the curriculum in your institution?
Lecturer 2 College A	The current barrier that we have now is that we don't have resources, lack of training. We don't have any knowledge or idea how to teach them or how to handle their situation. Especially the hard one is teaching computer. Some of them are partially sighted. Especially in computer. We don't know how to help them or how to teach them. Challenge of accessing the buildings.

Interviewer	What are the assessment strategies used to cater for a diverse range of learning needs amongst students?
Lecturer A College A	In computer we use individual assessment because in computer you cannot just stand in front of the students and star checking them individually and checking how they perform. I only use individual assessment.
Interviewer	How are you motivated to carry out inclusive practices?
Lecturer 2 College A	Love is what is motivating us. The more you love these students the more you appreciate them.
Lecturer 2 College A	
Interviewer	Are you not having special keyboards?

Interviewer	What resources are available to cater the needs of students with diverse learning needs?
Lecturer 2 College A	Currently we don't have resources, they ned laptops they ned braille. They even have textbooks. We are really in need. teaching without re-sources is a challenge they don't even understand what you are saying
Interviewer	What policies are in place to cater for inclusivity into the curriculum in your institution?
Lecturer 2 College A	I don't know of any policy, this year we started late. We never had a meeting to talk about the needs and the policies.
Interviewer	What type of training have you undergone in order to integrate inclusive education into the curriculum?

Lecturer 2 College A	No training at all.
Interviewer	Which teaching and learning methods are employed to integrate inclusivity into the curriculum?
Lecturer 2 College A	In my class I'm assessing them individually
Interviewer	What are the diverse learning needs among students at your college?
Lecturer 2 College A	They are not respected by other students. they treat them unfairly when they ask for help. We do the large print A3 paper.
Interviewer	How are students assessed to determine their special needs?

Lecturer 2 College A	That one I don't know. You just find them in clas.it was through h efforts of the premier's office that they are enrolled. When we go to class, we find them.
Interviewer	In which programmes are students with diverse learning needs enrolled?
Lecturer 2 College A	Office administration, Management Assistant. I think this programme are suitable for them because they don't ned physical activities and they cannot go to the kitchen and do Hospitality.
Interviewer	What measures are put in place to integrate inclusive education into the curriculum?
Lecturer 2 College A	So far, the college is trying their best to include them. Like buying lap-tops and installing a special programme called JOWS. I think is a talking programme.

Interviewer	What type of support are lectures provided with to ensure effective inclusive practices?
Lecturer 2 College A	We never had support. We are on our own. No one tell us when we are having a problem. Sometimes these students come to class hurt or crying and you don't know what to do.

APPENDIX Q

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Student 2, College B

Interview Setting: The interview was conducted in the office of the HoD at College B at 13:30 am on Monday, 13 May 2019

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Student 2, college B	When we talk about inclusive education is where we combine different students, those who have disabilities like myself with other people who don't have disabilities.
Interviewer	How do the available policies cater for your diverse needs as students?
Student 2, college B	Up to so far, the policy of our college is trying to cater us we our neds that we are requiring. Like when we come to question papers, they do

	it with brails. It is trying. Like maybe okay again this policy of our college, whether you are disabled or not you are allowed in this college it shows humanity. Inclusivity is provided for.
Interviewer	How are your curricula needs provided for as students?
Student 2, college B	I think I will answer this in this way. Lecturers are giving lectures in a good way, but a challenge is when we come to books. We don't have books in this college which is so painful. When I want to read it means that I must go to my phone on the table and start to record a person who is giving a lecturer because there are different physical barriers regarding recordings. Maybe a car entering the college, that sound of a car is giving us a physical barrier. Or maybe if other students are outside because here, we are divided in different causes. You can find that people who agent noted in the afternoon they can come early, and they will be talking, and that noise outside the lecture room. Will be disturbing the recordings. If someone comes late to class and I'm busy recording a lecture, the person who comes late will be disturbing the recording. As I record them, they are aware that we record them, and

	they are force by law to allow us to record them. Is the only way where we can get information. Hose recordings are our books.
Interviewer	What barriers do you encounter regarding access and participation?
Student 2, college B	I will say this now and then. Challenges of books with regard to participation. In advertising and promotions there are lot of drawings. This thing of drawings is difficult to us because we are unable to draw and there is question that say we must draw and even if we are writing a test or examination. Even if we are wringing an examination there are things that are in a cartoon and is difficult to understand a carton.
Interviewer	Any alternatives for drawing questions?
Student 2, college B	If a question comes like that Il be using my own understanding on that question is that "may you feel sympathy because I'm totally blind and I'm not able to draw this". I don't know whether the person who is going to mark this will be able to read this and understand because he will not be seeing any drawing, or they will put zero or what. There's no alternative for marks.
Interviewer	Accessing buildings?

Student 2, college B	Hey, I'm experiencing a barrier I don't know this campus when I'm alone. It means that I must ask someone to help me. You see myself I went to university to do computer but in that place on the doors they have written with braille (braille signage) that this is the office of so and so. And when it comes to mobility, there is no one who trains us here.
Interviewer	How do you as students overcome barriers that hinder inclusivity?
Student 2, college B	To overcome this barrier, you need to tell yourself that you want victory. It doesn't need a person who have a small heart. I persevere.
Interviewer	What resources are available to cater for an inclusive curriculum?
Student 2, college B	There's still shortage. We have "Imboza" which is a machine that brings a question paper to braille. When we come to our computer lab.

Interviewer	Are the teaching and learning methods suitable for your learning needs?
Student 2, college B	A person who is teaching computer she doesn't have a full knowledge of how to teach people like us because she is busy explaining things by clicking and we don't know how to click. If they provide us with books is better
Interviewer	What type of support is provided to you to ensure sufficient inclusive practices?
Student 2, college B	Someone to help me move around. We need a subscriber. If there's a graph in a question paper, we ned someone to helpers to draw. For things like assignments, we have to depend on other students to draw for us

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Student 1, College B

Interview Setting: The interview was conducted in the office of the HoD at College B at 13:30 am on Monday, 13 May 2019

The interview was done through the interpreter

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Student 1, College B	He understands that education is important to everyone, and even deaf learners must also learn so they need to understand that the deaf people also need education and they also have to work after they pass their education.
Interviewer	How are your curricula needs provided for as students?
Student 1, college B	Yes, they said we are using an inclusive education but, were having a problem because when we talk about inclusive education we must be respected as a deaf people and as blind people, so we are having a problem of other people who are not respecting us.

Interviewer	What barriers do you encounter regarding access and participation?
Student 1, college B	We as the deaf are being helped because we have the interpreter in the class. The interpreters are helping us by interpreting what the lecturers are teaching us. The interpreter and the lecturer must work hand in hand because the lecturers do not know how to use sign language. We're encouraging the lecturers also to learn sign language so that we can communicate together without using an interpreter.
Interviewer	How do you as students overcome barriers that hinder inclusivity?
Student 1, college B	If we can respect each other, I think that the problem can be solved, if they can take us as normal people. Then we are not going to have a problem.
Interviewer	What resources are available to cater for an inclusive curriculum?
Student 1, college B	If they can give us the textbook or If the lecturers can give us the notes so that we can learn because most of the time the lecturers read from the text book and it is difficult for us to grasp what they are saying because they are too fast. So, the resources that they are having is only textbook. We use only the text book as the deaf

Interviewer	Are the teaching and learning methods suitable for your learning needs?
Student 1, college B	The thing that is important is that we ned the interpreters because the lecturers don't want to sign. If the lecturers can also try to sign. But for now, we're learning because of the interpreters. The deaf learner specifically requested for his interpreter from the class. When I'm with this interpreter we can communicate well even though the other lady is also an interpreter.
Interviewer	What type of support is provided to you to ensure sufficient inclusive practices?
Student 1, college B	The triple "S" is the one who helps us, when we have a problem, we go to her. They make sure that during the holidays we go and do practical at the government offices. The deaf learner also commented that I just also learn sign language.

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Student 2, College A

Interview Setting: The interview was conducted in a separate office at college A at 11h00 am on Friday, 03 May 2019.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Student 2, college A	I don't know what inclusive education is.
Interviewer	How do the available policies cater for your diverse needs as students?
Student 2, college A	The college is not well prepared for us the students with disabilities. Even at the residence we are not well catered for.

Interviewer	How are your curricula needs provided for as students?
Student 2, college A	They teach us like other students.
Interviewer	What barriers do you encounter regarding access and participation?
Student 2, college A	Inaccessible buildings. toilets and classrooms. There's a lift and it jams while we are inside and it becomes a problem. The lecturers are not trained, the people with visual disabilities are the ones with the most problems.
Interviewer	Any alternatives for drawing questions?
Interviewer	How do you as students overcome barriers that hinder inclusivity?
Student 2, college A	I'm not sure how to overcome them, our needs are not catered for generally especially at the residence because there are things that we cannot do on our own like washing our clothes and cleaning and that is not careered for and as a result we are struggling.

Interviewer	What resources are available to cater for an inclusive curriculum?
Student 2, college A	The blinds have resources, the physical disabilities can write and see.
Interviewer	Are the teaching and learning methods suitable for your learning needs?
Student 2, college A	I'm fine with them.
Interviewer	What type of support is provided to you to ensure sufficient inclusive practices?
Student 2, college A	Other students help us by taking us wherever we want to go and they do the washing for us.

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Student 3, College C

Interview Setting: The interview was conducted in the boardroom at 13:30 am on Monday, 20 May 2019.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Student 3, college C	Students who learn with other students who don't have a disability.
Interviewer	How do the available policies cater for your diverse needs as students?
Student 3, college C	They pay attention, they give me extra time during exam and I can even ask them to zoom. They understand my situation. I attended primary at a mainstream school.

Interviewer	How are your curricula needs provided for as students?
Student 3, college C	They give me individual attention.
Interviewer	What barriers do you encounter regarding access and participation?
Student 3, college C	I'm able to move around. The problem is computer and is part of my course. I don't know what type of computer that I needs. I don't know braille. The light also affects my eyes.
Interviewer	How do you as students overcome barriers that hinder inclusivity?
Student 3, college C	I ask help from other students.
Interviewer	Are the teaching and learning methods suitable for your learning needs?
Student 3, college C	After the lesson I raise up my hands. When they click I cannot see well on the smart board.

Interviewer	What type of support is provided to you to ensure sufficient inclusive practices?
Student 3, college C	They give me extra time for exam.

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Student 1, College C

Interview Setting: The interview was conducted in the boardroom at 12:30 am on Monday, 20 May 2019.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Student 1, college C	I don't know what inclusive education is.
Interviewer	How do the available policies cater for your diverse needs as students?
Student 1, college C	At first, I didn't know what to do. But the HOD advised me to go to the doctor to get a letter so that they can apply for extra time for me because I type with one hand. As for another lecturer treat me well. They accept me.
Interviewer	How are your curricula needs provided for as students?

Student 1, College C	I'm not struggling with other subjects.
Interviewer	What barriers do you encounter regarding access and participation?
Student 1, college C	I suffered stroke. But my foot gives me a bit of a problem. I type with one hand and I'm slow.
Interviewer	How do you as students overcome barriers that hinder inclusivity?
Student 1, college C	None
Interviewer	Are the teaching and learning methods suitable for your learning needs?
Student 1, college C	Sometimes their teaching methods are okay.
Interviewer	What type of support is provided to you to ensure sufficient inclusive practices?

Student 1, college C	Concession during exam. I applied for concession

Interviewer (Researcher): L.P Sako (Student)

Interviewee: Student 3, College A

Interview Setting: The interview was conducted in a separate office at 11:15 am on Tuesday, 07 May 2019.

THE ACTUAL INTERVIEW TRANSCRIBED VEBARTIM

Interviewer	What is your understanding of inclusive education?
Student 3, college A	Is when people with disability learn together with those people who can see.
Interviewer	How do the available policies cater for your diverse needs as students?
Student 3, college A	Since I came here, I have never heard of a policy that accommodate us.
Interviewer	How are your curricula needs provided for as students?

Student 3, college A	So far, we are not well accommodated they need a workshop.
Interviewer	What barriers do you encounter regarding access and participation?
Student 3, college A	
Interviewer	How do you as students overcome barriers that hinder inclusivity?
Student 3, college A	The surrounding is a problem in the surrounding but in classroom it's okay. Marketing is my course. We are unable to interpret cartons and pictures because I cannot see them and as a result, we may lose marks. We are always lagging behind with programmes. We ned braille as a backup for JAWS.
Interviewer	Are the teaching and learning methods suitable for your learning needs?
Student 3, college A	It depends on the barrier.

Interviewer	What type of support is provided to you to ensure sufficient inclusive practices?
Student 3, college A	Laptop with JAWS, we need backup like braille because it tires our mind.