Teaching strategies for students with learning challenges at a TVET college in the Western Cape

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Declaration

I, the undersigned, **Cavin Benedict McPherson**, hereby solemnly declare that the thesis hereby submitted to the **Cape Peninsula University of Technology** for **Masters in Education** has not previously been submitted by me for a degree at this or any other university, that is my own work in design and in execution, and that all materials contained therein has been duly acknowledged.

C. McPherson   28/24/2022

Signature   Date

Dedications

This thesis is dedicated to:

My wife, Abigail McPherson

For her constant love, support and encouragement on this tremendous journey.

Thank you for keeping me focused when days were dark.

Daughter Caitlin

Who supported me by being patient during days that I spent all her time on a Masters process. My hope is that this will inspire you to use your talent or gift that God blessed you with.

My Parents Vincent & Caroline McPherson

Who were the inspiration for my studies and who instilled in me the importance of learning.

Thank you for your continuous prayers and love on this journey.

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Abstract

This study explores both the challenges experienced and the teaching strategies of lecturers in a technical and vocational educational training college (TVET) in the Western Cape. In this regard, the teaching strategies used in teaching at a TVET college is an essential skill to assist students in their learning experience. Evidently, a lecturer who does not have good teaching strategies can lead to student's underperforming in their academic quest. Viewed from this perspective, evidence-based practices are advantageous for teaching these students. However, effective teaching at a TVET College comes with a lot of challenges. Among the challenges identified in the literature review, lecturers' academic qualifications, institutional management, lack of teaching skill are of the major challenges experienced by lecturers in their teachings.

This study is located within the interpretive paradigm which explores the lecturers' academic encounters and their views. The lecturers' experiences and their qualifications were considered in the empirical study when the interviews and observations were performed. The study adopted a qualitative approach as it intended to find as much detail as possible using a case study design. The study is framed theoretically by the Bronfenbrenner's bio ecological theory. The participants in the study were 4 lecturers who were purposively sampled as 2 inexperienced lecturers and 2 experienced senior lecturers at a TVET College in the Western Cape based on the duration of their services. A total of 5 students were also selected to triangulate the other instruments. The data was collected through classrooms observations, semi-structured interviews with lecturers and interviews with students.

This study revealed that lecturers do not have basic teaching skills and expertise to teach TVET college students with learning challenges. In addition, most of the lecturers tend to find themselves in terrible conditions due to lack of support from the college management team and the DHET. There is also justifiable evidence of the lack of resources and facilities which also makes matters worse for the lecturers because they impact on teaching negatively. Part of the lecturers felt that preparation and development in the region of teaching methods so to help students with learning challenges was not received at the college. The study concluded that there is dire

need to overhaul the school system so that students who complete their schooling are mature enough to fit into institutions of higher learning. The study recommends that TVET College lecturers should be trained through workshops on skill development and evidence-based teaching strategies relevant to students learning challenges and in accordance with EWP 6 (PSET). Also, the lecturers should also be trained to identify and support students with learning challenges. Lastly, newly appointed lecturing staff need to be well informed of EWP6 (Department of Education, 2001) and should as well be inducted to know the kind of challenges that exists in TVET colleges.

Table of Content

Chapter 1

Introduction

1.1   Introduction/background

In TVET Colleges, traditional/academic teaching strategies are the practices used by current lecturers in teaching and learning. With the kind of students that we have today, these methods of teaching cannot work because the students registered to study in TVET colleges are deficient given the kind of results that brought them to TVET colleges in the first place. Viewed from this perspective, these cohorts of students have learning challenges that require their lecturers to go beyond the traditional teaching methods to put them up to scratch. This is in line with Heinman and Precel (2003:254) who suggest that students with learning challenges have different ways of learning from the students without learning challenges. Based on this, a reasonable number of factors seem to hinder these students from achieving their academic goal. Papier (2009:29) and Haywood (2014:44) suggest that students who enter TVET colleges come from previously disadvantaged and marginalised backgrounds where basic services such as health and education are lacking. As such, this cohort of students have a host of developmental, health, and social issues that impede their ability to learn. Some of these challenges may be compared to chronic health issues, disabilities, behavioural problems, economic deprivation, abuse, language barriers, and cultural differences. In this study the views of TVET college lecturers on teaching strategies are discussed and analysed to show the challenges that students and lecturers confront.

In line with the introduction above, it is needful to delft into some background information to provide a proper context for this study. In 2001, the Department of Education (South Africa, 2001) promulgated the Education White Paper 6 (EWP6), both at schools and in higher education. Technical Vocational Education and Training (TVET), at the time called Further Education and Training (FET) (South Africa, 1996:29), was not classed as a separate form of education and training, but was classed with higher education in the White Paper 6. EWP6 recommended that "higher education institutions should have a flexible curriculum and assessment policies that

This recommendation became commonly applied to TVET colleges till date.

At this point, it is needful to focus on the type of students that are recruited/admitted into TVET colleges. Out-of-school youth and the unemployed are people who do not meet the entrance requirements to be admitted into universities and those are the students who commonly opt to register at TVET colleges (Van der Bijl & Lawrence 2016:344). In addition, TVET colleges also access students from schools of skills or technical schools. Students from skills schools may either enrolled at TVET college by choice, as the subjects offered at academic/traditional schools are not suited to their vocational choice. Alternatively, these students may be referred to colleges because they might not be able to cope with the academic demands in the school curricula's FET band.

There are several reasons for students not coping with the academic demands. Among these reasons are the learning challenges and disabilities (South Africa, 2014:12). It is needless to stress that some of the students are diagnosed with medical conditions, but others do not possess the necessary skills needed for tertiary education. The current practice, in my experience as a lecturer at a TVET college, is for lecturers to refer students with learning challenges to its Student Support Services Unit for intervention even if this is practically impossible. To this effect, TVET college lecturers continue with their teaching and learning process just to cover the curriculum rather than to achieve the outcomes. Thus, it is demanding to work with students who have learning challenges because a lot still needs to be done to bring these students up to scratch. All the College management talks about is the expectation for lecturers to do a quick fix and to accommodate these cohort of students in their classroom.

1.2   Problem Statement

Van der Bijl and Lawrence (2016) assert that out-of-school youth and the unemployed are people who do not meet the entrance requirements to be admitted into universities and those are the students who commonly opt to register at TVET colleges. These kind of students come to the TVET Colleges with learning challenges because schools did not prepare enough for tertiary education. Based on this, TVET College lecturers are sitting with a situation that they themselves are not trained to handle and tend to

seek help where ever they can find. Hence, the referral of students to Student Support Services and Academic Support Services, affords an opportunity for this researcher to investigate lecturers' views on how they are coping with learning challenges. The challenges experienced by some students are not directly related to a medical diagnosis but are most frustratingly being referred back to the lecturers without assistance nor proper training. Despite the challenges at hand, the students continue attending classes and the lecturers continue with their teaching and learning process, remaining responsible for maintaining acceptable pass rates, a task which requires support from the school management and the department of Higher Education.

1.3   Research Question

Main research question

What are the teaching strategies used by TVET College lecturers for teaching students with learning challenges?

Sub research questions

The sub-questions flowing from the main research question are:

- What is the nature of learning challenges encountered by TVET college students?
- Which are the challenges that lectures face in teaching in TVET colleges?
- What are the strategies used by lecturers in teaching and learning?
- How can TVET College lecturers overcome the challenges in teaching and learning?

1.4 Aim and Objectives

Main aim

The main aim of the study is to investigate the teaching strategies used by TVET College lecturers for teaching students with learning challenges

Objectives

- To find out the nature of teaching and learning challenges experienced by TVET college students with learning challenges
- To investigate the challenges that lecturers face in teaching TVET College students
- To establish the lecturers' views about appropriate teaching strategies for such students
- To investigate appropriate teaching strategies to overcome the challenges in teaching and learning

1.5 Significance of the study

This study might help TVET lecturers to identify learning challenges that may occur during their teaching and learning processes. It is anticipated that the study may enlighten lecturers with teaching and learning strategies that are effective and efficient which may assist them in teaching students with learning challenges. In addition, it may inform lecturers of the use of evidence-based practices that are appropriate for student's effective learning experiences. The findings of this research would also assist the DHET as well as the relevant management teams to consider effective programmes or possible intervention models that may assist lecturers in their development and improvement in teaching strategies. Effective teaching strategies may lead to effective learning experiences for struggling students and consequently to a high throughput.

1.6. Preliminary chapter division

Chapter 1: Background/Introduction.
The background information of this study will recognise and describe the history and nature of lecturer views on teaching strategies appropriate for dealing with students with learning challenges at a TVET college which will be well-defined by relative literature. The background will demonstrate the root of the study, the relevant environment which the study will explore, and the extent to which previous studies

effectively researched the issue, taking note where gaps exist and which of these gaps this study will address.

Chapter 2: Literature review

The literature review in this study will provide the foundation of knowledge on Lecturer views on teaching strategies appropriate for dealing with students with learning challenges at a TVET college in the Western Cape. In addition, this study will identify gaps in research as well as conflicts in prior studies.

Chapter 3: Research Design and Methodology

This study will be utilising a qualitative research approach to understand the problem and research question. In-depth interviews and unstructured observations will be used to collect data. Data received from interviews and observation will be captured for analysis using the thematic analysis process.

Chapter 4: Presentation and Analysis of data

Chapter 5: Discussion

In this section discussions and analysis around the findings of the study will be brought forward.

Chapter 6: Findings, Recommendations, and Conclusion of the study

This section will give the reader a brief synopsis of the findings and conclusion of the study at hand. Thematic analysis will be used to solve for the objective of this study therefore, solutions will be presented from analysing the interview questions and observations. The concluding statements will be built on the questions that were presented in the interview to the lecturers that were done at the TVET institution.

Chapter 2

Literature review

2.1 Introduction

A literature review allows the researcher to reflect and consider the entire research and what theoretical implication it has (Henning, 2004:29). An evaluation of literature permits the researcher to embark on a method of regular mirrored image and attention of the studies holistically. A review of literature allows the researcher to embark on a process of constant reflection and consideration of the research holistically. In addition, a literature review assists with the discovery of information on existing research on what is already known about a question before coming to your understanding (Neuman, 2006). Based on this, relevant literature would be reviewed to gain an objective understanding of the various teaching strategies used by lecturers as well as the challenges lecturers face daily. Factors prompting learning challenges experienced by students differ from one individual to another and are influenced by different circumstances.

Some of the factors related to the management of TVET Colleges that may lead to students experiencing learning challenges are enormous. The challenges identified by the literature include: poor infrastructure, poor institutional management, poor timetable management, irrelevant teaching practices and training of lecturers in inclusive practices. Training of under-qualified lecturers is the responsibility of management at the TVET college that accounts for some of the challenges encountered in TVET Colleges. Effective teaching practices are known to be determined by lecturer's competence and qualifications. In a perfect world, TVET lecturers ought to have teaching, academic and workplace qualifications as these skills and abilities may equip the lecturer with the necessary knowledge and skills to engage students in the teaching and learning processes.

Amongst the many issues discussed, the socio-economic status, background, academic preparedness and students' disabilities of the students registered at TVET Colleges would be addressed in this chapter since these aspects tend to affect students psychologically and may also lead to teaching and learning challenges by both the lecturers and the students alike.

2.2 Theoretical Framework

The theoretical framework of this study is embedded in Bronfenbrenner's bio-ecological systems theory of 1979. The bio-ecological theory focuses on the context of a relationship between a student and the relevant stakeholders such as the institution, lecturer, DHET as well as the community. This is meant to suggest that all parties concerned, need to work together to create a pleasant learning experience for students and to assist these students in achieving their academic goals.

The ecological system theory supports the basis for assisting students who experience learning challenges. Based on this, the biomedical model requires identification, or diagnosis and management (John, 2010) of students with learning challenges to find special educational needs internal to the student, without considering the social and external context (Ebrahim, 2013). Students at TVET colleges who experience learning challenges are categorised biomedically based on their condition or challenge (Haywood, 2014). These students are regarded as students with somatic problems that need assistance. The medical model focuses on diagnosing and treating issues that guarantee individual assistance (Haywood 2014). In the past, a student who experienced learning challenges was classified according to their problem with the students being looked as having a problem. Such a student with learning challenges would then be placed in specialised learning institution. This medical model was valuable in the medical subject area where the attention was on identifying the nature of an issue and guaranteeing that the individual gets appropriate care.

However, in a social context which is the focal point of this study, the medical model is less helpful particularly where learning challenges are not attributed to biologically internal aspects. Applying the bio-medical model to education tends to differentiates students focusing on what is medically wrong with these students and treating it without considering all the extrinsic factors e.g. the students' nutrition, socio-economic status and students with emotional problems that lead to their inability to perform well in the teaching and learning process. Swart and Pettipher (2011) argue that the focal point of applying the biomedical model to assist students with learning challenges in education needs to shift from treating students with barriers as a personal problem to a combined personal and societal approach. This method is central in this study and guides the investigation appropriately. In light of this, the socio-ecological model

appears as a yardstick to deal with the idea that students with learning barriers have a treatable disorder. As such, the socio-ecological model seems to replace diagnoses with the belief that various factors can lead to a student not functioning optimally. The socio-ecological model in this sense is in line with the Salamanca Statement (UNESCO, 1994:11–12). The Salamanca statement states that;

> inclusive education systems should recognise and respond to the diverse needs of students, accommodating different styles and rates of learning and ensuring quality education to all through appropriate curricula, organisational arrangements, teaching strategies, resource use and partnership with their communities.

In light of this quotation, teachers should start recognising all factors and considering different ways and styles of teaching as well as consider that all students have different learning needs to respond to the different kinds of needs of students.

Swart and Pettipher (2011) argue that it is not merely the responsibility of the student to adjust to the education system, but of the education system to accommodate the students. This insinuates that the education department needs to adjust its education system so that the students can experience education that accommodates their diverse needs and thinking abilities. The world is changing and our education system needs to evolve with it. From another perspective, Haywood (2014: 32) argues that lecturers need to change their "assumptions, beliefs, values, norms, behaviours and practices" to accommodate students with diverse learning challenges. Based on this phenomenon of accommodating students with diverse needs and learning challenges, Bronfenbrenner's bio-ecological model appears to be among the most prominent theoretical models that can be used to implement the paradigm shift. It is on this grounds that Hay (2003) argues that the previous focus on an individual's inherent problems has to be replaced by the bio-ecological perspective that focuses on a comprehensive valuation of ecological systems that seem to influence students understanding.

2.2.1 Bio-ecological Systems Theory

Bronfenbrenner (1979) proposes the importance to both contexts of improving and developing any individual. In this regard, he asserts that there is an interaction between the individual and the surrounding environment. To understand the TVET college lecturers experience in dealing with students with learning challenges in the classroom, the bio-ecological systems theory is used. Given this, the study seeks to focus on the inter-connections between the systems such as the college, lecturers, students, parents and the wider community. In line of this, Haywood (2014: 33) agrees that "the socio-ecological model acknowledges that barriers to learning do not exist only in the student, but that there are also barriers in society that prevent the student from reaching his/her potential." Haywood continues to say that aspects within the students' instant surroundings have to be taken into consideration while attempting to aid students who encounter academic challenges. Aspects like students' families, ethnic group, religious beliefs, economic and language communities as well as the neighbourhoods that live in and society. Their lives are affected by what happens in their communities (Woolfolk, 2010). This spills over into the classroom where teaching students with learning challenges can be difficult. Therefore, it is of vital importance that lecturers are knowledgeable about inclusive practices since these inclusive practices are directly involved with learners. The practices include; using a variety of teaching strategies to assist and accommodate all students regardless of differences in ethnic background, culture, language, gender, socio-economic background or possible disabilities.

This bio-ecological systems model says there is social networking where people and their ecosystems which is their immediate environment and wider community don't exist in seclusion. However, they exist through Ubuntu. This insinuates that, human beings need to practice exchanges with others for mutual benefit as well as to find the need to interact, connect and form relationships with one another. The application of the bio-ecological model in this study leads to the idea that all support departments such as student support, student administration, exams, college council, the students themselves, parents and management need to ensure effective collaboration to support each other. This is in line with Donald, Lazarus and Lolwana (2006) who indicate that most important interactions occur between the students and other

important people (face to face interactions) such as parents, lecturers and friends as they play a vital role in shaping the student.

To understand the TVET lecturers' encounter of accomodating students with academic challenges in class, the bio-ecological systems theory is seen as being useful. To this effect, Bronfenbrenner (1979) indicates that the bio-ecological systems theory consists of five parts that are interrelated with one another, specifically the microsystem, mesosystem, exosystem, macrosystem, and chronosystem (Donald et al. 2006:39).

2.2.1.1 The Microsystem

According to Swart and Pettipher, (2011:14) the microsystem comprise an arrangement of actions which portrays what they partake in, involving relations among people and the system in which they are dynamic members. The members include: the family, college, and friends. In addition, the microsystem characterizes the immediate environment that have an effect on the developing any given individual. Thus, Donald et al. (2006: 41) are in agreement that the microsystem is the immediate environment where face to face interaction happens. This has ramification on the individual's social, emotional, spiritual and intellectual growth. This is in line with Watts, Cockcroft and Duncan (2009); Donald et al. (2002: 41); Landsberg, Kruger and Swart (2010) who think that "this is the context where bi-relationships and face-to-face interactions are influencing one another simultaneously".

2.2.1.2. The Mesosystem

Swart and Pettipher, (2011) assert that the mesosystem is made up of different microsystems that continually interact with one another which may in turn interact in the student's family and peer's influences to the student's academic performance in class as well and vice versa. Based on this line of argument, if a parent has issues or conflict at work or at home, such an issue can easily influence the academic performance of a given student. The mesosystem provides the connection between a TVET lecturer and the student as well as the relationship between lecturers and other staff members. This is similar to the way a student with learning challenges interacts

with peers. Haywood (2014: 35) seems to agree that "collaborative relationships between the different microsystems could help to offer better support to students who experience barriers to learning." Similarly, Vygotsky's theory of social constructivism appears to be in line with the mesosystem because the theory postulates that a student's environment can influence his/her learning success or outcome. In this regard, the students seem to benefit from the learner-centred teaching approach rather than traditional methods where lecturers are the epicenter. As such the mesosystem allows a facilitator to either scaffold or model the student to discover knowledge.

2.2.1.3. The Exosystem

Donald et al. (2006) say that the exosystem alludes to at least one condition through which a student maybe indirectly affected. This may have an impact on a student who has a face-to-face interaction with such condition in his/her microsystems. Seen through the same lens, Makanya (2015: 48) agrees that the exosystem is the "social context that is beyond a person's immediate environment, but that may affect him or her in one way or the other". A parent or a guardian's circumstances at work might indirectly have a negative or positive effect on a student over which he/she has no control over the events that may happen in the microsystem. For instance, if a management requests to extend due dates of Integrated Summative Assessment Tasks (ISAT) assignments as a means to assist students academically, lecturers may be reluctant to implement it if only a minority would want to take advantage.

Stated differently, students with learning challenges may be impacted negatively in various areas due to a lecturer's deficit training in the area of a learning challenge, college curriculum, and allocated time for an assignment. This is in the reason that Makanya (2015: 48) opines that a "student with a learning disability may be impacted by the lecturer's lack of training in the area of learning disability". As such, "parents' educational and employment status, college curriculum, college resources, activities, change of lecturers and assessment procedures" may be responsibility for the bad performance of a student.

2.2.1.4. The Macrosystem

Swart and Pettipher (2011) state that the macro system consolidates prevalent social and money related configurations similar to characteristics, values, and beliefs that control other social systems. Furthermore, the Ubuntu spirit that talks to social values can be a good example of values and belief systems that constitute the macrosystem. In other words, Ubuntu is a philosophy that is based on the idea that all humanity is connected and inter-connected. Thus, a connection between an individual and his/her community are mutually dependent and beneficial. The community at large and the community as a whole are two systems that are embraced by the mesosystem. The values and beliefs that our communities have toward learning challenges appear to influence the academic success of students. If managers, lecturers, and decision-makers in the TVET sector do not develop an ideology of accommodating inclusive teaching toward students with "barriers to learning" (the academic development, the student's support, and academic success) may remain restricted. Concerning accommodating students with learning challenges, the policies that govern the TVET college has a deficit of including students with learning challenges. The extrinsic elements that affect the college system form part of the macrosystem. Thus these governing policies also form part of this macrosystem.

2.2.1.5. The Chronosystem

Swart and Pettipher (2011) posit that developmental time spent at the chronosystem level is a significant aspect. Relations with all the ecological systems are impacted by the individual's improvement as well as the developmental time frames. With the developmental aspect in mind, a student's cognitive, emotional, and social development is effected positively because of the constant intervention strategies and developmental changes of all the systems the student is exposed to (Swart & Pettipher, 2011). Based on this, the lecturers and the college management may also be involved in the developmental stage.

It is on these grounds that TVET colleges are being encouraged by DHET to combat the shortage of skilled workers across the country. Since the students have learning challenges, one may question the readiness of TVET college and the lecturer's ability

to accommodate them. Below is a diagram of Bronfenbrenner's eco-systemic model figure 1.
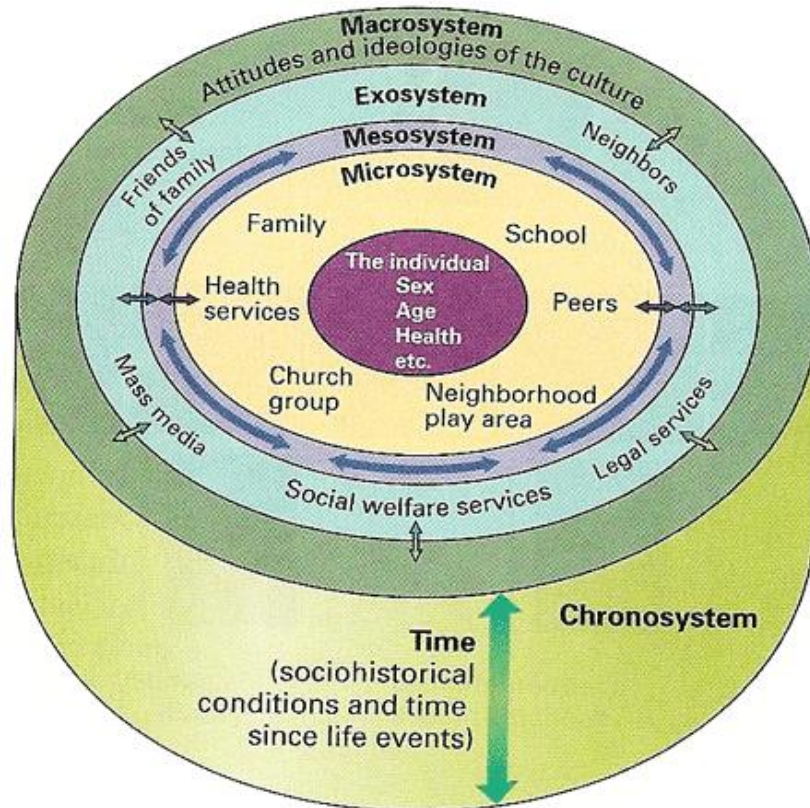
Figure 1: Bronfenbrenner's Bio-ecosystemic model (Cadwallader, 2010)

The Bio-ecological systems theory portrays how the various parts of the TVET college system work ideally to accommodate all the students. Nonetheless, corresponding to this study, the environment of each system is overlooked by the Bio-ecological systems theory. From a philosophical perspective, the Bio-ecological system has as its basis, the assumption that all aspects of the system exist, cooperate and interact with each other. Consequently, students may simply lack support just because their parents do not appear to play their own roles in the eco-system. There could be a good number of genuine reasons why some parents could fail to play their required roles in the learning process. First of all, some parents may not have the knowledge or the educational background to support their children academically. Secondly, some parents are unable to motivate their children to the importance of education. Thirdly,

some parents do not pay attention to their children who may be experiencing learning challenges.

With regards to the TVET college sector, in March 2018 the Strategic disability framework was introduced (South Africa, 2019). Based on this, the Strategic disability framework policy was created to achieve:

1. Education and Social Justice;

2. A single coordinated system;

3. Expanding access, improving quality and increasing diversity;

4. Education and work; and v

5. Responsiveness.

This policy was introduced to cater on how students with academic challenges in post-school education must be accommodated and included in the classroom (South Africa, 2019). The man focus was on the improvement and accommodation to increase accessibility, capacity building, Optimal utilization of technological devices, flexibility and family support. For this to happen, the environment should enable all students to access campus resources equally and openly. In view of this, the Education White Paper 6 (EWP6) argues that there should be mechanisms put in place to allow for a friendly environment for students with learning disabilities (South Africa, 2013). The system should include the installation of a wheelchair ramp and handrails for students with mobility impairment, marking staircases with white or yellow paint for students with low vision or visual impairment or any other type of accessibility devices like voice projection. These innovations can tend to allow students to access every provision of support available on campus.

 Despite the possible flaws of the model, applying the biological system theory appears to be effective in demonstrating how the college system can support students, by providing the supporting factors of the system theory.

2.2.2 An Ecological view of learning

Jenkins (2003) defines ecology as the study of interactions of organisms with their environments and with each other. In addition, human ecology is the study of human

interactions with their immediate environment. This comparison of ecology and human ecology indicates the similarity of the two environments. Moreover, learning happens through interacting with humans and their environment. In light of this, constructivists view ecology as the favourable learning conditions which provide a good environment for students to interact closely with their parents at home and with their teachers and peers in the classroom. Furthermore, Chemero (2003) suggests that an ecological approach to learning is more than just the ability to use an intellectual capacity alone but is a relationship between students and peers, and between students and the circumstances they find themselves in. This approach suggests that a lecturer using ecological methods, considers a conducive and positive learning environment to be part of the learning process including the students' intellectual ability. The usefulness of an ecological view brings out the emergence of learning, and in particular, the way cognitive processes connects with social processes.

2.2.3 Vygotsky theory of social constructivism

In addition to Bronfenbrenner's bio-ecological system theory that frames this investigation, the researcher strengthens its claims on the influence that Vygotsky's theory of social constructivism. This is to suggest that the constructivist perspective which investigates Lecturer's views on teaching strategies appears appropriate for dealing with students with learning challenges at TVET colleges. This view of teaching and learning is also seen as a social practice since lecturers need that the students and their immediate community should understand each other.

Based on the above, Hendricks (2013) sees the social environment as critical for learning. With this idea in mind, the integration of social and personal factors can produce effective and stress free learning. In line with this, Moswane (2019) agrees that the physical, cognitive and social environments must be taken seriously for students to develop their learning. These suggestions align with an important concept of group work/peer collaboration. At a point when peers work together, their social interactions can be used as a teaching tool to clarify concepts that are beyond the students' intellectual capacity.

Vygotsky (1978) believes that social interaction and culture play a critical role in learning through the process of scaffolded learning. This is similar to the developments

15

of Bronfenbrenner in which he displays how the environment affects a student's growth and development. Vygotsky (1978) also believes that students have abilities and possibilities that can be explored if given the proper guidance. In light of this, if the guidance, through a teacher or peer is realized, a student may learn through arriving at a discovery. This process is called scaffolding, a fundamental concept in social constructivism. Scaffolding is linked to a concept in Vygotsky's (1978) theory, the Zone of Proximal Development which is defined as the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers. Day (1983) postulates that the Zone of Proximal Development (ZPD) "is the amount of learning possible by a student - given the proper teaching conditions." Viewed through this lens, the ZPD assists students who cannot work independently because of the level of difficulty. It would therefore needful for lecturers to demonstrate a given skill and then allow the student to work along throughout the process.

Vygotsky's theories on constructivism have been on the rise and is an important part of the constructivism movement in human development. Schunk (2008) also denotes that social group learning and peer collaboration are ideal forms of constructivist approaches which are useful. Based on this, Vygotsky (1896) thinks that when students work in small groups to solve problems, they are able to communicate to each other through finding the answers to the problems. In other words, by assisting other peers, they together resolve their queries more efficiently and effectively than they could have done individually on their own. This approach to teaching may easily be introduced in a classroom to promote learner-centred education which may result in maximum benefit to the students across all cognitive levels and abilities. It is in this light that Vygotsky insists that learning and development cannot be separated from their environment (Schunk, 2008:241).

2.3 Evidence-Based Practices

It is the duty of lecturers and parents to ensure a good quality academic life for students to enhance students' performance. In view of this, lecturers need to access the best available teaching strategies to implement their teaching and learning

regardless of where the students' education takes place. Mitchell (2008) argues that it is evident that education has its fair share of problems. However, if a teacher has a reliable source of effective teaching practices for students with learning challenges, teaching and learning would not really pose a problem. According to Bernstein (1999), to teach vocationally, the lecturer has to comprehend the significance of knowing how to integrate situated knowledge, particularised and realistic knowledge in the classroom (horizontal knowledge). Mitchell (2008: 2) also says that there is a significant gap between research and what lecturers practice in the classroom. In view of this, he defines evidence-based strategies as "clearly specified teaching strategies that have been shown in controlled research to be effective in bringing about desired outcomes in a delineated population of learners." Thus, students should be taught using teaching methodologies that may encourage a learner-centred educational environment. McCombs and Whisler (1997) debates that to create a learner-centred environment, the lecturer should avoid lecture demonstrations but instead create opportunities for students to engage as well as participate. Hence, all lessons should be centred on the student. In situations for learning of this nature, opportunities must be created whereby the student builds on their knowledge. This is meant to suggest that our educational leaders should be continually be reminded about the primary goal of the institutions which is the wellbeing of our learners. As such, Lecturers need to dedicate their teaching careers on refining and enhancing the way they comprehend learner-centered education as well as accommodate students with learning challenges.

2.3.1 Constructivism as a teaching strategy

Anderson (2002: 5) states that "learning refers to the acquiring of new information, skills, and behavior or adopting existing knowledge". He continues that education or acquiring knowledge is different for every student. Given this, Piaget (1954) emphasizes that constructivism is pure discovery learning. Constructivism uses a student's personal experiences and opinions to develop their knowledge. Based on this, learners should be "actively involved in the learning process" to consume new knowledge. Current teaching strategies and interventions for learners with learning challenges are based on a variety of learning theories. However, this study

concentrates on constructivist teaching methods for students with learning challenges because it pays attention to the dilemma of the students and how it may influence learning. Constructivism requires an active learning context, to understand and enjoy the curriculum and learning. To understand how to influence learning, Vygotsky (1978) says that constructivism is all about creativity and learning to think proficiently. Based on the above, lecturers need to change their teaching approaches from a traditional to a more active learning approach. "Active learning refers to a way of thinking to realize someone's mental processing" (Zhenlin, 2009). In other words, active learning is any learning activity where the student takes part or interacts in the learning process, instead of inactively taking the information being provided. Allowing learners to be mentally creative by using active learning as a method, results in learners gaining knowledge that usually stem from existing knowledge. In this regard, the lecturer needs to provide a conducive/favourable learning environment for learners with learning challenges.

According to Young and Collin (2004), students are individuals as they learn and understand differently with distinctive life encounters. Every student has a different learning preference, some students learn by doing, others by seeing or hearing. By changing teaching strategies, it does not only help to provide an alternative for students to comprehend new knowledge, it makes the learning process more pleasing and exciting for the students in the classroom.

A Constructivist learning approach should incorporate both the method of learning and how students learn, which requires integration of knowledge. Constructivist lecturers develop students mind set so that they are able to query their own thinking as well as question what their peers postulate. This exercise is meant to develop learning conditions for students to grow a strong questioning mind set on knowledge and learning.

2.3.2 Advantages of Constructivism

Brooks and Brooks (1999: 5) argue that learners can control their learning and that some educators feel that many students struggle to understand concepts individually rather than as a whole. In addition, completing a curriculum is in some cases more

important than ensuring students understanding and academic success. In TVET institutions, time is a major stumbling block as there is little time to complete what is expected by the curriculum. In this regard, lecturers are not allowed to waste time even if students do not understand important concepts due to some personal or other academic barriers. Education professionals need to recognize that learners' schooling is about consuming knowledge through exploring and being curious of instruction being taught. How to find and solve problems should be subsidiary for learning (Brooks & Brooks, 1999: 6). Viewed through this light, it is the duty of all lecturers to allow students to ask questions repeatedly by using the 'Say, See, Do' teaching strategy. Sullivan (2021) signals that most of his successful workmen need detailed instructions because he demonstrates a step-by-step process of what needs to be done to bridge the gap in the misalignment between theory and industry. To this effect, Lecturers need to start realizing that knowledge cannot be completely passed on from a teacher or a book to a learner. Instructions guided by the constructivist learning approaches enhance student's learning. With this in mind, Lecturers need to start realizing that all the knowledge that students consume is not learned only from a lecturer or from a book. When constructivist learning approaches are used to guide appropriate teaching practices, it enhances student learning. Based on this, Steele (2005) posits that students with learning challenges can benefit most from active learning because of their difficulty in adapting from the traditional ways of learning to a more interactive classroom.

Constructivism views effective learning as "learning as the processing of information (information processing), and learning as the construction of knowledge" (constructivism) (Mayer, 1992: 143). The above quotation means constructivists believe that students can build on the knowledge gained thereby creating new knowledge. Students working in a classroom environment can essentially gain knowledge from their educators as well as from their peers. This is in line with Vygotsky's ZPD in which he explains that the ZPD which stipulates that those peers who know more or are more skilled, need to share their knowledge with those who know less to accomplish a task. All their experiences in the classroom would contribute to their construction of knowledge. Constructivism is based on the idea that students learn and understand, from experience (Fosnot, 1996). Knowledge can be gained exponentially if the teaching methodologies, classroom environment, and the

group of students have a thirst for knowledge and are motivated. Students acquire knowledge not only from their lecturers but also from the circumstances which surround them. The fundamental core from which constructivism is based is that students effectively develop insight as well as the significance through engagement and participation (Fosnot, 1996; Steffe & Gale, 1995). Viewed through this light, a learner has the responsibility to gain maximum knowledge from the classroom environment.

Constructivism is composed of three main parts. "Cognitive constructivism represents one end or extreme of the constructivist continuum which is typically associated with information processing and its reliance on the component processes of cognition" (Dole & Sinatra, 1998). Cognitive constructivism can be associated more with technical education where students construct their knowledge then apply their knowledge using their cognitive skills to solve technical problems. Radical constructivism means that "knowledge acquisition is an adaptive process that results from active cognizing by the individual learner, rendering an experientially based mind, not a mind that reflects some external reality". Knowledge is gained either through experience or creation. The knowledge that is created does not necessarily depict reality (von Glasersfeld, 1998; 1995). Social constructivism signifies students working together to construct knowledge in the classroom. This postulates that knowledge can be constructed in the classroom via the students' social interactions with their peers and lecturers. Knowledge acquired through communication and engagement with others in this way becomes a communal rather than a singular experience (Prawatt & Floden, 1994: 37).

Constructivist pedagogy in the classroom maximises the knowledge construction of students across all cognitive levels. If lecturers use the correct teaching practices in the classroom, they would be able to get attention from all students as well as being able to assist in the student's understanding. Brooks and Brooks (1993); Larochelle, Bednarz, and Garrison (1998); Steffe and Gale, (1995) highlight eight important facts that may assist a constructivist teaching approach. They include:

1. Learning must match and prepare students for the current tasks in practice.
2. Students must be able to learn mediation skills to resolve conflicts and negotiate in order to become skilful.

3. Must show students how relevant the content is to their selected profession.
4. Must show how relevant prior knowledge is in understanding current learning content.
5. Must show how important formative assessments are to support students' future learning.
6. To encourage a student to become more independent and mindful in order to make appropriate decisions.
7. Lecturers are available as facilitators as they need to guide the learning process not to enforce knowledge on students.
8. Lecturers should encourage different perspectives of students' knowledge.

These eight approaches give the core for all constructivist teaching methods, accentuating the crucial role students have in the learning or developing of skill through experience or development. Learning should be authentic and relevant to the industry involving social negotiation and mediation. The curriculum of the skills learnt should be addressed to suit the learner. The curricula should be able to guide the student to enhance what he/she already knows. On the contrary and as required by TVET colleges, the lecturers are more interested in completing the syllabus than making sure students understand the work to prepare them for the future.

Based on the constructivist perspective, students should receive formative assessments to assist learning for future experiences. Formative assessments assist students in identifying their strengths and weaknesses because it targets areas that need work. In this regard, students need to find stimulation within themselves to manage their learning by working out what they do not understand. Students should also learn to express what they do not understand to their lecturers so that their knowledge gaps may be resolved. This is true because Educator's primary purpose is to be a guide that facilitates learning, not instruct students on what to do by stimulating their development to have several viewpoints and ways to represent their understanding of the curricula or by giving support and advice.

2.3.3 Disadvantages of Constructivism

Constructivism can be misleading because it is a teaching strategy for low intellectualism (Clements & Batista, 2009). Secondly, it is not the method that is at

fault, but the constructivist approach requires a great deal of expertise. Thirdly, the method has never been implemented correctly in the classroom. More so, Broderick, Mehta-Parekh and Reid (2005) say that experienced lecturers find a constructivist teaching approach less effective since all students respond well to traditional methods of teaching. Also, it is a tiring and tedious method since it requires a vast amount of planning for teachers who have to separate students according to their interests and needs. Segregating students according to their abilities, needs and educational achievement may create a sense of doubt and isolation.

2.3.4 Learner-Centred Education

Learner-centred Education is described as a point of view and an attitude that integrates a focal point on the students ("their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs") ability to learn and the teaching practices used to promote learning (McCombs & Whisler, 1997:9). The main aim is on having the best available knowledge to learn. How this occurs as well as effective teaching practices that promote high levels of motivation, learning and achievement for all students are important. Effective education transfer is geared solely for the maximum benefit for the student.

This is true in every sense since all decisions, teaching methodologies, curriculum development and institutional rules are governed for the maximum benefit of students. The institution's management is responsible for creating an effective learning environment. VET (Vocational Education and Training) teacher training has been professionalized across countries world-wide. The demand that VET teachers have teaching qualifications, are setting national standards for training and licensing of VET teachers as well as the setting up of monitoring and evaluation structures, have become common practice (Simon & Thomson, 2007). Lecturers are responsible for using effective teaching techniques and improving the classroom environment which may promote willingness to learn. The lecturer needs to attend workshops where the concept of learner-centred is explained. In addition, lecturers should be taught the teaching methodologies which may encourage a learner-centred educational environment. Our educational leaders should be continually reminded about the primary goal of the institutions which is the wellbeing of students. learner-centred

educational approaches should become lecturers' primary choice of teaching strategies in which they need to commit to and improve themselves as it is the ideal method for student learning. Five attributes must be considered to promote learner-centred teaching. These attributes are:

1. Allow for student independence and to use their discretion.
2. Lecturers need to encourage effective communication in which they should use question practices that encourages students to convers.
3. Engage in explicit instruction as it is more direct and allows for students to engage.
4. Encourage student collaboration and group projects as students' bounce ideas off one another which creates a greater opportunity for lecturers to facilitate knowledge.
5. Encourage student reflection which allows students to analyse and process what they have learnt.

Students have specific views or frames of reference derived from history, environment, hobbies, target, ideals and ways of thinking. They have different emotional states of mind, learning rates, learning styles, stages of development and abilities. Students learn best when what is being learned is relevant and meaningful to them while the student is actively engaged in the learning process. In addition, the environment in which students learn as well as constructive interpersonal relationships and interactions with their peers are vital and beneficial to their learning process. Students are considered eager learners when exposed to knowledge that interest them (The Citadel Undergraduate Catalogue, 2002-2003:207). According to Dewey, (1938: 48), the learning experience must leave each student motivated and the solving of each problem must lead to a new one related to the topic dealt with. Based on this, learner-centred education may be seen as a constructivist approach where every student should build their understanding by integrating prior knowledge with current knowledge.

2.4 Learning challenges in Post School Education

Studies on students with learning challenges in higher education in South Africa are uncommon. Konur (2006) argues that academically challenged students are simply

denied access. The introduction of the inclusive education approach has resulted in a steady increase in the accommodation of students with learning challenges. Based on this, Savvidou (2011: 54-55) notes that there is an increase in students with diagnosed disabilities in the Post School Education (PSE) sector after the introduction of the education white paper 6 (EWP6). However, in the Post School Education (PSE) sector, it would be problematic to determine how many students with diagnosed learning disabilities have learning challenges as post-school education institutions are not well-informed about student's disabilities. In addition, there seems to be a stigma attached among students. Heinman and Precel (2003: 249) argue that while students with academic challenges in the post-school education sector experience a vast amount of social and psychosocial challenges, most current existing knowledge of the application of inclusive education apply only to school.

2.4.1 Management of Infrastructure

Challenges on infrastructure has become a common phenomenon among TVET Colleges, especially in under-resourced communities. However, poor management plays a crucial role in the everyday maintenance of the institution. With all these in place, Van Wyk (2009:53) suggests that TVET colleges face a myriad of challenges including infrastructural challenge such as insufficient ablution facilities for the number of students on campus etc. Also, most TVET colleges are under-resourced and may not even be in possession of a library or resource centre as internet facilities may only be limited to a few computers. Poorly maintained facilities encourage low self-esteem in students since it encourages students misconduct resulting to learning challenges (Smit & Rossouw, 2015). However, maintaining neat and clean offices may lead to the reduction of students' misconduct and encourage academic performance. Inadequately kept offices appear to make an impression of carelessness on TVET Colleges which may prompt thoughtlessness in students' demeanour towards academics amounting to learning challenges.

Other challenges may include under-resourced institutions, overcrowded classrooms that make students feel overwhelmingly discouraged as they do not receive the individual attention required from the lecturer. In this regard, Vink and Adejumo (2015) assert that overcrowded classrooms encourage opportunists to test the limit. Some

students take advantage of overcrowded classrooms to misbehave and therefore may discourage the majority of the students who are motivated and thrive to progress. Poor Infrastructural management results in under-resourced institutions and institutional management.

2.4.2 Institutional Management

According to the White Paper on Post School Education and Training (SA, 2013:2), the education offered at many post-school education institutions, which include TVET Colleges, is inadequate. Learning challenges related to teaching, curriculum and infrastructure in institutions vary.

Students tend to experience poor service and support from lecturing staff due to management not supporting or communicating with lecturers. This is in line with Van Wyk (2009: 66-80) who thinks that there is a lack of communication and teamwork that presents itself among TVET managers and TVET lecturers. Given this, it may negatively impact students as lecturers may appear to be unable to perform their daily tasks resulting to learning challenges in students.

2.4.3 Timetable Management

According to Herbert (2005: 72), to manage daily activities on campus, it is important to have an efficient timetable. A discrepancy in a timetable disrupts class activities and lesson plans, this may have a ripple effect on the timetable for the rest of the day. For an orderly structured environment for student learning, it is important for management to have a well-designed and well-organised timetable (Herbert, 2005:72).

A poorly designed timetable shows disorganised management and may lead to many disruptions during class activities, this creates confusion and a feeling of disgruntlement among students which may lead to learning challenges.

2.4.4 Developing and training TVET lecturers

Training and development for TVET lecturers play a vital part in their classroom management. Therefore, a lack of lecturers training and development could experience difficulty in managing learning challenges. A lack thereof, may be as a result of the lack of qualifications, experience or mentoring. Manyau (2015:65) states that there is a shortage in training TVET lecturers on knowledgeable aspects such as teaching strategies, curriculum training, technical skills and career development. In some cases, lecturers indicated that training and development programmes were minimal or not available. However, 64% of TVET lecturers who participated in Manyau (2015) research indicated that the training received was irrelevant and not helpful in their area of speciality (Manyau, 2015:72). Many of the lecturers indicated a lack of financial support when they have attempted to enrol at institutions of higher learning to develop themselves with relevant teaching skills (Manyau, 2015:72).

Training and development of lecturers are the functions of the institutions' management and in most cases are processes that tend to be neglected. There may be instances where management has been newly appointed or have not yet implemented skills programmes but even so, there is need for staff training and development. Manyau (2015:76) indicates that due to a lack of training, informal learning is used to develop unqualified lecturers teaching skills. This is in line with Van der Bijl (2015) who asserts that for lecturers to develop or equip themselves with teaching skills, these lecturers depend on their management to develop formal or informal coaching programmes. Lecturers who are not adequately trained to manage their classrooms effectively often lack experience or mentoring by experienced lecturers which may lead to students finding themselves despondent and experiencing learning challenges.

2.5 Challenges faced by TVET lecturers

In the advanced technological world that we live in, information is readily available. Students feel that lecturers are expected to be knowledgeable or subject experts in their respective field, and tend to respond negatively if the lecturers do not show such competencies (Teh, 2015). Students tend to lose the respect they have for lecturers and become despondent which in turn may lead to learning challenges. Lecturers

qualifications have been stipulated in the policy for TVET lecturer qualification (SA, 2013 :12-31) as an important factor for managing students in the classroom. TVET lecturers are deemed qualified if academic and workplace qualifications are present. The qualifications by themselves do not portray competence and there is need for staff development and training consistently.

2.5.1 Academic qualifications of TVET lecturers

According to The Green Paper on Education and Training (SA, 2012), most TVET lecturers are employed from industry, therefore knowledge and skills in teaching strategies are lacking. In addition, these lecturers display a vast amount of workplace knowledge and experience (SA, 2012) but are not adequately equipped to manage students in the classroom. According to Manyau, (2015) lecturers in the TVET sector lack academic qualifications which is largely responsible for the need for development and training. This is in line with McBride, Papier and Needham's (2009) who demonstrate that 50% of TVET lecturers in the Western Cape are not academically qualified. This is meant to suggest that TVET lecturers do not have the subject content knowledge to present an effective lesson. Petersen and de Beer (2014:5-6) indicate that developing lecturers' subject knowledge and evidence-based approaches remain a challenge. Based on this, lecturers who do not have subject content knowledge end up utilizing lecturer-centred teaching approaches. With the lack of pedagogical content knowledge, lessons are not well prepared by lecturers tend leading to learning challenges by students more frequently (Smit and Rossouw 2015).

2.5.2 Teaching strategies used by lecturers in TVET colleges

Manyau (2015:62-70) displays that it is evident that most TVET lecturers face challenges related to their teaching skills and that 50% of these lecturers need training in teaching strategies. Furthermore, Ngubane-Mokiwa and Khoza (2016) also say that traditional teaching strategies are being used at TVET colleges. They pursue that the use of traditional teaching strategies on Science, Technology, Engineering and Mathematics subjects tend to exclude students with learning challenges. Therefore, a more learner-centred teaching approach or innovative teaching approach should be

incorporated to accommodate students with academic challenges. In addition, TVET college lecturers have limited skills in teaching students with learning challenges, which poses a threat in the post-school education sector (PSET) (Ngubane-Mokiwa & Khoza, 2016).

Heinman and Precel (2003: 254) are of the opinion that there are different ways students with learning challenges learn when compared to students without learning challenges. They further argue that at-risk students can use more creative learning strategies that can include, singing, chanting, use of drawing or sketches to remember work. When lecturers are creative in class it stimulates student's learning and creates a blissful environment. Makanya (2015:24), in agreement argues that lecturers who make use of visual explanations like video clips have been more successful when in overcoming learning challenges. These methods are used by lecturers with subject content knowledge as well as with knowledge in teaching skills. Due to the increase in enrolment of students at TVET colleges, lecturers need to develop an understanding of the use of teaching strategies that address the needs of students with learning challenges including understanding teaching strategies that TVET college lecturers should use to assist students with academic challenges (Makanya, 2015). It is on this premise that Downing (2010) argues that learner-centred teaching strategies for students with learning challenges should be encouraged.

2.6 TVET students' background

Many factors may lead to TVET students experiencing learning challenges in the classroom. Factors such as students' socio-economic status, their academic preparedness, motivation toward their studies, learning disability as well as their household or family circumstances. Learning challenges experienced by students may not be directly related to some of these factors but surely contributes to their academic success.

2.6.1 Students preparedness

Students are often known to be disappointed and become frustrated with themselves when an academic goal is not achieved (Teh, 2015). Such disappointment usually

leads to students feeling despondent and demotivated which may result in the students experiencing learning challenges. In some cases, behavioural problems may occur since students with learning challenges may become envious of academically strong students. Hugo (2011) states that behavioral problems often happen due to students' academic failures. These students are often students who struggle to keep up with their peers and become distracted leading to learning challenges. Contrarily, Hugo (2015) thinks that academically strong students may also experience learning challenges when lecturers underutilize their academic ability. These students may become frustrated or even bored during class and may be drawn away from their work during class.

2.6.2 Students socio-economic status

Students socio-economic status plays a relatively intrinsic role in their academic success in PSET. This socio-economic status may also require various support. Young, Johnson, Arthur and Hawthorne (2011) show that student motivation and achievement are important factors in overcoming their socio-economic status. These factors include support/motivation in career guidance, the professional direction in assisting to select the right course and the necessary support. This support may come in the form of remedial intervention and building up their awareness of certain expectations and responsibilities. In addition, student's achievement and socio-economic status appear to have a strong link with their academic performance (Hugo, 2011). A student who has low socio-economic status may not have nutritious foods, effective health care, enough electricity and sufficient clothing (Hugo, 2011). These students are often subjected to difficulties experienced at home where gang violence has become a norm that disrupts the household. Students struggle to do homework as there is no suitable chamber. In most cases, due to the household financial restraints, these students have afternoon jobs to assist and therefore struggle to complete academic responsibilities. Due to these restraints, students are absent-minded during class and may struggle to concentrate during a lesson and may hand in poor quality work as a result. The difficult experiences due to student's socio-economic circumstances may very well lead to learning challenges as these students

may become chronically absent-minded as they may need to support their family to survive economically.

2.6.3 Students with learning disabilities

Students with learning disabilities experience a lack of social skills and problem-solving skills which may contribute to teaching strategy limitations. In addition, they may experience rejection from their peers. As a result, some students with special needs may suffer from anxiety and depression which may further lead to a poor self-image (Hugo, 2011). However, a student with a learning disability who comes from a low socio-economic background may experience financial difficulty too worsening the physical lack. Most of these students are known to struggle to receive adequate support from trained lecturers to succeed in their academic journey.

2.6.4 Finances of TVET students

Students wanting to study in South Africa who were part of the previous education system, post-1994 have to fund their studies by themselves. This might have created a barrier for many students who are not able to afford the means but may only have the option of visiting a financial institution to obtain a loan. However, the education department seems to have very little involvement in TVET student funding which becomes the responsibility of the student. According to the Department of Education (South Africa, 2009), the portfolio of NSFAS has been extended to fund students in the TVET sector in their response to make the TVET sector to become the institution of choice. In light of this, Papier (2009) argues that the TVET sector has been occupied with major restructuring changes to assist students financially to access learning programmes. Students find themselves distracted in class if they do not know where they will receive the finances to fund their academic journey. This financial assistance is welcomed by most students who struggle to enter institutions as a result of financial restraints as it relieves the burden and creates hope and opportunity for them to achieve academic success.

2.6.5 Family background of TVET students

Learning challenges can stem from a lack of parental guidance (Teh, 2015). A lack of parental guidance is often due to the dissolution of the family unit. This can cause students to lose motivation, becoming despondent or in most cases it may result to disorientation in class. In some cases, students may tend to draw attention to themselves by misbehaving or causing disruptions in the classroom. This could often be mistaken for a cry for attention as Teh (2015) points out that dissolution could steer parents to work longer hours. This could be one of many attempts to try and provide for their children or trying to overcompensate due to feelings of guilt. The overcompensation often takes the form of a lack of discipline when needed. Parents may tend to overcompensate as a result of guilt and in some cases giving into outrageous demands. Walker (2015) concurs that a cry for help or attention often leads to students experiencing learning challenges. These students with families from low socio-economic backgrounds more often than not tend to experience low motivation and as such end up to submit poor quality work. However, on a positive note, in some cases, Students from bad backgrounds may do anything to get an education and a well-paying job so that they can leave that world behind them. These students could be assisted through support programmes by focusing on the students and their family background.

2.7 Overcoming challenges in the teaching of TVET students

Whether appropriately trained or not, TVET lecturers are expected to recognise patterns in the students who have learning challenges through student daily academic performance, which may be below the level of regular students. Students with learning challenges may easily be identified through specific error patterns in their assignments (Rudiyati, Pujaningsih, & Mumpuniarti, 2017). Once these challenges are identified by the lecturers, they are required to seek interventions to assists such students. However, Ebrahim (2013) argues that TVET institutions need to develop lecturers and departments that are appropriately qualified and skilled in addressing student's learning challenges.

2.8 Conclusion

This chapter has outlined the theoretical framework which informs the study. In an attempt to address the research questions, the literature regarding the challenges encountered by lecturers on accommodating students with learning challenges was reviewed. The chapter touched on the relevance of the bio-ecological systems theory and how it can be utilized in supporting lecturers in identifying students experiencing learning challenges in the classroom environment. The bio-ecological systems theory further elaborates on how TVET college lecturers need to rely on various stakeholders to include themselves as they cannot exclusively assist students with learning challenges. The following touches base with the research method that was employed to gather and process data on the teaching strategies used to accommodate students with learning challenges in the classroom.

Chapter 3

Methodology

3.1 Introduction

This chapter focuses on the methodology in which information was obtained to understand the views and teaching strategies of TVET College lecturers. It also strives to show how lecturers include students with learning challenges in the classroom through discussions, engagement and participation. The research paradigm, design and methodology that were used in this study are given a thick description in this chapter. The sampling techniques and procedures for gathering the data was also explained.

3.2 Research aim and objectives

The main aim of the study seeks to investigate the teaching strategies for teaching students with learning challenges at a TVET college in the Western Cape.

The objectives flowing from the main aim were:

- To find out the nature of learning challenges encountered by TVET college students.
- To investigate the challenges that lectures face in teaching in TVET colleges
- To explore the strategies used by lecturers in teaching TVET college students
- To investigate methods to overcome the challenges in teaching and learning

Critical questions that arose from the problem statement, aim and objectives that guided the study are:

- What is the nature of learning challenges encountered by TVET college students?
- How are the challenges that lecturers face in teaching addressed in the TVET college sector?

- What teaching strategies are used by lecturers in teaching TVET college students?
- What methods are used to overcome the challenges in teaching and learning

3.3 Research Paradigm

This study is situated within an interpretivist paradigm, as it addresses a demand to grasp the particular views of TVET college lecturers on students with learning challenges in their classrooms. An interpretivist paradigm relates to grasping the personal world of human experiences (Creswell, 2012). For this study to achieve the interpretivist approach, the researcher tried to understand the research participant's views as well as their experiences in the classroom through communicating, observing interacting and listening to them. This was eased as the researcher approached the lecturers from an insider perspective.

Based on the above, this study strives to understand the lecturer's experiences through human experiences by socialising and interacting with the students as well as listening to what they experience inside and outside of the classroom. The interpretivist paradigm also provided scope for understanding that learner's experiences should be taken seriously and not considered lightly. Cohen, Manion and Morrison (2011) argue that to achieve reliable and effective information on what is being studied, "a researcher must try by all means to understand the people being studied from within, to preserve the reliability of what is studied". The above quotation indicates that to achieve this type of understanding, the researcher has to communicate with the research participants by having a face to face conversations with them talking about their feelings and observing their teaching approaches. This would be essential to the researcher to have a good understanding of the fundamental or basic strategies and support that the lecturers lack to assist students in achieving their academic goals. The study explores the views of TVET college lecturers on teaching practices when dealing with students with learning challenges, and the most suitable way is to use the interpretivist paradigm for this study. Once such information is acquired through collecting the perspectives of the participants, the researcher is now placed at a position where he/she can retell the story of his/her participants the way he/she understands it.

3.4 Qualitative Research Approach

To achieve a detailed knowledge of the lecturer's views on students with learning challenges, the researcher used a qualitative research approach so that comprehensive insight of first-hand experiences could be established. A qualitative research approach, according to Cohen et al. (2011) and Creswell (2012), is appropriate for this study because it affords an in-depth knowledge of the aspect to be researched. This aided the study to improve its knowledge and insight of the lecturers' experiences. The qualitative approach permitted the researcher to pose rhetorical questions that permitted the members taking part in the study the freedom to share their perspectives and experiences openly. The interview schedule and the classroom observation allowed the researcher to simulate the life and experiences of the participants in the classroom. This afforded the researcher to study the participants in their natural setting to interpret their experiences of the TVET college lecturers.

According to Creswell (2009), the idea behind a qualitative research approach is to purposefully select participants and sites that best help the researcher to understand the problem and research question of the study at hand. According to Leedy and Ormrod (2010), participants are chosen for a particular purpose. In this study, the researcher selected participants who were rich in information due to their experience and knowledge that could assist the researcher understand the research problem. These participants are familiar with the TVET sector and have a strong opinion on their challenges as lecturers including student experiences. This study allowed the lecturers to share their opinion and thoughts openly by reflecting on experience and knowledge to describe their views and experience in detail.

3.5 Research Design

The objective of this section is to indicate the method in which information was obtained to understand the views and teaching strategies of TVET College lecturers and how they include students with learning challenges in the classroom. According to Ragin (1994:191), the definition of a research design is "a plan for collecting and analysing evidence that makes it possible for the researcher to answer questions he or she has posed." An interpretive paradigm was used for this study which indicates that the researcher is involved in a critical part throughout the study. Cohen, Manion

and Morrison (2007) indicate that an interpretive paradigm approach suggests that it is important for the researcher to understand the subjective experiences of individuals.

The research design of a study is connected to most parts of the research, including the data collection, to the method in which data would be analysed. In addition, Burns and Grove (2003: 195) explains that a research design is the "blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings." For this study, the researcher adopted a case study approach that will answer the research question by identifying relevant methods of collecting data. Therefore, for this study, research is defined according to Nachmias and Nachmias (1992: 77-78) as a plan that:

> guides the investigator in the process of collecting, analysing, and interpreting observations. It is a logical model of proof that allows the researcher to draw inferences regarding casual relations among the variables under investigation.

3.5.1 Case study

The study focuses on one TVET college and therefore utilizes a case study design. Creswell (2012:465) indicates that case studies are types of ethnographic design; it focuses on "in-depth exploration of the actual case". This indicates that qualitative researchers that use ethnographic designs allow the behaviour and beliefs of people who have similar cultures to be interpreted and described for analyses. Ethnographic designs are qualitative method. Creswell (2009:13) defines it as "a strategy of inquiry in which the researcher studies an intact cultural group in a natural setting over a prolonged period by collecting primarily observational and interview data." This indicates that the researcher should observe participant behaviour in person or interact within their real-life environment. Given this, ethnographic case studies "employing ethnographic methods and focused on building arguments about cultural, group or community formation or examining other sociocultural phenomena" (Schwandt & Gates, 2018:344) over some time.

For this study, lecturers from a TVET college who shared a similar culture were interviewed. This meant that participants who shared a similar ethos, values, beliefs, background and ethnicity were interviewed and observed in their comfortable

environment. Creswell, (2012:465) in agreement indicates that "a case study is an in-depth exploration to capture the live encounters of the research participants in a specific setting and environment". This implies that a case study is a study of an actual situation in action which provides unique illustrations of actual events happening to people in real situations. In light of this, this study explored a case study design on the teaching strategies appropriate for dealing with students with learning challenges, as well as the setting and environment of the lecturers and their classroom. Therefore, the TVET college was used as the specific setting as well as the TVET lecturers who teach the students that experience learning challenges.

3.5.1.1 Site selection and study context

South Africa has 50 multi-campus TVET colleges, of which six are located in the Western Cape Province. For this study, one campus of one public TVET college in the Cape Town city area has been chosen. The researcher sought permission from the school management and which has been granted to carry out the study. This campus is located in a middle of a socio-economic class area where there is no poverty. This college has six different campuses across various socio-economic areas in Cape Town namely the CBD, Vredehoek, Gugulethu, Crawford, Athlone and Thornton. This particular campus was chosen because it is where the researcher is employed and is a campus where the challenge related to the research topic is commonly being experienced. Given this, lecturers at the Thornton campus was selected to carry out the study.

3.5.1.2 Physical setting

This sample site is a middle-class area of Cape Town that constitutes Building & Civil and Mechanical Engineering studies as the main courses being offered. This campus has an ethnically diverse range of lecturers which is one of the attractions for the study. Most of the college students are black and coloured students who travel utilizing public transport from low socio-economic areas or informal settlements. Informal settlements are areas where groups of houses are built using improvised materials such as wood, zinc or mud. These houses are constructed on land that the occupants occupy illegally.

This campus was chosen due to the struggles the lecturers face in teaching methods and having to accommodate students with learning challenges. This campus was chosen through purposeful sampling as the study wanted to explore how these lecturers accommodated students with learning challenges in the classroom.

This campus has a total of approximately 545 registered students per trimester, with 25 lecturers, 2 Head of the department, 3 Senior Lecturers and 1 campus manager. The majority of these staff members are permanently employed by DHET and the minority is contracted by the college.

The outbuilding of the campus classrooms and workshops is solid and built with bricks. The roof structure is a solid pitched timber truss with IBR roof covering. The campus has eight outbuildings; administration block, Building & Civil block, Mechanical block, Maintenance block, five blocks for occupational workshops and two used for residences. Each of these blocks is constructed with building bricks and mortar and has been recently painted. The administration, building & civil, as well as mechanical block, are interconnected by covered corridors that link them together. The administration block consists of an entrance hall and administration staff courters with five offices which are occupied by the HOD, three senior lecturers and the campus coordinator. Both the Building & Civil and the Mechanical block has 6 classrooms, each classroom is allocated to an NCV and Report 191 staff member. Each classroom is fitted with high-quality smartboards that aid the lecturers teaching resources.

The maintenance block consists of four rooms, two of which is storeroom where their tools are stored and controlled from and two-room is the male and female dressing room. This block is controlled and managed by the factotum of the campus.

The occupational workshops consist of five well-equipped workshops, namely the fitting & turning, welding, plumbing, carpentry and furniture making. Each of these workshops has demarcated workstations for the students as well as offices for the facilitator. In addition, there are wash stations, as well as ablution facilities for male and female. This campus has the plumbing and welding centres of specialization. Most of these blocks are shared amongst departments and students are integrated. There is galvanised fencing around the entire perimeter of the campus with two entrance gates for motor vehicles and pedestrians allowing access to the campus. Both entrances are access controlled. One entrance leading to the administration block and

another allowing access to the workshops and residence. Each of the gates is manned with security guards for access entry. The campus is maintained as it appears that the fields are cut and the grounds are clean. The campus has an Open Learning Centre (OLC) which is resourced with books and five computers for students to do research. The students' toilets are not well maintained and many of the urinals are out of order. As a matter of concern, the student support office is limited and has minimal support for students with challenges. There is no educational psychologists or trained guidance councillors available for students. The students support officer is only available for consultation one day of the week.

The four observed classrooms had teacher ratios of 1;25, 1;17, 1;30 and 1;13 respectively. Each classroom has a pleasant welcome when entering as there are relevant posters and models on display that are used to brighten up the class and assist students with explanations. Two of the classrooms has problems with the windows as it is unable to open. The only fresh air that enters is through the entrance door. When talking to lecturers prior to the observation, I was told that it was a common problem with most classrooms throughout the campus. The campus starts at 8:00 am and ends at 15:30 pm Monday – Wednesday, Thursday from 8:00 am – 14:40 pm which allows for staff meetings or staff developments and Fridays from 8:00 am – 13:00. Staff meeting takes place in the auditorium which is an audio-visual room along the administration block.

Due to the current pandemic, it is pleasing to know that COVID 19 protocols are in place when entering the campus as well as in the classrooms. All entrances are equipped with a screening station where all visitors and staff need to get screened daily. The screening station has a 'cooling off' area for those visitors whose temperature spikes before getting screened for a second time. All classrooms have sanitizing stations at the entrances and are reminded by staff to keep their masks on during class.

3.6 Study population and sampling

The sample chosen for this study constitutes 4 lecturers who try to accommodate 35 students with and without learning challenges in their classrooms. There are currently 30 academic lecturers and 25 practical lecturers on this campus. These lecturers are

teaching at the Engineering campus of a Technical Vocational Education & Training (TVET) college in the Western Cape. This college consists of six campuses across the Western Cape with more than 11233 students registered at the time of the study. This TVET college was selected as it was practical and easily accessible by the researcher as it was the college where he is currently employed. McMillan and Schumacher (2014) posit that if a group of individuals from which a sample is drawn and yet findings are generalised to the larger population, this can be described as a population. In addition, McMillan and Schumacher (2014) add that a sample is taking a group of a population as a representation of the total population, from whom data is collected. For this study, the total population consist of all the lecturers of the 50 TVET colleges in South Africa (South Africa, 2012).

3.6.1 Sampling

Mason (1997) stipulates that sampling is fundamental as it would be illogical to accomplish a total evaluation of a wider population wherein the research is centred around. This is to suggest that sampling enables the researcher to study a segment of the population instead of the whole population (Slavin, 1992). A population is the group of people from which a sample is drawn.

In view of this, Sapsford and Jupp (2006) opines that saving time, effort, being consistent and giving fair estimates of the population being researched should be the aim of sampling. For this qualitative study, purposive sampling was used. Creswell (2009) thinks that a purposive sampling method in a qualitative research study allows that certain participants and sites are chosen that would best assist the researcher to understand the problem and research question. For this study, the researcher purposefully selected a sample of 10 lecturers (5 senior, well experience and 5 young enthusiastic lecturers) who participated in a semi-structured interview and 4 classroom observations which were conducted at a time that suited them (Addendum B). However, when analysing the interview, the researcher found similar answers being given from the first 3 participants. Due to the similarity in answers, the researcher foresaw similar answers being given therefore decided to limit the interviews to 4 lecturers (2 senior, well experience and 2 young enthusiastic lecturers) and 4 structured observations. In addition, the researcher decided to conduct a semi-

structured interview with randomly selected students after the observation to get an understanding of how students felt about the study at hand. The lecturers were selected because (1) the experienced lecturers have a vast amount of experience in teaching students but are not keen to apply different teaching methods so as to accommodate students with learning challenges. (2) If the younger enthusiastic lecturers were keen to adapt their teaching practices to accommodate students with learning challenges.

3.7 Data collection

According to Leedy (1993), research methods inform the reader precisely how the data was collected and processed. The nature and problem of the research determines the methodology being used. In any situation where the data is verbal like this study, a qualitative method would be more appropriate.

Three qualitative techniques were used to collect the data for this study, as the researcher needed information on teaching strategies appropriate for students with learning challenges. The instruments used included:

- Semi-structured Qualitative interviews with lecturers
- Structured classroom observation
- Unstructured interviews with students

To collect information for the study, the in-depth interviews, classroom observations and semi-structured interviews were found to be the most appropriate as the researcher needed a deeper understanding and first-hand information and interpretation of the lecturer's views about the topic (Leedy & Ormrod, 2005: 184).

3.7.1 Interviews

Wiersma, (2000) asserts that an individualized interaction between the interviewer and the participants is viewed as an interview. In addition, Borg et al. (2003) postulate that an interview involves direct verbal interaction between the interviewer and participant to collect data. According to Guba and Lincoln (2005), interviews are primarily used

when participants are unlikely to complete a written survey and when participants are unlikely to respond without being prompted by the interviewer.

The method that was used in this research to obtain reliable qualitative information from research participants was through in-depth interviews with the lecturers and students regarding their experiences, customs, philosophies, teaching strategies, and opinions (Harrel & Bradley, 2009). Analytical questions that allowed open-ended questions was asked to all the participants to make sure that there was congruency and consistency in the responses received from both the students and the lecturers. This allowed the researcher to openly communicate with all the interviewees to which they gave detailed feedback on their views.

3.7.1.1 Conducting the Interviews

The researcher intended to conduct 10 interviews with TVET college lecturers (5 senior, well experience and 5 young enthusiastic lecturers) from the inception of the study. However, when analysing the interviews, the researcher found similar answers being given by the first 3 participants. With this discovery, the researcher therefore decided to limit the interviews to 4 lecturers (2 senior well experience and 2 young enthusiastic lecturers). In addition, the researcher decided to conduct semi-structured interview with randomly selected students after the observation to get an understanding of how students felt about the teaching strategies being used. Prior to the interview, the researcher noticed some anxiety within the participants' as they started asking questions about the interview. So to prevent their anxiety, the interview schedule was given to them prior to the interview so that they knew what to expect.

Each lecturer's interview lasted for approximately one hour within which they shared their views on teaching strategies and how to accommodate students with learning challenges. However, the interview was not dependent on the time but merely dependant on the information that was given during the interview.

Three of the four interviews took place in the lecturers' classroom as this was the most convenient venue for them at the time. These interviews were recorded via a Dictaphone and transcribed later. However, 1 interview had to happen while running with the participant who is a running buddy as it was the only available time slot he

had to share his views on the teaching strategies. Once the run was over, the researcher and the participant met at a coffee shop to record the relevant data. All interviews were conducted in English.

During the interviews of two of the participants, the researcher noticed that the participants either did not answer the question or found that there were gaps in the answers that were given. The researcher then decided to probe so as to clarify responses given by participants that were not clear. The researcher noticed participants confused facial expressions which probed more questions to clarify their uncertainties.

The data was then gathered and analysed thematically. Thematic analysis is a widely used qualitative research method of analysis to analyse the data captured. Braun and Clarke (2006:79) indicate that this is a method used by researchers to analyse, define, and describe data. In addition, they define thematic analysis as "a method for identifying, analysing, and reporting patterns within data."

In the section that follows below, the researcher has attempted to put down the interview schedule with an attempt of analysing each question to let the readers understand exactly what the researcher intended to achieve through the question.

3.7.1.1.1 Interview schedule for lecturers

During the interviews, the researcher made use of semi-structured question as a guide to conduct interviews with participants. A total of 7 questions were designed to encourage participants to speak freely. Below is the question with an analysis of what each question strives to achieve.

Question 1. In your opinion, what kind of teaching and learning challenges do students with learning challenges in your classes, experience?

To find out if lecturers identify or are mindful of students who experience learning challenges in their classroom.

Question 2. What do you think of those challenges experienced by the students – what do you think causes their challenges, and how do the students deal with their challenges?

To find out if lecturers are empathetic and considerate of the possibility that there are students who struggle in class due to learning challenges.

Question 3. What teaching strategies do you currently use to teaching these students?

To find out if lecturers are educated on inclusive education and the use of appropriate teaching strategies.

Question 4. Are these teaching strategies you use, effective, or what challenges do you perhaps experience in teaching these students?

To find out if lecturers are being supported by the college and if they understand how to implement the correct teaching strategies for their students.

Question 5. What do you think, is the most appropriate or effective way or ways of teaching such students?

To find out if students are being supported by the college and if there are available resources to assist.

Question 6. What is your opinion can be done more, or different than what you are doing – what teaching strategies would be more effective for such students to overcome their challenges in learning and in teaching them?

To ascertain if the college plays an active role in the academic success of students.

Question 7. Do you have any further comments about this?

To find out if the lecturers have any added suggestions to assist in the academic success of students with learning challenges.

3.7.1.2 Advantages of conducting Interviews

According to Gay (1992:231), there are some advantages of using interviews as a data collection method:

- Questions of a personal nature would be appropriately answered using interviews as it allows for the interviewer to probe.
- The interviewer can adjust the questions of the interview to suit the circumstances of the interview.
- The interviewer can obtain reliable information as interviews allow the participants to enter into a trust relationship with the interviewer.
- The interview encourages accurate and honest responses from the participant as it allows the interviewer to explain questions and clarify the rationale of the research.
- The interview allows for probing questions on unclear or incomplete responses.

This encouraged the researcher to use in-depth interviews as it allows him to probe questions that encouraged the participants to open up about their experiences on teaching strategies and accommodating students with learning challenges. In addition, due to the flexibility of the interview, allowed the interviewer to adjust the questions to get relevant and rich information.

3.7.1.3 Disadvantages of conducting Interviews

Bailey (1994:175) indicates that interviews also have the following disadvantages:

- Interviews can encourage biased responses due to researchers' presence.
- An interview is lengthy and time-consuming.
- Interviews offer no assurance of anonymity to interviewees.
- In interviews, not everyone is expressive and insightful.
- If the participants are busy, it is difficult to get them to partake in an interview.

According to Corbetta (2003: 270), there are limitations to semi-structured interviews whereby the interviewer is free to conduct a conversation and ask probing questions in each topic using words he/she deems appropriate. Questions are asked for clarification, should an answer be unclear. The participant can be asked to explain or clarify further and establish his/her conversational style. In this study, to overcome the challenges in conducting interviews the researcher asked probing questions to achieve the desired responses from the participant. Participants were asked to clarify unclear answers. To prevent bias, the researcher asked participants to answer the question truthfully. Participants were not limited or pressurised with time during interviews as they were told that they may stop the interview at any time. The researcher attempted to be quite assertive but patient at times to try and encourage the participants to partake in the interview.

3.7.2 Observation

After interviewing the lecturers, classroom observations were done to verify what the lecturers said in their interviews matched their experiences and practices in the classroom. Creswell, (2012: 213) asserts that observation is "a process of gathering open-ended, first-hand information by observing people and places at a research site". He further notes that the activities that happen on the research site can also be captured by taking down field notes obtained through observation (Creswell, 2012: 217). In this study, a structured observation schedule was designed to find out if the lecturers implemented their teaching strategies mentioned in the interviews to accommodate students with learning challenges. The researcher took down field notes on what transpired in the classroom parallel to what was said in the interviews. Jorgensen (2010) suggests that an observation is a data collection method that verifies the information provided in an interviews session. This study used observation to

authenticate activities that featured during the interview schedule with the lecturers. In view of this, observation allowed the researcher to see participant's actual behaviour and how the students responded to this behaviour which is more reliable than the interviews.

During the classroom observation, the study paid special attention to the teaching strategies used to conduct their class lesson as well as the teaching resources that were available to align with the lecturers as well as the student's responses to these practices. The classroom observation lasted approximately 50 minutes. During the observation, the researcher tried to be early for the class as he wanted to see if the lecturers and students arrived on time or not and if the time was used maximally. Overall in the four observations made, students always appeared to be unsettled the first 10 minutes which became the duty of the lecturer to bring in peace for the class to take place. During the lessons, the researcher took down field notes on what transpired. The field notes were guided by an observation schedule which form part of the data captured under segment 3 in the data presentation chapter.

The study started with the semi-structured interviews first and then continued with the observation as it assisted the study in confirming what was said in the interview. After the classroom observation, the students were then interviewed to authenticate the information given by the lecturers in the interviews.

3.7.2.1 Advantages of Observation

According to Creswell (2012: 241), there are some advantages of using observation as a data collection method. They include:

- The participants' experiences are learned directly
- Able to capture information as it takes place
- During observation peculiar traits may be noticed
- Its beneficial to investigate topics that are uncomfortable for individuals.

In this study the observation afforded the researcher the opportunity to access an environment where social activities occur that is not generally seen by the public, as people do not experience these activities outside the classroom. In addition, DeMunck and Sobo (1998) argue that it provides the possibility to give rich, unique descriptions

where the social activities occur in the field notes and to view unplanned events, enhance understanding and develop inquiries to be requested by participants.

However, being a reliable tool, it has its disadvantages too as Jorgensen, (2010) explains that even though it is a reliable data collection tool, individuals feel awkward being watched and they may perform differently when being noticed. This may also encourage participants to temporarily do their work correctly when being watched.

3.7.2.2 Disadvantages of Observation

Creswell (2012:241) stipulates that observation also has its disadvantages and limitations as a method of collection data. Among the limitations are:

- The researcher can be viewed as an annoyance and or unwelcomed.
- Personal particulars or data might be discovered that the research is unable to report.
- May lack observation skills and attention to detail manifest
- Some participants' manifest with other influences that prohibits rapport.

In addition, DeMunck and Sobo (1998) suggest that researcher bias is a common limitation. The bias in this case may stem from the researchers' background of experience. The common sorts of bias include gender, culture and ideological that if not properly managed, may provide a filter for understanding the situation being studied. In light of this and to overcome these challenges, the researcher needed to acknowledge and be aware of his own bias and to put it aside in order to view data neutrally as well as to make accurate interpretations of what was being observed. The researcher made prior arrangements well in advance to guide the participants and to indicate that an observation would take place. The study created an observation schedule that guided the researcher on what to observe to assure that any form of bias was handled adequately. This would have assisted the researcher to outline in detail what was observed.

3.7.3 Semi-structured interviews with the student

After the observation was conducted, the researcher randomly selected students from the observed classes to interview. These interviews were not originally planned, however after transcribing and analysing the data collected from the interviews, the researcher came across similar answers during the whole process. Therefore, interviewing students was found to be useful to authenticate the views of the lecturers on the teaching strategies used in teaching.

These semi-structured interviews allowed the students to express themselves and allowed the researcher to get an additional view of the teaching strategies. During the observation, I found that there is a possibility that the lecturers can give a false reflection of what happens within the classroom therefore these additional interviews with the students gave the researcher an idea if lecturers are accommodating students with learning challenges. People are invariably affected by observation with which they prefer to present their best reflection of themselves. The researcher found that being watched, changed lecturers behaviour.

In addition, the student interviews allowed the student to share his/her experiences of the teaching strategies and if they are accommodated in the classroom. These interviews proved to be beneficial to the study in that they produced valuable information. A total of five students were interviewed and was conducted in person at the Open Learning Centre (OLC). These students were randomly selected from the classes that were observed. The interviews were conducted in English but were not recorded as they were merely used as an extra insight to assist the study.

A total of 6 questions were used to seek the perspective of the students. Below are the questions with an analysis of what each question intended to achieve.

Question 1. What is your experience as a student at the institution?

Are students satisfied with the service they receive at the college.

Question 2. What is your current experience as a student with the teaching strategies used in the classroom?

Are students finding the teaching strategies being used in the classroom assisting them in their academics.

Question 3. What do you expect from the college?

Are students getting assistance from the college and lecturers.

Question 4. Do you experience challenges and difficulties that deter you from achieving academic success?

Are students experiencing challenges at home or with travelling to college

Question 5. In your opinion are these challenges accommodated in the classroom?

Are the challenges they experience being noticed by the lecturer. Have they asked for assistance

Question 6. Do you have personal recommendations to lecturers on their teaching strategies that would assist them to make your current or future experiences better in the classroom?

What suggestions do students have that may assist lecturers better their learning experience

3.8 Data analysis

According to Creswell (2009: 184-189), he explains that a qualitative researcher collects qualitative data, analyses it for themes, and reports on identified themes. The themes are identified on recurring issues that were picked up through the field notes from interviews and the observations. The subsequent themes that were identified:

1. Poor infrastructure
2. Poor institutional management
3. Poor timetable management
4. Irrelevant teaching practices
5. Training of lecturers in inclusive practices
6. Training of under-qualified lecturers
7. Effective teaching practices
8. Socio-economic status
9. Student background
10. Academic preparedness
11. Unprepared lectured

After perusing and organising the information the researcher coded the data. Coding is depicted as gathering and accumulating text and images into categories. These

categories materialised into major findings in the study which was then coded. These codes were used to describe the views and experiences of the participants. According to Leedy and Ormrod (2005), data analysis entails the subsequent process:

1. To organize the case comprehensively
2. To sort out data in categorise
3. understanding of particular examples
4. To Identify a pattern in field notes
5. To generalize and integrate patterns

Due to the researcher not being completely pleased with the process proposed by Leedy and Ormrod (2005), he frequently made reference to the subsequent process to check if he was on the right path.

In this study, thematic analysis was used to arrange the qualitative data in logical order. Thematic analysis is described as breaking sentences and words up to try and interpret the data (Henning, 2004:127). This was done by placing it under fitting, distinctive headings which were interpreted. These interpretations were then used to describe and explain the participants' views and their experiences.

After analysing the data collected it was possible to determine the findings on what institutional support is available as well as teaching strategies suitable for teaching students with learning challenges.

3.9 Credibility and Trustworthiness

This study used a qualitative method approach to gather data for the study by collecting qualitative data. Creswell (2009:190-191) explains that by comparing the qualitative data with the codes we can ensure the trustworthiness and credibility of the study. By doing this, we ensure that we remain within the boundaries of the definition of the codes. In addition, Creswell, (2009) suggests that it is therefore beneficial that the codes be checked by other researchers. Cohen *et al.* (2000: 134) thinks that credibility and trustworthiness are important in a qualitative research study. The researcher must ensure authenticity of the study. Creswell (2009:190-191) believes that the trustworthiness of the study is ensured by utilizing thick, rich descriptions, collecting data by using different methods and investing more time in the field

collecting data. To get an in-depth understanding of the problem and more accurate findings for the study, the researcher should spend more time in the field Creswell (2009:192). In this study, the researcher compared the data with the codes and codes were checked by other researchers to establish the credibility of the study. The trustworthiness of the study was ensured by utilizing thick, rich descriptions, collecting data by using different methods and investing more time in the field collecting data.

To guarantee the validity and reliability of a qualitative study, data was collected using in-depth structured interviews as well as semi-structured observations.

Johnson and Christenson (2010:264) states that for research to be valid in a qualitative research approach, it has to be "plausible, credible, trustworthy, and therefore dependable."

Creswell (2009: 190) further postulate that in qualitative research there is a distinct difference in meaning between validity in a qualitative study and reliability in qualitative study. Qualitative validity requires the findings to be scrutinized, this is done by the researcher taking certain measures, such as using a consistent approach throughout the project by verifying the data repeatedly and by making sure information received by participants does not change. In addition, the researcher read the questions word for word as they appeared on the interview guide to affluence to the findings. By ensuring the research is trustworthy, the validity and reliability of the study can be achieved. The four standard principles for Quality research of in Shenton (2004) is addressed by the researcher. This ensured the trustworthiness of qualitative research:

(i) Credibility – If researcher can validate that the results can be confirmed by others, this promote the credibility of the findings (Shenton, 2004:64 -72).

The researcher:

-acquaint himself with the lecturers before leading the interviews by meeting with the lecturers (or emailing) who demonstrated that they are happy to participate in an interview.

-purposefully pick lecturers for the interview who will partake in the qualitative period of the study.

-guarantee the trustworthiness of the lecturers by urging the interviewees to be honesty and fair.

-will compare the researches findings with other similar research studies literature.

(ii) Transferability – To promote transferability the researcher needs to make sure that findings and conclusions apply to other situations and populations as well (Shenton, 2004: 69).

-Transferability was promoted by the provision of providing a basis on the investigated situation which enables the reader to create a subjective conclusion on the findings.

-Comparisons of current evidence will also be made.

(iii) Dependability - Shenton (2004:71) also says that the processes followed to collect data in the study should be reported descriptively as this will address the dependability or reliability of the data. Indicates that the procedures followed to collect information within the examine have to be suggested descriptively as this will deal with the dependability or reliability of the information

–This study will enable a future researcher to repeat this study as dependability refers to the extent to which a study will yield the same results if repeated.

(iv) Conformability - Shenton (2004) posits that it is the of the qualitative researcher's responsibility to ensure that the findings are the result of the participants' experience and should not reflect the characteristics and preferences of the researcher.

-The qualitative approach that was used by the researcher prohibited the effect of any false findings and affirm that the researcher remains clinical and neutral.

3.10 Researcher's position

During the interview with the relevant participants, the focus was on the lecturers and their experiences in dealing with students with learning challenges. According to Adler and Adler (1987), a researcher approaching the interview from the inside allows for acceptance by their participants as they would be more open to communicating since the participants feels a relationship between the researcher and him/herself. In addition, they indicate that this creates a positive outcome as the data captured would be in greater depth. Dwyer and Buckle (2009) in agreement indicate that an insider approach provides a level of trust and openness with the "participants that would likely not have been present in the study". In addition, they indicate that there is an assumption of understanding and shared distinctiveness whereas those looking at the study from an outsider perspective would not understand. Since the researcher shared

a variety of similarities with the study participants, the study was approached from an insider's position.

3.11 Ethical consideration

Prior to the data collection, the study obtained permission from each participant, the Cape Peninsula University of Technology(CPUT) as well as the TVET college where the participants are employed.

In view of the above, Creswell (2009) suggest that those who are participating in the investigation must give their consent as well as the participant's support. All the lecturers that were involved were notified and informed about all ethical issues when participating in this study, this included giving informed consent in writing by completing the informed consent form developed for this study (Addendum A), to participate in the investigation. It was confirmed that the participants participated willingly, and was clearly expressed that they have the right to revoke their participation at any point during the interview process. In addition, there was an indication of bias by the researcher as he works with the potential participants. To maintain the validity and trustworthiness of the study no lecturer was influenced or manipulated to give information and was asked to give honest answers at all times. Creswell, (2009:88-89) indicates that ethical dilemmas that may arise in the research should be anticipated and addressed by researchers. These issues emerge while indicating the research problem, the identification of the purpose statement and research questions, and also when collecting data and reviewing the outcomes. All participants in the study were assured that their confidentiality and anonymity would be maintained as no names were used to address a participant. Each participant that is interviewed was briefed.

3.12 Limitations to the study

Due to the COVID 19 pandemic, it created huge amounts of hesitancy in participants especially the participants over the age of 60 to participate in this study. There were numerous times that the researcher thought that the interviews or the observations would not take place as the participants were uncomfortable with interacting with the

researcher for fear of contracting the disease. Therefore, the researcher tried to assure these participants that the interviews would take place in a well-ventilated classroom or even outside of the classroom. In addition, the researcher assured them of his/her corona negative and the adherence to the corona virus procedures and protocols.

Time was a huge factor, mainly for the reason that the researcher was an insider because he/she had to balance his/her teaching time and research. For instance, with regards to the lecturer participants, the researcher had to target free periods and after class to hold interviews and also to remind the participants of data collection. Also in a few instances, the researcher used weekends to make appointments relying on the participants' availability.

Furthermore, the participants were hesitant and most of them had to be persuaded to meet for an interview. Most of the time the researcher and the participants would agree to an appropriate time slot for an interview but due to circumstances such as family responsibilities came as unforeseen and they would propose another date. In addition, some of the participants failed to answer the semi-structured questions, because they did not understand the questions posed to them. In this regard, the researcher was required to ask additional questions to the participant to obtain the relevant answers. Yet, out of all the pleading and now and again frustration, the researcher is pleased to say that in the end, he has afforded valuable data.

Due to the observations being done during a week before exams, the participants were busy with revision classes which was not an ideal situation to collect data. This caused procrastination among the participants as they were hesitant to assist. Fortunately, and with so much patience, the researcher managed to complete the observations planned and obtained the data needed for the study.

3.13 Conclusion

This chapter presented and elucidated the design and methodology that was used in this study, in addition, it gave clarity on the data collected and the procedures that were taken to ensure the trustworthiness of the study. The ethical procedures pertaining to the study and cooperation from the participants were discussed. The following chapter will explain the presentation of findings and analysis of the study

pertaining to the lecturer's views regarding their teaching strategies and the college support towards students who experience learning challenges at a TVET college.

Chapter 4

Presentation of data and analysis

4.1 Introduction

This chapter focuses on the presentation of the data collected from the TVET college lecturers and students on the challenges they encounter in their teaching and learning processes. In addition, it focuses on the teaching strategies that the lecturers use to accommodate students with learning challenges. A Qualitative approach was employed to gather data that was obtained from the interviews with lecturers and students, and observations. After gathering the data, it was thematically analysed in order to make sense of it and to understand the TVET college lecturers' experiences and practices with teaching methods. The data was coded and categorized under the following themes:

1. Poor infrastructure
2. Poor institutional management
3. Poor timetable management
4. Irrelevant teaching practices
5. Training of lecturers in inclusive practices
6. Training of under-qualified lecturers
7. Effective teaching practices
8. Socio-economic status
9. Student background
10. Academic preparedness
11. Unprepared lecturers

The themes that have been itemized above were suggested by the theoretical and epistemological underpinnings of this study and the researcher believes that this can support a better understanding the analysis. In this respect, the themes should therefore be seen as a pathfinder for the analysis. The above-numerated themes were originally suggested by the literature review and the data collected. Also in chapter 3,

mention was made of the consistency of probing in the instruments for data collection. This would be certified by the conspicuousness and inextricability of the themes with data. This relationship between themes with data would be dealt with in greater length in the discussion chapter (chapter 5).

4.2 Demographics of the participants in the interviews

This information was provided to capture the details of the participants while attention was drawn from their experiences in teaching students with learning challenges in a TVET college. Each participant's qualifications were precise while the institutions were not exhaustive. That was done to keep some information confidential and to protect the participants from being exposed. Pseudonyms were also used for the participants' names.

4.2.1 Participants background (Gender of the participants)

Participant	Gender
LECTURER 1	Male
LECTURER 2	Male
LECTURER 3	Female
LECTURER 4	Male

Table 1: The table above presents the gender of the lecturers

The table above indicates the number of participants interviewed in terms of gender. Out of the four participants, one of them were female and three were male. The researcher saw it fit to establish whether gender has any bearing on teaching strategies in accommodating students with learning challenges.

4.2.2 Participants Age (Age of the participants)

Participant	Age
LECTURER 1	50 years

LECTURER 2	57 years
LECTURER 3	39 years
LECTURER 4	60 years

Table 2: The table above presents the age of the lecturers

The table above indicates the number of participants interviewed in terms of age. Out of the four participants two of them were well experienced and rigid lecturers and two were younger enthusiastic lecturers. The researcher saw it fit to establish whether age and experience influence the teaching strategies in accommodating students with learning challenges.

4.2.3 Participants qualification

Participant	Qualification
LECTURER 1	ND(Building) , HDE,ACE (Education)
LECTURER 2	ND(Building), Trade (Carpentry), PGCE(Education)
LECTURER 3	(ICT), B.ED
LECTURER 4	Trade (Fitting & Machining)

Table 3: The table above indicates the qualifications of the lecturers

The table above indicates that out of the four participants interviewed, two participants (a male and a female) have higher qualifications in education, i.e. ACE certificate in education and B.Ed. respectively as well as a relevant academic qualification in the field of speciality. One senior participant has a PGCE qualification in education, Trade or workplace qualification as well as an academic qualification. The other senior participant only has a trade qualification.

4.2.4 Participants experience

Participant	Teaching experience in TVET
LECTURER 1	10 years

LECTURER 2	25 years
LECTURER 3	10 years
LECTURER 4	37 years

Table 4: The table above illustrates the lecturers teaching experience in TVET

The above table indicates that all the participants interviewed are experiences in teaching in TVET colleges. However, two participants are well experienced with more than 20 years of experience in the TVET sector.

4.3 Manner of presentation

This study used two tools for data collection to draw from the perceptions of the participants on the challenges they encounter in teaching as well as the strategies used to accommodate students with learning challenges. The main tools used for data collection were:

1. Interviews with lecturers
2. Interviews with students
3. Observation

The manner in which the presentation of the data was represented were depicted as segments in conjunction with the themes to show how they were harmonious as initially mirrored in chapters 2 and 3 as a vanguard. In view of this and for the purpose of being consistent and coherent in his data presentation, the researcher used the following data segments to illustrate the themes mentioned earlier in this chapter:

1. Data segment 1 (Interview with lecturers)
2. Data segment 2 (Interview with students)
3. Data segment 3 (Participant observation)

For the purpose of being consistent and coherent, the researcher used a minimum of 4 strands of data for lecturers and 5 strands of data for students to illustrate the segments above. The lecturers were labelled as Lecturers 1-4 and students were labelled as Student 1-4 who were randomly chosen after observation due to the researcher finding need to bring in the voice of the students. The data presentation follows below.

4.4 Poor infrastructure

The above-mentioned theme was identified from the literature review and interviews with lecturers as prominent in the study. The data captured from them was aimed at capturing the maintenance of facilities on the campus as it tends to create an impression on the TVET college management and the challenges students face due to poor infrastructure.

4.4.1 Data Segment 1: Interviews with Lecturers

The extracts below came from the transcripts of the data with the lecturers probed by the interview question 1.

Question 1: In your opinion, what kind of teaching and learning challenges do students with learning challenges in your classes, experience?

This question was posed to lecturers to find out if they identify challenges or are mindful of possible challenges' students experience at the institution or learning challenges in their classroom.

Lecture 1:

The institution is in a secure safe and secure neighbourhood. Students have problems coming to college most times. But I think that the college itself is not located in a travel-friendly area as there is no immediate transport facilities close by besides the trains. The majority of students use public transport to get to the institution. I understand that they must take two sometimes three taxis to get to the institutions. So most students

opt for taking the train but as we know that trains are altogether unreliable. Also, there has been one or two reported incidents that I know of at the train station not too far from the college. I think that incident alarmed management at the time, which created a lot of awareness at the college for students to walk in groups or try and travel in groups

Lecturer 2:

the facilities are terrible at the institution, we have very old and dilapidated toilet facilities for students which never gets upgraded. I think the way these toilets look now is the way they were when this college was a school many years ago. Also, I don't think there is enough toilet facilities for students as there is only two urinals that work the last time I went into the student's toilets.

Also, I think we have a huge problem with classroom facilities, it seems all classrooms get given to the occupational unit or gets rented out to other private institutions to host their training programmes at the institution. Not minding that the lecturers at the campus is struggling with space as our classrooms are too small for the number of students I have. I think many staff members her has a problem with overcrowded classes and I don't think management cares about it. It's always just about the numbers and don't give a damn about the quality.

Lecturer 3:

I feel that the college is selfish in spending money at the institution. There is always something that breaks and then it takes maintenance a very long time to fix things. For example, my aircon in my classroom has been broken for a long time now and just never gets sorted out. The students struggle in summer as the windows in my class cannot open. This class is very hot during summer, and don't think students can concentrate at all in a hot confined classroom that has no ventilation.

Lecturer 4:

I have been complaining about the windows in my classroom that does not open. I think a few years ago this matter was addressed in a staff meeting but nothing was ever done about it. Students is unable to work in condition like this. There is no ventilation in the classroom and I am pretty sure that this problem is common amongst most of the staff members here. I have addressed this with management a number of times but I don't think they care, because nothing gets done about it. I don't blame students for complaining or wanting to cut classes short

All four participants agree that there are infrastructure problems at the institution.

4.4.2 Data Segment 2: Interviews with students

The following are some of the responses from the transcripts of the data with the students probed by the interview question 1.

Question 1. What is your experience as a student at the institution?

The above question was posed to students to probe whether students are satisfied with the service they receive at the college and to find out if students experience challenges at the institution.

Student 1:

The college is nice; they make a new paint job in the beginning of the year yes. They redo the roof also, because it was bad here in winter the classrooms leak. But the toilet is not nice, toilet is always dirty yes. Also classrooms are not clean all the time. But I think its students, they eat in class and they leave the paper there on the desk or on the floor.

Student 2:

I would like the college to implement more practical training at the college. There are workshops available that are not utilized. This will help us understand things better. Mr…. takes us on the field to show us the different brick patterns that we do in class. This I think is very helpful. If we could only do this with all our subjects.

Student 3:

Sir with the COVID 19 pandemic I feel that the college does not have enough ventilation in the classroom at the classroom in Room 61 all the windows cannot open. They are all riveted closed.

Student 4:

The college is not transparent with us when it comes to COVID 19. Last week there was a lecturer that had COVID and we only found out the next week. He was teaching us that whole week. There is no ventilation in the classrooms and some of the classes are damaged or not maintained well. I think the teachers must be stricter with the students.

All participants are consistent with their view of poor infrastructure.

4.4.3 Data Segment 3: Observation

The following data was generated from my field notes based on the observation of the TVET college with regard to the poor infrastructure.

Upon entering this institution, the campus is easy on the eye as there is no dilapidated building around the campus. The campus appears to have been recently painted and the roof of the building has been recently done. Most of the students coming to this campus take public transport even though the campus is not close to any main roads. The campus is however close to the train station but due to the current circumstances of PRASA's infrastructure damage, this line is closed.

Open entering the classrooms for observation, there appear to be strict COVID 19 protocols in place as there are sanitisers at the entrance door for students to practice safe protocols, in addition, the campus manager walks around campus reminding staff and students to wear their masks during college time.

Each classroom has a relatively average number of students attending class, so during the observations, there were no overcrowded classrooms. Each classroom is fitted with relatively advanced smartboards which are used as teaching aids by the lecturers. During one of the observations, a student was asked to excuse himself from the class and accidentally closed the door with which the door could not reopen as there was no handle on the. This door was eventually opened by a student using a pair of scissors. In addition, I did also experience poor ventilation in a classroom with which the lecturer indicated that most of these windows are riveted shut.

During this observation, the poor ventilation is a matter of concern during these times of the COVID 19 pandemic as there is no fresh air that circulates.

4.5 Poor institutional management

The second consistent theme dictated by the literature review as well as the data collected from the interviews with the lecturers is poor institutional management.

4.5.1 Data Segment 1: Interviews with Lecturers

The extracts below came from the transcripts of the data with the lecturers probed by the interview question 1.

Question 1: In your opinion, what kind of teaching and learning challenges do students with learning challenges in your classes, experience?

This question was posed to lecturers to find out if they identify challenges or are mindful of possible challenges' students who experience at the institution or learning challenges in their classroom.

Lecturer 1:

I find that there is a big discrepancy in the way the management runs the campus. There is no transparency between management and lecturers. I am a person that likes things done on time, don't ask me on the last minute that you need this or that. This is what management does to us. I'm sure that they know long in advance what is expected of them and what they need from us as lecturers.

Lecturer 2:

I am a team player; I enjoy working as a team. But there are a few members of our staff that does not feel that teamwork is necessary. I think that this is supposed to be dealt with by management but does not get addressed at all.

Lecturer 3:

Every trimester I have to deal with students not being allocated textbooks. Students cannot study or learn without textbooks. This is an ongoing problem that just does not get solved. Students struggle to adapt to the lesson during class and it also causes unnecessary work for me as I need to try and make photo copies all the time.

Lecturer 4:

The student support office is open one day of the week. How do we expect students to receive assistance from the institution? The college does not assist hungry students; other institutions have feeding schemes through the students support office. A hungry student will never be able to concentrate or learn.

In light of the above comments, the lecturers indicate various institutional problems which suggest poor management.

4.5.2 Data Segment 2: Interviews with students

The following are some of the responses from the transcripts of the data with the students probed by the interview question 1.

Question 1. What is your experience as a student at the institution?

The above question was posed to students to probe whether students are satisfied with the service they receive at the college and to find out if students experience challenges at the institution.

Student 1:

Why at this institution must I buy textbooks? At other institutions, they get textbooks for free. They get all the drawing equipment and calculator. Here, I must pay.

Student 2:

The college by far has the worst administration department. These ladies do not know how to speak to us. They are so rude towards students. One of the students was telling me that she actually cried after one of the admin ladies was screaming at her. We don't get any proper assistance from the administration. I was am more worried about whether my registration has been sorted out, otherwise, I will not get resulted.

Student 3:

…… also I have a big problem with the way the administration deals with the student. I know students are scared to go to enquire about anything at the admin.

Student 4:

…. two occasions that I did not get resulted. I spoke to the admin lady a few times that trimester to make sure that my registration was correct. Every time she sends me away to come back later. Afterwards, I found out that I was not registered properly. This

wasted my time at the college because I had to redo subjects again. I don't have money to redo.

From the above comment, it is evident that most students have difficulty with the administration at the institution. It further indicates that it created emotional despair among the students as they struggle to get assisted administratively by the college. In addition, one student claims and questions why the administration processes are different in other colleges as they are supposed to be consistent across all institutions. These challenges can be due to poor institutional management.

4.5.3 Data Segment 3: Participant Observation

The following data came from my field notes based on my observation of the TVET college concerning poor institutional management of the TVET institution.

During my observation, I managed to converse with a few senior managements, curriculum advisors and lecturers to get a holistic idea of the way the lecturing staff experience support from management. It is evident that lecturers lack an immense amount of teamwork amongst each other as there is no communication and no sense of togetherness. From an insider perspective, this lack of communication extends to poor communication from the senior management, which unfortunately results in poor service from the lecturer. I have also observed that most students don't have textbooks for the various subjects they registered for. This creates a difficult teaching experience for lecturers as they struggle to get students to participate in class. It appears that there is a delay in ordering textbooks from the senior management level. In addition to this, I also observed that lecturers experience curriculum challenges based on individual subjects. Most of these curriculums has never been updated. This challenge stems from the Department of Higher Education and Training (DHET). In addition, students struggle to consume the knowledge brought forward by the lecturer because of this misalignment. However, from an insider perspective, there are many ways to improve this misalignment that students experience but are ignored by curriculum advisors and senior management of the college.

Poor administration assists from this campus frontline staff seem to be evident as, on my way to observation, I passed by the administration where staff are rather unaccommodating and rude towards students. The student then asked me if I could assist as he is afraid of going back to the administrative staff for assistance. If the students are not being supported or accommodated administratively many underlying administrative issues pop up which affect daily campus activities negatively. This suggests that management does not monitor observe the day to day activities of the administration staff.

4.6 Poor Time table management

The following data extracts based on literature review and interviews with lecturers and students provided realistic evidence on poor timetable management that affects student ability to achieve academic success.

4.6.1 Data Segment 1: Interviews with Lecturers

The extracts below came from the transcripts of the data with the lecturers probed by the interview question 1.

Question 1: In your opinion, what kind of teaching and learning challenges do students with learning challenges in your classes, experience?

This question was posed to lecturers to find out if they identify challenges or are mindful of possible challenges' students who experience at the institution or learning challenges in their classroom.

Lecturer 1:

the college timetable is always a delay. There are some trimesters that we need to start the trimester a lot later due to results that do not come out on time. This affect the time frame students have to complete the trimester. Very little students have the

69

ability to complete a syllabus or able to understand the work done in such a short period of time.

Lecturer 2:

The staff does not work together to conform. The Mechanical department is supposed to work with the building department regarding the timetable. There always seems to be a clash with the timetable, where staff members complain about using classrooms. Sometimes there are clashes where two lecturers are assigned to one classroom. This causes a disruption for students. Sometimes I must let my students go work in the library, therefore they are missing on valuable teaching time.

Lecturer 3:

…. the timetable is always a problem. Sometimes I have to change times or the day when students will have class or when they will write a test. Some students are not happy with this as they have made arrangements' with their workplace to be in class. There are students at the college that have external responsibilities.

Lecturer 4:

I don't get an administration period to catch up on some admin work. We have a lot of administration work to complete before the end of the trimester. I sometimes have to forfeit a period during the week and let students work on their own so that I can do my absentees or marking.

In view of the above comments, the participants experience difficulty with the design of the timetable which plays a vital part in their day.

4.6.2 Data Segment 2: Interviews with Students

The extracts below came from the transcripts of the data with the students probed by the interview question 1.

Question 1. What is your experience as a student at the institution?

The above question was posed to students to probe whether students are satisfied with the service they receive at the college and to find out if students experience challenges at the institution.

Student 1:

…. the timetable is very confusing. When I came here in N4, I didn't know where I needed to be in class. Nobody explains it to me, I wasn't sure if I was in group A or group B. I just follow the class. Sometimes I sit here the whole day and there is no class.

Student 2:

…. the staff do not communicate when there is no class. I travel from far just to come to college and find that the timetable has changed. I don't think it's right as I wasted my mother's travel money.

Student 3:

Some lecturers do not respect other lecturers time slots. They tend to teach over the time allocated. Not all students do all 4 subjects so when we get to class, time is wasted waiting for the rest of the class to come before the lecturer can start.

Student 4:

For some students, we have to attend an academic support class because we did not perform academically. But the timetable is never aligned. I sometimes miss another

class to attend an academic support class. In that case, I will always be behind with work.

The above data from the student's interviews indicate ill-discipline from the lecturers regarding the timetable.

4.6.3 Data Segment 3: Participant Observation

The following data came from my field notes based on my observation of the TVET college concerning poor timetable management from management at the TVET institution. It also included comments made in classes the researcher visited.

A well-designed timetable plays an important role in the successful running of day-to-day class activities. During an observation in class, I witnessed students standing outside of their classroom which disrupted classes around. Based on students in the class it is common for the timetable to be incorrect and that it creates confusion among them.

4.7 Training of lecturers in inclusive practices

Another area where the participants raised concerns about was lecturer's ability to manage inclusivity. Below is data to vocalise both lecturers' and student's opinions about this theme.

4.7.1 Data Segment 1: Interviews with Lecturers

The following are some of the responses from the transcripts of the data with the lecturers probed by the interview question 3.

Question 3: What teaching strategies do you currently use to teaching these students?

The above question initiated data so to find out if lecturers are educated or need to be educated on inclusive education and the use of appropriate teaching strategies in the classroom.

Lecturer 1:

….. very few are able to accommodate these types of students. I show students short subject related videos that assist them in their understanding. Also during some lessons, I take the students to the workshop to show them the components they learn in class. They love it!

Lecturer 2:

……when students participate in class it creates constructive learning. I think the students like it when there is a constructive debate in class about the work, so I try to create debates like that in class.

Lecturer 3:

I encourage participation in class, I sometimes let students explain by writing notes on the whiteboard.

Lecturer 4:

……. the use of peer groups where students can tap into their peers' knowledge of the work to get a better understanding or catch up with work missed. In most cases, this works as I find students are caught up and understand the work by almost 70% better.

The data above indicate that lecturers are aware that various teaching methods need to be used to accommodate students especially those with learning challenges.

4.7.2 Data Segment 2: Interviews with students

The extracts below came from the transcripts of the data with the students probed by the interview question 2 which focused on training of lecturers in inclusive practices.

Question 2: What is your current experience as a student with the teaching strategies used in the classroom?

The above question was pose to students to find out if the teaching strategies being used in the classroom assists them in their academics.

Student 1:

……of the lecturers don't explain very nicely. Sometimes I leave the class not knowing what is going on. I feel sometimes the lecturers are just not understanding at all. When I ask them to explain again.

Student 2:

The lecturer doesn't even give an introduction in the lesson he just expects us to know what is going on in class. I never did this work before.

Student 3:

I like Mr X he has a nice way of teaching and he is very considerate he takes us to workshops and shows us what the materials look like, but I think some students take advantage of his goodness. He always asks if you are ok and if there is anything that we need to talk to him about, we should speak to him.

Student 4:

….at times I can't concentrate in class. I'm hungry, sometimes I don't eat in the evening or in the morning. When the teacher is teaching I'm having difficulty understanding.

Student 5:

….. yes, I was at the student support office but a lot of the time she is not there. I speak to her about my problems with lecturers because I don't understand. …… lecturer speaks too fast and other teachers always give homework. I don't have a place at home to do homework. I don't have a table or equipment.

The above extracts from students indicates the challenges students experience on campus.

4.7.3 Data Segment 3: Participant Observation

The following data came from my field notes based on my observation of the TVET college with regard to the training of lectures in inclusive practices at the TVET institution. They were based principally on the researcher observation and some remarks made by lecturers and students as well as comments made in the class the researcher visited.

There seems to be a need for lecturers to understand the challenges students face in their personal lives in which requires lecturers to be equipped with the necessary skill and knowledge. Based on the observation in classes I think that the background of lecturers is a contributory factor as they require empathy with students' challenges. Lecturers have good academic knowledge of their subject matter but not have the knowledge or competency in teaching students with learning challenges. During class lecturers use creative ways in which they try and accommodate students in their academic success, however, they appear to be set in teacher centred approaches. However, time is also a factor as one period lasts 50min.

Lecturers are too hasty in completing the chapter for the day in which their pronunciation of words is not clear. Students appear to be isolated and divided in class due to lecturers continuously requesting the academically strong to answer questions. In addition, the lecturer doesn't allow students time to grasp the lesson that was just taught as he/she does not pause to allow for a class discussion. Most lecturers try and force participation from students as some of them appear disorientated or unaware of their surroundings'.

A number of students are absent or arrive late for class. Students that arrive late are reprimanded, because of time constraints, these students miss parts of the lesson but no accommodation is suggested in order for them to catch up.

4.8 Training of under-qualified lecturers

The following theme provides extracts based on literature review and interviews on the importance of teacher qualification training for lecturers. The data also shows the impact teaching approaches has on students.

4.8.1 Data Segment 1: Interviews with Lecturers

The extracts below came from the transcripts of the data with the lecturers probed by the interview question 4.

Question 4   Are these teaching strategies you use, effective, or what challenges do you perhaps experience in teaching these students?

This question above was posed to lecturers to find out if lecturers are being supported by the college and if they understand how to implement the correct teaching strategies that best suits their students' needs.

Lecturer 1:

…….. I'm not trained in inclusive practices; the college needs to send us for training courses so that we are able to deal with such students." "…. We find that lecturers are appointed with no teachers' qualifications. To be honest they know nothing about teaching. I don't think there is a proper recruitment process.

Lecturer 2:

…… I'm not a qualified educational psychologist to diagnose specific learning challenges but for these students, I send them to the student support staff. I wait on the results of any appropriate intervention strategies.   …. but never get a response from them. The college must send us for training workshops instead of workshops that we know nothing about and that will never be of any use to us in the classroom situation.

Lecturer 3:

Often students are late or absent from class and miss out on work and fall behind, therefore I often encourage collaborative teaching where these types of students are then able to use their peers to catch up on work missed. In most cases, this works as I find students are caught up by most of their work. I do what I can, sometimes as I am not sure how will help the student.

Lecturer 4:

Every student has a different ability in the classroom, so pairing an academically strong student with others creates a tremendous amount of support as there are times I am unable to give every student individual attention. There is just not enough time in the trimester to finish the syllabus.

In view of the comments above, it is evident that lecturers feel they are not trained well enough to accommodate students with challenges.

4.8.2 Data Segment 2: Interviews with student

The extracts below came from the transcripts of the data with the students probed by the interview question 4.

Question 4. Do you experience challenges and difficulties that deter you from achieving academic success?

This question was posed to students to initiate whether they experiencing challenges at home or with travelling to college that affects their ability to succeed academically.

Student 1:

new lecturers struggle in class, sometime the students tease them because he is new. We struggle because there is a new lecturer that comes in to teach in the other lecturers' place. But we don't learn anything from her.

Student 2:

the teacher does not know how to explain the work to us. But most times we understand when we help each other, He has a lot of experience in the industry, but that does not always help us. He just reads from the book all the time

Students 3:

the lecturer teachers from the question paper. He never explains things out of the book. He gets the memo and reads the answers to us.

Students 4:

I am always late for college. The lecturer does not understand when I explain that I don't have money to take a bus. I can only take a bus to college after 8 am because it is cheaper. Then I get to college at 9 am.

78

Student 5:

I must work, to pay for food in the house. In the morning I must take my brother to school. Sometimes I can't come to college because I'm tired.

The data above indicates that students have different abilities and that their personal lives take preference over their studies.

4.8.3 Data Segment 3: Participant Observation

In this segment, most of the data was collected through observation and the field notes collected at the TVET institution.

All of the lecturers observed are academically qualified and have good background knowledge on the subjects being taught. However, it is evident in one lecturer that he has poor teaching practice and inadequate lesson preparation. These deficiencies caused a poor learning experience for students and therefore promoted misconduct in the classroom as students started having their little conversations that had nothing to do with what's happening in class. However, the lecturers do promote support for students and a friendly classroom atmosphere.

4.9 Effective teaching practices

This following theme was extracted from the literature review as well as interviews from lecturers providing data on the use of effective teaching practices for students with learning challenges.

4.9.1 Data Segment 1: Interviews with Lecturers

The following are some of the extracts that came from the transcripts of the data with the lecturers probed by the interview question 5.

Question 5: What do you think, is the most appropriate or effective way or ways of teaching such students?

The above question is posed to lecturers to find out if students are being supported by lecturers and the college and if there are available resources to assist these students to achieve academics success.

Lecturer 1:

Our students don't have access to a laptop or the internet at home. Some students don't even have a smartphone. So my solution is to issue workbooks with lesson slides and lots of question and answer exercises and problem-solving tasks. I find this is essential and brings along a better understanding of theoretical concepts and accommodates these students who do not have resources.

Lecturer 2:

Every student has a different ability in the classroom, so pairing an academically strong student with others creates a tremendous amount of support as there are times I am unable to give every student individual attention. There is just not enough time in the trimester.

Lecturer 3:

I often encourage productive talk in my classroom, even when students use their home language to explain to one another as they are better able to relate and express themselves. However, one has to ask the student to recall in the medium of instruction to determine the level of understanding, as students cannot always manage all the details. I encourage active learning strategies and teaching techniques that increase student engagement in daily lessons and on the internet platforms.

Lecturer 4:

I keep my students active because I know they are experiencing problems. So I would go to them and physically aid them by demonstrating then ask 'did you understand?' in order to get feedback from the students. I try to explain to him again because I want him/her to be competent. I tell them that there is no other option but to pass. I want them to have a sense of belonging, I want them to feel that they belong in this class. You belong in this class.

The data portrays that students encounter learning challenges.

4.9.2 Data Segment 2: Interviews with students

The extracts below came from the transcripts of the data with the students probed by the interview question 6.

Question 6. Do you have personal recommendations to lecturers on their teaching strategies that would assist them to make your current or future experiences better in the classroom?

The above question was posed to students to find out what suggestions do students have that may assist lecturers better their learning experience.

Student 1:

I would like it if lecturers can take us to the workshops more often. I think lots of students like doing practicals. Most of the students cannot understand the work in class.

Student 2:

Lecturers must show more videos so we can see what they are talking about in class.

Students 3:

I think the syllabus must be updated, the lecturers are teaching irrelevant work to us. The material in the textbooks is very old. One day I saw a syllabus that was last updated in 1976. We are using more advanced strategies in the industry.

Student 4:

I would like the lecturer to be more positive and try and encourage students. I think lectures are lacking this in class.

Students 5:

Lecturers are rushing to get the syllabus done. I think they must not rush and speak slower so that we can understand.

Just like the lecturers, students are aware of learning challenges.

4.9.3 Data Segment 3: Participant Observation

Lecturers are aware of the needs of students with learning challenges. The lecturers are using a variety of teaching resources and teaching methods to accommodate these students. It appears that lecturers are flexible with most students. Teaching resources are a challenge at the institution as students have challenges obtaining textbooks. Lecturers improvised as they used electronic textbooks in class. For some students written work by the lecturer seemed to present a challenge. The lecturer had to adjust his teaching methods in order to accommodate the student. The lecturer also used various visual aids like videos to stimulate class discussion. This also aided student understanding which allowed them to contribute their opinion on the subject matter.

4.10 Socio-economic status

The above mentioned theme was prominent in the literature review and interviews of the study. The data raised concerns about the socio economic status of the student and how it affects student learning. Below is data aimed at providing evidence on the effects that the socio economic status has on students' academic success.

4.10.1 Data Segment 1: Interviews with Lecturers

The extracts below came from the transcripts of the data with the lecturers probed by the interview question 2.

Question 2: What do you think of those challenges experienced by the students – what do you think causes their challenges, and how do the students deal with their own challenges?

This question was posed to lecturers to find out if they are empathetic and considerate of the possibility that there are students who struggle in class due to learning challenges.

Lecturer 1:

I don't think students get much support from family and they may not understand it themselves to be able to deal with the challenge themselves.

Lecturer 2:

Student challenges have been completely ignored from primary school and parents would also ignore that there is a possible challenge or that their children suffer due to the areas they live in. I am not qualified to diagnose learning challenges but most students come from areas where very little care is given to students. Students grow up in an area where there is an influx of gangsterism and drugs.

Lecturer 3:

Students have socio-economic problems as a lot of our students come from poor backgrounds where parents' cannot afford their children studies. They don't have the necessary resources at home that could assist them. Like the internet, computers/laptops, emotional or financial support from parents or guardians. Some of these students go sleep with an empty stomach.

Lecturer 4:

Learners experience and live in isolation for most of their lives and the sad thing is that they have been living like this from a young age. These learners know how to duck and dive from their situation.

The data above clearly indicate that lecturers understand that students come to class with various socio-economic challenges.

4.10.2 Data Segment 2: Interviews with students

The following are some of the responses that came from the transcripts of the data with the students probed by the interview question 4.

Question 4. Do you experience challenges and difficulties that deter you from achieving academic success?

This question was posed to students to initiate whether they experiencing challenges at home or with travelling to college that affects their ability to succeed academically.

Student 1:

I have to work so I can feed me and my brother every day. We don't have parents to help us. My parents' died a long time ago so I don't have support. I don't have money to come to school or for fees.

Student 2:

Sometimes I can't come to school because of the gangsterism in our area. The gangsters shoot you even if you just walking down the street. They run through our houses like it's a battlefield. They killed my brother.

Student 3:

We don't have money sir, we don't have food, sometimes we cannot buy electricity in the house so I cannot do homework. I must sometimes sit with a candle. When I come to school sometimes I am very hungry I cannot think.

Student 4:

My parents' are divorced, and I live with my mother but on a regular basis my mother goes to work overseas and I must stay at home alone. My father does not come and look after me so most times my grandfather comes to look after me.

Student 5:

I have difficulty coming to college most days as I must travel. There is no trains and I must take too many taxies to get to college. When I take a taxi it's very early in the morning and I will get robbed. They already took my phone and school bag twice. Sometimes I come to the taxi rank, then there is a taxi violence and they shooting at taxi drivers.

It is evident from the data above that students' experience socio-economic challenges that affect their everyday lives.

4.10.3 Data Segment 3: Observation

Students socio economic status affect them at this college. This learning challenge emanates from the students are present at this institution. During one of the

unpredicted conversations with students during the observation, it is evident that the students are disadvantaged by their socio-economic status.

 These comments below should not be taken as a word for word transcriptions but merely an approximation of the students' views. The students present himself with financial, emotional and psychological challenges as he struggles to pay his tuition at the institution. It is this student first time at the institution and he was not successful in obtaining an NSFAS bursary. In addition, the student comes from a poor socio-economic area where gangsterism and drugs are rife and dominates the streets on a regular basis. There are times that they are unable to leave their homes due to the dangers that may occur. This causes psychological problems as they fear for their lives therefore unable to come to college.

All the three segments provide enough evidence that students have various socio-economic problems that need to be considered to create an effective learning environment in the classroom.

4.11 Student background

Student background was a prominent theme from the literature and interviews regarding student environment and background. The responses from interviews with lecturers and students explain the theme of student background.

4.11.1 Data Segment 1: Interviews with Lecturers

The extracts below came from the transcripts of the data with the lecturers probed by the interview question 2.

Question 2: What do you think of those challenges experienced by the students – what do you think causes their challenges, and how do the students deal with their own challenges?

This question was posed to lecturers to find out if they are empathetic and considerate of the possibility that there are students who struggle in class due to learning challenges.

Lecturer 1:

Students challenges stem from an early age already. They did not have support in primary schools and in some cases in my experience, students were not taught well or given the basics. Therefore, as they grow they struggle throughout their academic career.

Lecturer 2:

Some students had learning barriers from a young age and their parents did not recognize it or could not afford send them for proper care. Students in my class cannot read, write and spell correctly.

Lecturer 3:

Some students come from poor families that cannot support their children. Therefore, grow up having a poor education background.

Lecturer 4:

Some students come out of good homes but have major lack in parental guidance. Some of these parents' spoil their children by just giving them what they want. This gives the student the impression that he/she does not have to work to succeed in anything. He/she will just get it from his parents.

From the data above provided by lecturers it is evident that students at the institution have various socioeconomic statuses.

4.11.2 Data Segment 2: Interviews with Students

The extracts below came from the transcripts of the data with the students probed by the interview question 4.

Question 4. Do you experience challenges and difficulties that deter you from achieving academic success?

This question was posed to students to initiate whether they experiencing challenges at home or with travelling to college that affects their ability to succeed academically.

Student 1:

I did not have good results at the end of grade 11, so the college put me in the NCV programme. I finished up till level 4. But now I'm struggling in the N4 because I did not do the work that is being taught.

Student 2:

I'm struggling to cope with the NATED programme. It feels as if the teacher is not teaching us the work that we must know. I finished my grade 12, but it feels as if I am going backwards.

Student 3:

I have never done drawings on school. Now I must do it in N4 and I don't know how. I'm struggling, I'm trying to work with some of my college students.

Student 4:

Some of the teachers at the college don't realise that some of the work that we do in class, we have never done on school.

Student 5:

In school, we did not have a choice but to do Mathematics Literacy as a subject. Here at College, we are just using pure Mathematics and the last time I did it was in grade 9.

The data above from the students indicate that they experience learning challenges due to poor academic background.

4.11.3 Data Segment 3: Observation

Students were very slow in consuming the lesson taught by the lecturer, simply because of their poor academic background in prior levels. Some students also appeared to have low motivation to be in class. In addition, some students appear undernourished and using narcotic substances as the smell of cannabis was present on some of them. This could also cause poor academic performance in class. During a class, the lecturer had given the students some homework in preparation for the day's activities. Most of the students came to class unprepared in which they used various excuses when trying to explain to the lecturer why the work was not done. Most of these students appeared to be jovial in the matter as a few of them laughed and misbehaved. The lecturer responded to this behaviour with huge frustration, in which he started expressing his disappointment and the students' low standard of expectation they have of their education. Students misbehaviour in class can become overwhelming to the lecturer as they attempt to draw attention away from their work.

4.12 Unpreparedness of lecturers

The following theme on the unpreparedness of lecturers in which data was extracted from the lecturer's and students' interviews, provided realistic evidence on the role that the unpreparedness of lecturers plays as a learning challenge for students.

4.12.1 Data Segment 1: Interviews with Lecturers

The following are extracts from the transcripts of the data with the lecturers probed by the interview question 2.

Question 2: What do you think of those challenges experienced by the students – what do you think causes their challenges, and how do the students deal with their own challenges?

This question was posed to lecturers to find out if they are empathetic and considerate of the possibility that there are students who struggle in class due to learning challenges.

Lecturer 1:

I feel that there are teachers that are lazy and have no enthusiasm for teaching. Some of them just do what they are supposed to for the day and wait for the paycheck at the end of the month. Sometimes this can be related to family problems at home, where they cannot concentrate at college.

Lecturer 2:

Lecturers do not prepare sufficiently before they come into the classroom. These lessons are just read from a text book which creates no excitement for students.

Lecturer 3:

TVET colleges are meant to help students to create employment for themselves. But we have staff members who don't realize that the content we feed our students has a direct implication on the way they work in the industry. What I'm saying that we should not be teaching students from question papers as this creates a limit to the knowledge the students receive.

Lecturer 4:

Lecturers who are fresh out of university. They have no experience in teaching at all. We have one colleague that I am trying to assist now and she is struggling to bring the lesson across to the students.

Given the lecturers' comments above, it is evident that some lecturers are unprepared when teaching students at the TVET college.

4.12.2 Data Segment 2: Interviews with Students

The following are extracts that came from the transcripts of the data with the students probed by the interview question 2.

Question 2. What is your current experience as a student with the teaching strategies used in the classroom?

The above question was pose to students to find out if the teaching strategies being used in the classroom assists them in their academics.

Student 1:

Lecturers don't follow the right timetable. Sometimes I'm not sure if it has changed, but lecturers say that they had class beforehand or after the period that we supposed to have class. Most times I think lecturers arrive late for class then change the timetable.

Student 2:

I think that some lecturers don't plan their lessons like they are supposed to. Also, some of them give us added irrelevant material that makes us more confused at the end of the lesson.

Student 3:

I think there are lecturers that are struggling financially. They are just teaching to put food on the table. This might lead to lecturers giving unprepared lessons as they come to class not knowing where to start.

Student 4:

Lecturers teach certain topics without teaching aids and this results to most of us students not understanding the topic in discussion. Most times its due to their resources not working from time to time. This takes up time from our lesson. But if lecturers were prepared they would be able to make other arrangements for teaching aids.

Student 5:

The COVID 19 created a high rate of absenteeism in the college. This leaves us with nowhere to go sometimes we are sent to other lecturers to be looked after, but we are left to work on our own.

It is evident from the data above that students are affected by lecturers who ill-prepared for class.

4.12.3 Data Segment 3: Observation

Most lecturers were well prepared for their lessons and were on time for class. However, there was one lecturer that came 12 minutes late for class. This was a clear indication that the lecturer was unprepared for his lesson and had no regard for the timetable. This behaviour indicates no discipline by the lecturer. During the class lesson, the lecturer then takes out a textbook and starts teaching. This textbook was not shared with the students, as a result, the students appear confused and demotivated. After reading from the textbook the lecturer takes out two question

papers with marking guidelines and places it on the projector for students to see and starts reading the questions to students for them to answer.

This observation showed that the lecturer was not well prepared for his lesson and used poor academic teaching practices. In addition, it showed poor regard for the timetable set by management. However, this was not the case for the rest of the observed lecturers' punctuality as good teaching practices was key. One of the lecturers did indicate that they have a big workload across all their subjects, and this makes planning very difficult.

4.13 Irrelevant teaching practice

The above-mentioned theme was identified from the literature review and interviews with lecturers as prominent in the study. The data captured from them was aimed at capturing the teaching practices used in the classroom and whether they are appropriate in order to accommodate students who experience challenges.

4.13.1 Data Segment 1: Interviews with Lecturers

The following data from the interviews with lecturers and students provide evidence that the use of irrelevant teaching practices is a deterrence in the academic success of students, especially those with learning challenges came from the transcripts of the data with the lecturers probed by the interview question 2.

Question 2: What do you think of those challenges experienced by the students – what do you think causes their challenges, and how do the students deal with their own challenges?

This question was posed to lecturers to find out if they are empathetic and considerate of the possibility that there are students who struggle in class due to learning challenges.

Lecturer 1:

It is important that lecturers try and use new relevant teaching methods so that we can focus on the quality of teaching and not the quantity. This helps lecturers understand learning through the eyes of the students. I believe that lecturers do not teach with clarity especially with the different cultural students we have. This can somewhat be very confusing for students and created a huge learning challenge.

Lecturer 2:

…. I have been teaching with chalk and a blackboard for almost 30 years and it has been very successful. But the students of today are just very lazy to work…..i would call it a traditional way of teaching because when I teach, students must listen to me, otherwise, they will not understand. If there is a time at the end of the lesson, we can have discussions around the work.

Lecturers 3:

I find that communicating to colleagues around the relevant teaching practices can be good practice as there are lecturers that are none the wiser. This could help lecturers especially new staff with improving their teaching methods and aiding students with their academics.

Lecturer 4:

I find that due to time constraints at a TVET college many lecturers fail to give students proper feedback on assessments and lessons. Students would need to know if they are moving forward. I think it is equally important for students to give feedback as it would aid the lecturer to adjust his/her learning material or teaching methods.

The data above indicates that lecturers are unaware that they are using irrelevant teaching practices in the classroom. The evidence shows that some lecturers are obstinate in their teaching methods which leads to lecturers neglecting common and

important practices. Communication, time and feedback are three shortages indicated by lecturers. This would aid lecturers' in making use of good practices.

4.13.2 Data Segment 2: Interviews with Students

The extracts below came from the transcripts of the data with the students probed by the interview question 2.

Question 2. What is your current experience as a student with the teaching strategies used in the classroom?

The above question was pose to students to find out if the teaching strategies being used in the classroom assists them in their academics.

Student 1:

After a lesson, it is difficult to know whether we are understanding the work or not as it seems lecturers assume that we understand. Lecturers fail to give relevant feedback after we come with the homework that was given.

Student 2:

Lecturers do not give us time to wrap our heads around what has been taught, they just immediately start with the next module or chapter. I think students must be allowed space to think and consume the knowledge that has been given to us.

Student 3:

Lecturers do not allow the students to grasp what has been taught. I think that lecturers must allow time during class for a class discussion as this may allow lecturers to see if we understand what was being taught. I think we as a student can also learn off each other.

Student 4:

There are students in class that miss behaves, they make a noise and disturb the rest of us. I feel that the lectures do not reprimand them. This creates problems for other students as we cannot learn.

Student 5:

I feel that the classroom is very boring, where students do not engage in class. There is no excitement coming from students. Some even fall asleep. Lecturers don't use methods that excite the class or make it lively so that we feel like engaging. Sometimes I get the impression that lecturers are not passionate.

It is evident from the data above that the students are negatively impacted by irrelevant teaching practices of lecturers.

4.13.3 Data Segment 3: Observation

During the observation, most lectures had good and relevant teaching practice which promoted learning and encouraged student support. However, there was one lecturer who used question papers as a form of teaching by asking questions related to the question paper, in addition, no engagement took place as students were not given an opportunity to discuss their understanding or reflect.

In some instances, there was poor classroom management whereby the lecturer had not confronted students on their bad behaviour. In addition, even though lecturers say they understand that students experience various learning challenges, it does not always reflect in the way they teach or show if they have the students best interest in the class.

4.14 Conclusion

This chapter has presented and analysed the qualitative data gathered that emanated from the in-depth interviews and classroom observations presented from the research conducted in the sampled TVET college that participated in the project.

The data was analysed thematically in which has provided the researcher with the opportunity to walk in the participants' shoes and see things from their point of view. Given this, the analysis of this investigation suggests that lecturers need to be knowledgeable and trained to teach students with learning challenges and it proposes that evidence-based teaching strategies be used as best practice.

This chapter has enlightened the researcher on the challenges lecturers experience when teaching students with challenges in a TVET college. The next chapter will focus on the discussion of the findings.

Chapter 5

Discussions of the findings

5.1 Introduction

This chapter is an extension of the previous chapter as it presents the story of the researcher's understanding of the challenges that students face as well as the teaching strategies that lecturers use at a TVET college through the understanding of these participants' interpretations. In other words, what the researcher proposes to do in this chapter is to shape a chain of narratives and interpretations. This presupposes a construction of a story of their story where the researcher's narrative is seen as an interpretation of their interpretations. In order to achieve this task, the researcher needs to underpin or reinforce his/her beliefs that underlie or trigger this study and interpret the findings in terms of the lived through experiences (Foncha, 2013) as a sequel to chapters 1, 2, 3 and 4 of this study. In light of the foregoing argument, this chapter focuses on the role of interpreting the interpretations of the participants which signifies a view of discontent and underscores the researchers' attempts to raise his/her thinking and practice to a higher level of understanding through interpretation (Sivasubramaniam, 2004; Foncha et al. 2016). Given this discontent, the researcher now understands how his/her stance appears to position itself against a positivist view based on his/her acceptance of the context of this study as a means of constructing and interpreting knowledge.

In the preceding chapter, the researcher presented the data as a narrative of a developing design and understanding through which socially, constructed realities, local generalizations, interpretive resources, knowledge, inter-subjectivity and reasoning can assume substance and prominence (Denzin & Lincoln, 1998). Through this lens, the chapter appears to tally with a constructivist view of teaching students who experience learning challenges, the core for this investigation. In principle, this means that the researcher must share his/her experiences and insights with his/her readers because this study is located within the context of human experiences. Although the researcher is aware that locating experience might produce an imperfect or flawed fit (Foncha et al., 2016), he/she intends to communicate to the reader the

confirmatory evidence and the context in which it is understood. This is to suggest that the researcher's knowledge has a particular impact on the whole investigation.

5.2 Narration as a way of experiencing their experiences

The study pointed to the direction that all knowledge is perspectival and as such has led to the understanding that it cascades within the ethical practice of teaching students who experience learning challenges. The constructivist approach to the teaching strategies outlined in the literature review, data analysis and methodology chapters suggest that this chapter should relive and retell the stories and experiences of the participants' notions as a way of re-experiencing their experiences. In view of this;

> We imagine, therefore, that in the construction of narratives of experience there is a reflexive relationship between living a life story, telling a life story, retelling a life story and reliving a life story. As researchers we are always engaged in living, telling, reliving and retelling our own stories. Our narratives of experience as Jean and Michael are always ongoing ones. We live our stories in our experiences and tell stories of those experiences and modify them through retelling and reliving them. The research participants, with whom we engage also live, tell, relive and retell their stories (Denzin & Lincoln, 1998: 160).

In light of the above, the current chapter can be seen as retelling of the TVET lecturers' stories where the researcher has attempted to describe, explain and theorize in an attempt to qualify this study as a creative act of enquiry. Therefore, the researcher intends through retelling their stories to propose knowledge through an interpretive explanation of what TVET lecturers have done in the context of this study. In the narratives that were presented in chapter 4, the researcher lived through experiences that were related to his participants lived through engagements of accommodating students with learning challenges. As such, the researchers' narratives suggested how the participants understand and made sense of their teaching strategies and how they could positively affect students with learning challenges. This also made sense of how

the participants' views were enmeshed with my epistemological and theoretical perspectives in this study. In view of Kohonen et al (2000:147)

> Perspectives if they are truly human, unfold and take shape of all the time as we move along, there is no need to define and name them in advance in exact terms. This is meant to favour the constructivist approach against the rationalist view (Lantolf, 2000).

It is in this sense that the researcher deems it necessary to explore and explain theoretical possibilities in this chapter that can relate to his/her knowledge of the experience.

5.3 Poor infrastructure

At this juncture, the researcher is disposed to commence and attempt to give meaning to the themes that were generated either by the data or the literature. One of the most prominent theme was that of poor infrastructure. In this study, poor infrastructure has affected all the participants adversely. As revealed from sections 4.4.1 and 4.4.2 and 4.4.3 of the previous chapter, there seem to be common infrastructural problems as articulated by both the lecturers and the students in their interviews. Amongst the things talked about, the location of the college, lack of facilities and the maintenance of the buildings are highlighted by the participants. All of these infrastructural challenges appear to create an impression of negligence from the TVET college management. It is evident that poor infrastructure may lead to poor student attitude towards their studies at the college. It may also affect the lecturers negatively if lecturers do not have space to present their lesson which is due to overcrowded classes or a room for consultation. One of the participants indicated that the institution is within a fairly safe community as there are very few incidents that are being reported. This comment insinuates that the poorly maintained facilities bring about learning challenges (Smit & Rossouw 2015). According to section 4.4.2, ventilation is a common problem in the facilities as there is an indication that the windows in the classrooms cannot open. In addition, student 1 adds that the classrooms are not kept

clean. However, students are to blame for the untidiness of the classroom. In addition, under-utilized classrooms and lack of facilities are responsible for the overcrowded classrooms with congestion. Needless to stress that all available facilities are not being used constructively. Student 2 also says that there is need for practical training and that the workshops should only be used for this purpose. This suggests that facilities at the college are under-utilized and can be used more efficiently to be beneficial to the success of the students. Most students learn by doing or need to be able to picture what components look like and how they are being utilized. Poorly managed facilities may lead to under-resourced institutions they may urge the students to feel overwhelmed or clustered in the classroom. This may account for students losing concentration in class.

Furthermore, section 4.4.3 reveals that the building that was built with brick and mortar appears to be well maintained. The college is situated in an above-average income area where transport is not easily accessible. This is challenging to most students as evident in section 4.4.2 where it is indicated that students are using public transport to the institution and seem to find it troublesome getting there on time. However, due to the ongoing pandemic and taxi violence, it has become rather unsafe as students come from various parts of Cape Town. The only form of transport available for students is the railway service, but due to the PRASA infrastructure damage Metrorail is limited and unreliable. Upon entering the campus, strict protocols are observed as sanitisers and screening stations are available. Lecturers have advance smartboard technology available in their classroom which aids lecturers with their teaching. These teaching aids create an entertaining environment for student's learning and academic success.

In light this, challenges to TVET college infrastructure is not uncommon. In this regard, Van Wyk (2009:53) shows that significant infrastructural challenges cause major teaching and learning challenges for lecturers and students and further encourages student's misconduct. As such, there is justifiable evidence that facilities that are maintained, seem to create a poor impression on TVET college management which may lead to student's negative attitude toward their studies. In view of this, infrastructural challenges may lead to student's learning challenges in TVET colleges.

5.4 Poor institutional management

In this particular study, poor institutional management speaks to the management of TVET colleges that are faced with challenges. It is evident that TVET colleges have a bad name within the educational sector. Due to the kind of education that is offered in the TVET sector being poor, the researcher ventured into determining whether this challenge could be due to poor institutional management. The Education White Paper on Post School Education and Training (South Africa, 2013) indicates that TVET college education has its share of challenges concerning the quality of education that it offers. However, quality education varies and may be a problem based on the teaching strategies, the curriculum of the subjects, the management or relevant communication etc. In light of this, section 4.5.1 reveals that the lecturers noted problems such as communication from management, teamwork, lack of student resources and student support as common challenges encountered in TVET colleges. This is in line with Van Wyk (2009) who suggests that there is a lack of teamwork and communication with lecturers as well as the managers. In the same light, section 4.5.1 also revealed that TVET colleges experience a lack of educational support and irrelevant advice from their seniors and peers. This is to suggest that lecturers may provide inadequate education to students in TVET colleges which could be a revelation of the kind of poor education offered within the TVET sector. In addition, poor institutional management could be as a result of management obtaining positions which they are not qualified for. According to Van Wyk (2009), staff who were appointed in management positions were not qualified for these positions and did not have the relevant knowledge to lead lecturers. This is believed to be the cause of lecturers not carrying out their tasks effectively. Seen through this lens, poor institutional management may lead to inadequate knowledge being transferred to students. In addition, Lecturers daily administrative skills become disorganised as one of the lecturers in the interview indicated that there is an ongoing problem with textbooks availability which causes students to struggle to adapt to the lesson. Evidently, in section 4.5.2, the students indicated that they have difficulties with the administration of the institution. The students further revealed that poor institutional management created emotional despair among the students as they struggle to get assisted administratively by the college. Moreover, one student questions why the administrative processes are different in other colleges as they are supposed to be

consistent across all institutions. These challenges seem to emanate from poor institutional management. Most of the students' comments in section 4.5.2 relate to administrative difficulties due to the unsatisfactory service that the administration renders to students and lecturers alike. Based on the researcher's observation, section 4.5.3 reveals a case of poor administration from the poor attitude of one of the campus frontline staff. The attitude of this frontline staff creates a poor impression of the institution and the lack of professionalism that appears to influence the students not to respect their lecturers, the management and as such tent to develop a carefree attitude.

In light of the above, If the students are not being supported or accommodated administratively many underlying administrative issues pop up which affect daily campus activities negatively. Thus, the management does not appear to be able to monitor or observe the day to day activities of the staff and students.

5.5 Poor Time table management

The vitality of a well-designed and functional timetable is important for managing the daily routine f every institution. Time table management is a pivotal function of the management in managing academic schedules. Herbert (2005) alludes that to manage daily activities on any campus, it is important to have an efficient timetable. According to section 4.6.1, most of the participants indicated that there is no consideration for administrative work which is just as important as teaching and learning. These comments appear to justify that there is no consideration on the timetables to allow lecturers the opportunities to catch up with their daily administrative work. In this regard, there is enough evidence that the management puts together a timetable that has not been thought through. In this regard, the management needs to provide a more concise and well thought out timetable to aid students with learning challenges since such a time table would give lecturers time to spend with students who don't understand the work taught in the classroom. Providing this kind of timetable would possibly give provision for student's support since lecturers will have slots on the timetable to assist students with learning challenges. These supportive periods may be used for administrative work by the lecturers as well. Additionally, in section

4.6.2, the students indicate that lecturers do not always follow the timetable that is given and some lecturers do not communicate with their students when schedules have changed. During an observation in section 4.6.3, the researcher witnessed students standing outside of their classroom because they were not aware of the changes on the timetable which disrupted classes around. It was later communicated to the researcher that the lecturer had administrative work that needed to be done during that period. The students also signalled that it is common for timetables to be misleading and ignored. In view of this, the changes in the timetable appear to create inconveniences for students especially those who are working and only come to campus during the period that they have a lesson.

Furthermore, it also indicative that lecturers need to be more disciplined with time management within their allocated timeslots in the timetable. This is meant to suggest that a well-planned timetable should be implemented as many of the students feel that intervention periods are not integrated well into the timetable which tend to affect them negatively. Furthermore, lecturers should communicate more effectively when have changes with their timeslots. In support, Herbert (2005) posits that it is important for management and lecturers to respect the timetable and its allocated slots. In light of the above, poorly designed timetables and not respecting allocated time slots on the timetable can lead to confusion among students which may lead to student learning challenges.

5.6 Training of lecturers in inclusive practices

As propounded by Manyau (2015), there is a shortage of trained TVET lecturers knowledgeable on aspects such as teaching strategies, curriculum training, technical skills and career development. From an insider's perspective, this seems to be the norm throughout all TVET colleges as training and development programmes for lecturers are minimal or not available at all. In view of this, section 4.7.1 reveals that most of the lecturers use teaching methods that encourage engagement and participation in their classroom. The lecturers said that some of the students appear to have a short attention span and these lecturers have to capture the students' attention during the lessons. In addition, lecturer 1 revealed that practical training assists students in understanding the subjects which creates excitement in these

students. Lecturer 4 also said that students tend to grasp or understand concepts better when the object or process is done in front of the students so that *'they practically experience learning'*. However, Lecturers tend to confuse teaching practices with using teaching aids that assist teaching in class like video clips. This insinuates that the lecturers think that playing a video clip related to the content illustrates a good teaching practice. Grasping a students' attention through the use of a video, may not always be the best practice because some students have different ways of learning. This is to insinuate that lecturers are aware of the learning challenges of the students but lack the relevant skills development that may assist them in developing students understanding. Based on the above, section 4.7.2 stress that most of the student's experience challenges with lecturers teaching methods because they have difficulty understanding the subject matter. Skill development is supposed to be organised by the management but which is not well coordinated in TVET colleges. Based on this, Manyau (2015) asserts that the lack of training may be the result of newly appointed managers or that developmental courses have not yet been implemented. In addition, to develop the teaching competency of TVET lecturers, it should often be initiated as informal learning programmes. In section 4.7.2, the students indicated that there is a lack of teaching competency among the lecturers. This is in line with Van der Bijl (2015) who points that lecturers who are not adequately trained in managing their classrooms effectively, often lack experience or mentoring which may lead to students finding themselves despondent and experiencing learning challenges. Also, student 5 notes that their challenges are not addressed in time as student support is not always available when needed. This seems to create a sense of helplessness in the lecturers not knowing how to assist students with learning challenges. Therefore, it is a normal practice to refer students to the student support office for further assistance.

Students expressed challenges of hunger during their academic journey which can be a result of their socio-economic status. In section 4.7.2 the students indicated that they need the lecturers and the college to be mindful and empathetic to this challenge. Student hunger is a challenge throughout the education sector due to poverty. In light of this, there is need for lecturers to understand specific challenges like hunger which can cause distraction resulting to a huge learning challenge for students. In section 4.7.2, student 4 also indicated that he cannot concentrate in class as he does not eat

some mornings and/or go to bed hungry. This is a national crisis in schools as well as in the universities. The Department of Basic Education (DBE) has implemented feeding schemes in most of their schools that are affected by poverty-stricken learners. In this sense, it would be feasible for TVET colleges in collaboration with the DHET to start thinking of feeding scheme projects at independent campuses that could aid students sitting hungry in classrooms.

In view of this, there seems to be a need for lecturers to understand the challenges students face in their personal lives which require lecturers to be equipped with the necessary skills and knowledge to deal with both academic as well as personal challenges.

5.8 Training of under-qualified lecturers

The data presented in sections 4.8.1, 4.8.2 and 4.8.3 revealed that most teachers do not receive proper training regarding teaching strategies to be able to accommodate students with learning challenges. Professional development is an essential and required part of improving the academic performance of TVET colleges. According to the Green Paper on Education and Training (SA, 2012), most TVET college lecturers are employed from the industry which implies the lack of the knowledge and skills in teaching strategies. lecturers display a vast amount of workplace knowledge and experience (SA, 2012) but are they are not adequately equipped to manage students in the classroom. As revealed in chapter 4, the participants in this study were qualified and experienced enough to teach students with learning challenges at the TVET college. The motive behind this was to verify whether they have been trained to accommodate students with learning challenges. Their experience in teaching at a TVET college assisted the researcher to know when the participants started teaching and therefore was able to gauge lecturers understanding of the paradigm shift from teaching students with and without challenges.

According to Manyau, (2015), lecturers in the TVET sector lack academic qualifications. To concur with this thought, Khurshid (2008) says that the qualifications of the lecturers play an important role in teaching because a trained lecturer can teach

much better than an untrained lecturer. Khurshid further explains that a trained lecturer knows well how to teach effectively and that there is a direct relationship between the qualification of a lecturer and the performance of the students. Given this, the researcher found it imperative in this study to check theability to teach students with learning challenges. According to section 4.8.1, it is evident that lecturers feel that they are not trained enough to accommodate students with learning challenges. In addition, Lecturer 2 advises that due to them being unqualified to assist students with challenges, it is best to send them to student support. However, he indicated that his experience in this process is that they never get assistance from the management nor DHET. Most staff advise that if the college sends them for training, they would be better equipped to assist students with challenges.

It is evident that the lecturers have difficulties with the academic duration of a trimester which is made up of approximately 8 weeks of contact time with students. Lecturers appear to find it difficult to complete the curriculum thoroughly without having to tweak the content so that students are ready for examinations. In section 4.8.1, lecturer 4 indicates that there is a time factor that prevents lecturers from accommodating students with challenges and their understanding of the subjects or lack thereof. There is only enough time to teach. Given this, the time constraints often affect the quality of teaching as lecturers are pushed to complete the syllabus rather than assisting students with understanding or their challenges.

According to 4.8.2 the experience of students with learning challenges forms one of the foundations of this study. Most students found it challenging to understand lecturers' methods of teaching and find that lecturers don't consider accommodating them in class. However, their experiences are that lecturers do not know how to accommodate their learning challenge and therefore they need to be trained. Students require lecturers to be empathetic and to assist them in finding an alternative or solution. Furthermore, student 3 feels that lecturers should go for training in teaching methods as he finds that their current practices are irrelevant.

Based on section 4.8.3, all of the lecturers that the researcher observed are academically qualified and are specialists in their respective fields. However, it is evident that qualification and experience do not substantiate poor teaching practice and inadequate preparation as poor teaching practice can cause a poor learning

experience for students. In addition, the study revealed that the lecturers do not receive support in the form of professional development from management or the DHET when it comes to teaching strategies.

It should be noted that workshops that were arranged for staff development were irrelevant and fruitless because they were run by incompetent and novice facilitators. Until such problems are addressed, these appointments will remain to have this problem in the future. Based on the above, lecturers who lack teacher training may fail to teach effectively.

5.9 Effective teaching practices

The data presented in sections 4.9.1 and 4.9.2 and 4.9.3 appear to indicate that participants limited exposure to training contribute to ineffective teaching practices. Also, section 4.9.1 revealed that lecturers were not effective in their teaching practices which becomes a struggle to teach a difficult subject when students experience challenges. In this regard, the lecturers are aware that students experience learning challenges and to some degree, they are trying to accommodate these students as best as they can. The lecturers further indicated that they are using teaching practices that are effective in their class. As such, the students responded positively and understood the content that was being presented in the classroom. Smit and Rossouw (2015) concur that using effective teaching practices is the most efficient way to manage learning challenges in the classroom. Mitchell (2008) is also of the opinion that teaching practices that are proven to be effective in the classroom are reliable for teaching students with learning challenges. In section 4.9.1, the lecturers indicated that the current students experience challenges like language barriers, lack of textbooks and socio-economic difficulties. To be precise, lecturer 2 suggested that every student's challenge is dealt with differently since these students have different learning abilities. He also said that peer learning as a teaching practice has assisted him with most students that experience various challenges in class as there are times that individual attention is just not possible.

As revealed in section 4.9.1, the data showed that most lecturers encourage positive and productive talk within their classroom environment to assist with motivating their students. This was also evident in a student's comment in section 4.9.2 that students

are keen for lecturers to have a positive attitude toward students since this can act as a motivation to the students to achieve academic success. Having a positive, warm and supportive environment in the classrooms appear to provide a supportive atmosphere. This is in line with Pienaar (2011) who posits that learning intervention is possible if there is a friendly, supportive atmosphere that exists in the classroom. Furthermore, the students in section 4.9.2 said that lecturers should be creative with their teaching methods by using any practical means or showing relevant videos on the topic being discussed. Many students prefer lecturers who have the ability to create a learning environment that allows a better learning experience for students.

Furthermore, lecturers have difficulty grasping learning content as most of the current curriculum is outdated. The processes that were used previously are no longer used today. If lecturers are teaching outdated content, they are producing students with outdated knowledge into the workplace. In support of the above, student 3 indicated that the curriculum is in dire need to be updated in colleges. The exposure he gets at his workplace shows that the content lecturers are explaining/teaching outdated and ineffective curriculum to the industry. Teaching a relevant and current curriculum is known to contribute to student learning and produces a relevant workforce to the industry. Based on the above, it is evident that students experience learning challenges due to ineffective teaching methods. In addition, it appears that lecturers are mindful of students experiences and challenges and are keen to be flexible by adjusting their teaching methods and also attempting to implement the use of a variety of teaching methods and aids to accommodate the students with learning challenges with the aim to stimulating an interactive and inclusive classroom.

5.10 Socio-economic status

The study revealed in sections 4.10.1 and 4.10.2 that most parents in the rural communities do not get involved in their children's education. The study showed that parents with low socioeconomic status do not have the knowledge or skill to assist their children with college work at home. This aligns with Pomerantz (2005) who argues that most parents choose not to get involved in their children's education unless when it is necessity to. Based on this, the lecturers indicated that lack involvement in their children's education due to a lack of understanding of the content

or teaching methods. This was further elaborated in section 4.10.1 that parents do not know what role to play at college in assisting lecturers with their children's work. The study further revealed that most of the students in this campus come from low socio-economic households where there are many challenges students face including lack of parental support. This is supported by Hugo (2011) who asserts that students from low socio-economic households may not have nutritious foods, effective health care, enough electricity and sufficient clothing. Furthermore, the lecturers also indicated that the socio-economic status plays an important role in the students' motivation and academic achievement. This is echoed by Young, Johnson, Arthur and Hawthorne (2011) who posit that student's motivation and achievement are important factors in overcoming their socio-economic status. This motivation is directly linked to a student's status as their households' by themselves seem to initiate that they do not have the necessary resources or that they may be limited. In section 4.10.1, a lecturer revealed that students do not have the necessary support from any family or were sent to a school where their challenges were not considered or noticed. It was further revealed that lack of support creates further academic challenges which they as lecturers may not be able to address without training in inclusive practices. This initiates the importance of lecturer development and student support from the college in the form of a student support office. It is believed that, such an office may give emotional assistance and relief so students who are willing to achieve their academic goals. This insinuates the importance of lecturers motivating students that come from low socio-economic households to achieve academic success.

In section 4.10.2, the students revealed that they are experiencing financial challenges at home and gangsterism in their neighbourhood. The students also said that they need to work to pay for their studies. Student employment can cause further stress to students as they may not have the time to concentrate on their academic work. If students do not work, they risk the chances of financial stress and their daily nutritional needs may not be met up with, which could cause poor motivation, fatigue as well as affect students emotionally and may lead students to become absent.

The risk factors students experience just coming to college due to gangsterism and violence may impact on them emotionally, psychologically and so may tend to affect their cognitive development. Currently, the impact of taxi violence on student learning has created a vast amount of pressure on lecturers too. Worthy of notice is student's

absenteeism which has created challenges for lecturers as they have to prepare students for examinations which goes hand in glove with the desire to complete the curriculum. The difficult experiences as addressed above as a result of socioeconomic status may lead to students experiencing learning challenges.

5.11 Student background

It is revealed that student's socio-economic status has an effect on their learning experience. However, section 4.11.1 seem to say that not all students come from poor backgrounds where they experience family, financial, medical challenges. Career-minded parents are so consumed with their work responsibilities that they do not have the time to avail themselves to their children. In view of this, Teh (2015) indicates that due to a lack of parental guidance, students tend to become despondent which may lead to learning challenges. This insinuates that whether a student comes from a poor background or a fortunate background, students are bound to experience different challenges depending on their different situations.

As revealed in section 4.11.1, students experience poor academic preparedness which resulted to a learning challenge for students as well as the academic staff in the classroom. A student in section 4.11.2 indicted that coming to college has made him to realize that they were disadvantaged in prior levels of schooling as it has not prepared them to succeed in college. This insinuates what students in most secondary schools were forced to continue with Mathematics literacy in grade 12 which does not seem to benefit them in the PSET sector if their career objective is to study in an engineering environment.

Due to students diverse and different socio-economic backgrounds, students schooling vary. As revealed in section 4.11.1, all students come from a poor background or have a low socioeconomic status but may also suffer from social challenges such as broken families. However, students who experience problems at home may tend to perform poorly leading to misconduct and misbehaviour in class. This is supported by Walker (2015) who insinuates that the causes of student's misbehaviour can originate from their family environment or the societal. Factors that increase the chances of students' lives to develop, may affect their mental well-being, thinking ability, and emotional development. On this note, the students revealed in

111

section 4.11.2 that the lecturers are not mindful of this misalignment and therefore do not consider them in class. This challenge forces them to collaborate with their peers so they may have a chance of succeeding.

Furthermore, section 4.11.3 revealed that students perform poorly in class because of their poor academic background. This may also be due to low motivation in the cases where students are not being supported by their families. Another prominent revelation is that students appear undernourished or may be under the influence of narcotics which may cause fatigue or lack of concentration in class. The influence that this has on the students may cause poor academic performance in class and may also lead to poor preparation prior to the class. In addition, section 4.11.3 also found that student's background plays a pivotal role in their academic success. As such, depending on the motivation of the student, motivation may allow the student to succeed or fail. Student motivation can be assisted through support programmes by focusing on the student as well as their family background.

5.12 Unpreparedness of lecturers

The researcher indicated in chapter 3 that participation from the participants was voluntary which created an effective atmosphere for lecturers to express their experiences. As revealed in sections 4.12.1, 4.12.2 and 4.12.3, the lecturers who have unprepared lessons for class create learning challenges for their students. There is justifiable evidence to suggest that the problem that leads to lecturers not preparing their lessons is due to the education department inability to provide quality in-service training to lecturers in TVET institutions. Foncha et al. (2018) indicate that window dressing has become rife within the departments' officials as proper training to the lecturer is not within their capacity. It has become a matter of fulfilling the fact that they have to run workshops rather than professional development.

Also, section 4.12.1 revealed that poor lesson planning among lecturers are due to various challenges they are exposed to. As highlighted in section 4.12.1, one lecturer agrees that the working conditions they are exposed to at the college affect the teaching in the classroom. Given this, section 4.12.1 further revealed that students receive textbooks very late from the institution. In view of this, most students cannot participate effectively in classroom activities or in assessments. In section 4.12.1 a

lecturer indicated that staff laziness is rife within the college sector as well as the lack of enthusiasm which affects their preparations before class. In addition, some lecturers just read from textbooks which clearly shows no consideration for the students' academic level as this may lead to poor student motivation in class. Some lecturers are ill-disciplined with regards to timeslots allocated on the timetable due to them not preparing well (Foncha et al., 2018). This may lead to lecturers missing lessons or being late for lessons which in turn may affect the time available for students to grasp the lesson. As revealed in section 4.12.3, there was one lecturer that came 12 minutes late for class. This is a clear indication that the lecturer was unprepared for his lesson and had no regard for the timetable. This is supported by evidence in section 4.12.2 that lecturers do not prepare well and use ineffective teaching strategies which affect their teachings negatively.

Further to this, section 4.12.1 gives evidence that unpreparedness leads to irrelevant teaching practices which in a way could affect the knowledge students produce at the workplace. Smit and Rossouw (2015) indicate that in order to effectively manage learning challenges, lecturers need to prepare lessons and teach effectively. Jacobsen et al. (1999) agrees that in order to be an effective lecturer, within the planning stage, the lecturer should ask himself/herself the question: what do I want my students to understand and what do I want them to know? It was revealed by data from section 4.12.2 that lecturers suffer financially due to poor remuneration or other difficulties within their household. Lectures who miss classes do not make up for the lost time to the student or have extra classes to make up for the lost time. This is in line with Ngaqo (2016) who thinks that lecturers do not teach for passion, they only teach to put food on the table.

5.13 Irrelevant teaching practice

It was evident from section 5.12 above that one of the underlying factors in the unpreparedness of lecturers was due to irrelevant teaching practices. Empirical evidence from section 4.13.1 show that lecturers using irrelevant teaching practices are lecturers with little experience in teaching, especially lecturers who are recruited fresh from the universities. As revealed by students in section 4.13.2, lecturers should

encourage student's engagement and classroom discussions as it would lift up the class and create a pleasant learning atmosphere. To manage learning challenges among students, preventative methods which may include relevant teaching practice and a friendly learning atmosphere are needful. Given this, Smit and Rossouw (2015) argue that to build a secure learning context in the classroom, lecturers should have prepared lessons and relevant teaching practices as they would contribute positively.

In section 4.13.1 it is evident that lectures show signs of being obstinate in their teaching methods which may be responsible for these lecturers neglecting common and important practices. Based on the researcher's observation of the classrooms, the older lecturers become complacent in their teaching methods due to experience. This often leads to lecturers being unaware that they are using irrelevant teaching practices in the classroom which knowingly or unknowingly may tend to affect the student's learning experience. Therefore, if irrelevant teaching practices are used in teaching and learning, it may affect students understanding of the lesson in class negatively.

Another challenge revealed in section 4.13.2 is that student's behaviour is a problem and that lecturers need to practice assertive measures to control these unbearable students because they are a disturbance for the majority of students. In support of this Oosthuizen (2016) says that students need to understand the rules of the classroom as it aids in understanding what is expected of them. Student's behaviour tends to interrupt class activities as well as teaching methods taking place.

5.14 Conclusion

This chapter discussed the results from the findings from the in-depth interviews and classroom observation. It has shown several challenges faced by lecturers at a TVET college. In addition, it identified the difficulties that lecturers experience when teaching students with learning challenges as there are no uniform teaching strategies followed by any of the lecturers. In the next chapter, conclusions are drawn and recommendations are suggested with the possibility for future research.

Chapter 6

Conclusions, Findings and recommendations

6.1 Introduction

In chapter 5, the lecturer's difficulties on accommodating students with learning challenges were shared. The data was collected at a TVET college in the Western Cape which was done through interviews with lecturers and students who experienced the challenges in teaching and learning at the college. The data was triangulated with classroom observation to make sure that what was said in the interviews was done in the classrooms. The data that was collected was organized into themes which were analysed and discussed, and thereafter the findings were generated.

In this chapter, a summary of the research findings and the insights for all the chapter are presented. This is based on the main research question and sub-questions that underpin the study. It is important to note that the findings have already been discussed in the previous chapter (Chapter 5). The summary of the findings in this study revealed the matters that are related to lecturer's experiences as they teach students in TVET colleges. Conclusions and recommendations were drawn from those findings and presented in this chapter.

6.2 Summary of Conclusion

This section reveals the issues that were related to what the lecturers experience as they teach students with learning challenges at a TVET college. The findings of this dissertation are presented by analysing the following themes based on the data collected in conjunction with the relevant literature consulted.

6.2.1 Poor infrastructure

The data found that lecturers at the TVET college do not experience infrastructural challenges which is contrary to Van Wyk's (2009) assertion that TVET colleges face infrastructural challenges. The data also indicated that the college is not under-resourced because it has an advanced technology that should aid the lecturers

teaching methods in assisting students. However, the study further revealed the lack of facilities for the lecturers due to poor management on the allocation of the necessary facilities.

6.2.2 Poor institutional management

TVET colleges experience a great deal of poor institutional management. Lecturers reveal that they do not receive adequate support, communication and teamwork from management. As highlighted in (South Africa, 2013), TVET college education has a bad name in the education sector. This is based on the incompetent college management who lack the skills to develop their staff.

6.2.3 Poor Time table management

The study revealed the importance of a well-designed and implemented timetable. The lecturers and students noted that it has become a common problem with in the campus that management creates poorly designed timetable in which it creates challenges for both students and lecturers alike. In addition, it has been noted that lecturers are ill-disciplined by abusing the timetable. Such an attitude downplays Herbert's (2005) assertion that an efficient timetable leads to well managed daily activities.

6.2.4 Training of lecturers in inclusive practices

The study found that despite the fact that lecturers at the TVET college are qualified and knowledgeable in their respective field, they are not trained in inclusive practices. Moreover, the college does not provide any skills development relevant to teaching practices or in line with inclusive practices as in the EWP 6. Van der Bijl (2015) concurs that lecturers who are not adequately trained in managing their classrooms effectively often lack experience in mentoring. In view of this, lecturers lack the knowledge and skill to plan and present effective lessons to accommodate students with learning challenges.

6.2.5 Training of under-qualified lecturers

The study also found that all the lecturers are suitably qualified to teach at the TVET college. However, most TVET lecturers are employed from the industry and do not have the knowledge and skills in teaching strategies (SA, 2012). Despite the fact that lecturers are qualified and experienced enough to teach students with learning challenges at TVET colleges, they lack knowledge and experience in effective teaching strategies appropriate for students who experience learning challenges.

6.2.6 Effective teaching practices

The TVET college under study is known not to be using effective teaching methods since the lecturers have limited exposure to teacher training. In line with Mitchell (2008), it may be said that teaching practices that are effective should be used when teaching students with learning challenges. In view of this, the students-centred teaching approaches seem to be the effective ways of creating supportive context that may facilitate student's learning.

6.2.7 Socio-economic status

Most students from the TVET college under study come from poor households. In view of this, most students do not have support from their parents. Many of the students struggle with financial, ineffective health care and hunger challenges. As highlighted by Hugo (2011) students from low socio economic households, experience a number of challenges that affect their learning.

6.2.8 Student background

It was revealed in this study that most students come from a disadvantaged background. However, there are also students who come from good homes. Despite all these, students come with different kinds of challenges that tend to affect their learning. Teh (2015) thinks that a lack of parental guidance leads to students becoming despondent and may lead to learning challenges.

6.2.9 Unpreparedness of lecturers

The lecturers at the TVET college are unable to teach effectively due to insufficient preparation. Based on this, lecturers who are unprepared for class create learning challenges for the students. Smit and Rossouw (2015) say that if lecturers prepare effective lessons, it may effectively manage student's learning. Evidently, there is an inadequate supply of support material such as textbooks and therefore lecturers are unable to prepare their lessons properly. As highlighted by Foncha et al. (2018), the lecturers come unprepared to class due to alternative duties at the institution. In addition, the study revealed that some lecturers are lazy and lack enthusiasm.

6.2.10 Irrelevant teaching practice

The study found that the irrelevant teaching practices at the TVET College is due to many underlying factors such as unprepared lesson plans, communication among staff and students, time and feedback to students etc. Most students at the TVET College struggle with various challenges which deter them from achieving their academic goals. This is in line with Smit and Rossouw (2015) that by lecturers illustrating relevant teaching practices in the classroom, builds a secure and positive learning environment for students. In addition, lecturers enforcing classroom management in the class also assists with creating a positive environment.

6.3 General Findings

To attempt to poise the research question, the findings gathered by the empirical research and literature reviewed in this study can be summarized as follows:

6.3.1 The Main research question: What are the challenges faced by lecturers on the teaching strategies appropriate for teaching students with learning challenges at a TVET colleges.

The study has shown several challenges that TVET College lecturers face in their different contexts. It has further highlighted lecturers' knowledge of teaching students with learning challenges at a TVET College. It's the researchers' philosophical

assumption that the challenges that lecturers face is present at all TVET Colleges and not exclusive to one college. Even though the environment in which the TVET Colleges differ, the reality is that these colleges have a lot in common. The commonalities include: use similar teaching practices, outdated curriculum, poor management, students who experience learning challenges, lecturers graduated from a similar teacher training institution and therefore face similar challenges.

Based on the above, understanding learning challenges and having flexible curriculum and assessment policies is important to understand how to accommodate students with learning challenges (Department of Education, 2001). Furthermore, lecturers struggle to teach students with learning challenges but are considered important to all participants in the study. All participants asserted that accommodating students with learning challenges is important however knowing how to accommodate them is a challenge. Based on this, student's success at a TVET College depends on the lecturer, the student and the college. It is therefore imperative that these components have a close interaction, enhanced by the students' ecological system. Thus, this study reinforces the views that a relationship between the students and his/her microsystem as a support student learning should be developed wherever possible.

The study discovered that no disability policy or framework presently guides the lecturers on how they are expected to assist students with learning challenges. In addition, there is no standard process on supplying of resources to support lecturers who teach students with learning challenges and students who experience the learning challenge.

6.3.1.1 Research **Question 1: What is the nature of learning challenges encountered by TVET college students?**

6.3.1.1.1 Poor infrastructure

Poor infrastructure challenges may be seen in the location of the college, lack of facilities or the maintenance of the buildings. All of these infrastructural challenges create an impression of negligence from the TVET college management. The facilities

at the college are under-utilized and are not used to benefit the learning experiences of the students.

6.3.1.1.2 Poor institutional management

The lecturers do not receive adequate support from management in the form of skills development to improve in their teaching practices. In addition, the management is inexperience and unqualified to lead a team of lecturers. Poor institutional management results in lecturer experiencing lack of support from management to provide the required services to the students leading to students experiencing learning challenges.

6.3.1.1.3 Poor Time table management

The timetable is poorly planned and there is need for support sessions to be implemented within the timetable to assist students. However, it requires lecturers to be disciplined and mindful of the timeslots allocated on the timetable for teaching. Poorly developed timetables not taking cognizance of time allocated for consultation may lead to student's learning challenges.

6.3.1.1.4 Training of lecturers in inclusive practices

Even though there are qualified lecturers teaching students at the TVET College, they tend to use ineffective teaching methods. In addition, lecturers are not mindful of inclusive practices to accommodate students with learning challenges coupled with lack of training and knowledge in inclusive practices.

6.3.1.1.5 Training of under-qualified lecturers

The lecturers employed by the TVET College are suitably qualified as most of them have industry experience and teaching qualifications. However, these lecturers are lack skills in teaching strategies appropriate for students with learning challenges.

6.3.1.1.6 Effective teaching practices

The lecturers at the TVET College do not use effective teaching practices due to lack of training. In addition, lecturers are instructed to create a more positive learning environment for student learning by motivating towards student learning experience. This may aid in students struggle to overcome their personal challenges that lead them to experiencing learning challenges.

6.3.1.1.7 Socio-economic status

The students experience low socio economic status as they struggle with various household and personal challenges. In view of this, students experience poor motivation that tend to contribute to their misconduct. The students from low socio economic status require motivation to succeed.

6.3.1.1.8 Student background

The students lack parental guidance in their personal and educational journey. This has impacted the students' lives emotionally and cognitively. Therefore, some made bad subject choices during their schooling which has had a ripple effect on their academics at the TVET College. Students from low socio economic backgrounds have family problems and display low motivation.

6.3.1.1.9 Unpreparedness of lecturers

The study highlighted that lecturers do not effectively prepare for their lesson due to inadequate support from the TVET College. However, there are some lecturers who have additional duties which deter them from preparing lessons due insufficient time. Also, there is a lack of enthusiasm and motivation due to personal problems.

6.3.1.1.10 Irrelevant teaching practice

The study found that delivering lessons that were not prepared adequately may lead to irrelevant teaching practices. Furthermore, lecturers are obstinate in keeping to their teaching methods. In a nutshell, Irrelevant teaching practices lead to students becoming despondent in class and lead to student misconduct and eventually students experiencing learning challenges.

6.3.1.2 Research Question 2: What are the challenges that lectures face in teaching in TVET colleges?

The lecturers feel that they do not receive adequate support from management or from the institution to assist them in their efforts to support students. Also, they do not have enough time to assist students who experience personal or learning challenges. However, when they refer students to student support offices, this support unit is unable to assist the students. Most referrals from lecturers do not get feedback from the student support office to determine if students have been assisted. The need for teacher training on new developments, knowledge or teaching strategies on how to assist students is also highlighted in the study. The lecturer's attempted many ways of to assist student's needs even when the college does not have a prescribed process on dealing with students and their learning challenges.

6.3.1.3 Research Question 3: What are the strategies used by lecturers in teaching TVET college students?

Due to the type of students admitted at the TVET College, the lecturers are bound to use a variety of teaching strategies to accommodate them. Most lecturers attempt to use flexible teaching practices while trying to adapt their teaching methods to suite what they think is relevant to the student's learning style. Despite the inadequate training on inclusivity or teaching methods appropriate for students with learning challenges, the lecturers found ways to make their teaching styles work based on their teaching experience and knowledge.

6.3.1.4 Research Question 4: What methods are used to overcome the challenges in teaching and learning?

The lecturers were aware of the challenges that students experience. With this in mind, the lecturers were forced to have productive or positive discussions with students to involve them to express themselves. In addition, most lecturers used active teaching resources and methods to uplift the class lessons to prevents students from feeling despondent.

6.4 Recommendations

It is common that after a researcher has completed a research project and has articulated his/her opinions to give some recommendations to address the problems that have been identified. The following recommendations can be made, based on literature and data collected from interviews and observations in order to improve lecturers teaching strategies relevant to TVET College students in the Western Cape.

The study recommends that TVET college lecturers should be trained using workshops on skills development and evidence-based teaching strategies relevant to students learning challenges and in accordance with EWP 6 (PSET). Both lecturing and support staff need workshops and on the job training.

Newly appointed lecturers need to be well informed of EWP6 (Department of Education, 2001). There is also a need for induction for all new staff.

The Institution needs to capitalize on a variety of resources that may aid lecturers to assist students with learning challenges in the class.

The institution needs to capitalize on programmes that support students with learning challenges.

6.5 Implications for future research

This study on teaching strategies for students with learning challenges has underlined suggestions which could inspire future research.

The study found that TVET College lecturers were not properly trained to accommodate students with learning challenges. Any future study may focus on the different kind of training and skills development that may help the lecturers. The finding of a study of this nature could prove to be of significant in improving the general teaching strategies of TVET College lecturers.

This study only focused on one TVET College in the Western Cape and could be extended to TVET Colleges across the Western Cape or beyond. It could also focus on the implementation of relevant evidence-based teaching practices at TVET Colleges for student with learning challenges.

6.6 Conclusion

In this study, an unassertive attempt was made to discuss the teaching strategies for student with learning challenges at a TVET College in the Western Cape. Furthermore, the researcher summarised the findings of the study against the research questions. This study clarified that TVET College lecturers have no prescribed education on inclusivity and specifically on teaching strategies relevant for students with learning challenges. The college also does not have sufficient support from management that can assist lecturers in assisting students who experience learning challenges. Most of the lecturers indicated in the interviews that although they are professionally qualified, they have no professional or formal training that equip them with the know-how in teaching students who struggle to concentrate or to enhance their learning experience in class. Despite the lack of training, these lecturers felt that by using a constructive/ learner centered teaching approaches especially when teaching academically challenged students, they obtained good results.

In addition, better success can be achieved as specialized teacher training is needed in the area of inclusivity. Training in the form of workshops can be beneficial in this regard. College management needs to play its part in providing much-needed facilities, resources, and skilled staff. The DHET's goal on inclusivity at the TVET College understudy can be achieved by strengthening the college's workforce. Policies and procedures must also be aligned with the goal of achieving inclusivity for ALL students.

124

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Appendix

Appendix A: Ethical clearance certificate

Private Bag X8, Wellington, 7654
Jan van Riebeeck Street, Wellington, 7654
Tel: +27 21 864 5200

P.O. Box 652, Cape Town, 8000
Highbury Road, Mowbray
Tel: +27 21 680 1500

FACULTY OF EDUCATION

On the 20th of April 2021 the Chairperson of the Faculty of Education Ethics Committee of the Cape Peninsula University of Technology granted ethics approval (EFEC 8-4/2021) to C McPherson for a M. Ed degree.

Title of thesis:	Teaching strategies for students with learning challenges at a TVET college in the Western Cape EFEC

Comments:

The EFEC unconditionally grants ethical clearance for this study. This clearance is valid until 31st December 2024. Permission is granted to conduct research within the Faculty of Education only. Research activities are restricted to those details in the research project as outlined by the Ethics application. Any changes wrought to the described study must be reported to the Ethics committee immediately.

Date: 20th of April 2021

_____

Dr Candice Livingston

Research coordinator (Wellington) and Chair of the Education Faculty Ethics committee

Faculty of Education

Appendix B: Permission letter from the tvet college

To Whom it May Concern
Cape Peninsula university of Technology

30 July 2021

APPROVAL : CAVIN MCPHERSON RESEARCH PROJECT

To whom it may concern

We confirm that permission to conduct the proposed research was granted on 23 June 2021 by Dr M. Muswaba (FCIS), Principal of the College of Cape Town for TVET.

Approval was granted in terms of "Policy DHET 004 Approval to Conduct Research in Public Colleges" to Cavin McPherson to conduct his Master's research study at the College on the topic of "Teaching strategies for students with learning challenges at a TVET college in the Western Cape".

Yours faithfully

Andrew Winks
Quality Manager

Appendix C: Informed consent

CAPE PENINSULA UNIVERSITY OF TECHNOLOGY
CONSENT TO PARTICIPATE IN RESEARCH

Teaching strategies for students with learning challenges at a TVET college in the Western Cape

You are asked to participate in a research study conducted by *Cavin McPherson (B. ED(Hon))*, a M. Ed student in the *Faculty of Education* at C. P. U. T. *as part of the completion of a M. Ed*. You were selected as a possible participant in this study because you are *a practising TVET college lecturer.*

1. PURPOSE OF THE STUDY

This study aims to determine the views of teaching strategies of TVET college lecturers aimed at accommodating students with learning challenges. The following objectives emanate from the aim.

• *To investigate the views of TVET college lecturers on challenges created by students with learning challenges.*

• *To determine institutional support provided to students with identified learning challenges.*

• *To investigate the views of TVET college lecturers on teaching strategies employed to address the needs of students with learning challenges.*

2. PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

Answer four general questions about the student learning challenges influence student behaviour and performance, how can college lecturers help students with learning challenges, What teaching methods attract students attention and interest and What your college can do to assist lecturers. If you require more information after the interview I will make every effort to supply it.

The interview will be conducted in a venue accepted by you and the college, and at a convenient time.

3. POTENTIAL RISKS AND DISCOMFORTS

There is no identifiable risk to doing this interview. There are no correct or incorrect answers. It is also not the intention to identify any negative college practices.

If at any time during or after the interview, you feel uncomfortable with a question, the direction questions are going or any other aspect of the interview, you are free to indicate your discomfort, refuse to answer the question or indicate that you want the interview to end.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

From this interview I will be able to determine the teaching strategies as you experience it, and also methods you use at accommodating students with learning challenges. From the interview you will be able to determine your own profile which will contribute towards your understanding of teaching strategies used at accommodating students with learning challenges.

The findings of this research will contribute to understanding how to accommodate students with learning challenges. It will also contribute towards understanding TVET college lecturer competency development profiles, which will contribute towards our understanding of the dynamics of teaching strategies in TVET colleges.

5. PAYMENT FOR PARTICIPATION

No payment will be given for the interview.

6. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. *Confidentiality will be maintained by means of allocating a number to each campus (e.g. campus 1, 2, 3, etc.) and by doing the same to each interviewee (e.g. Interviewee one of campus 1, etc.). No raw data will be published, the information will be published only after it has been analyzed and as part of an overall study.*

Content of interviews or any other biographical data will not be published, nor will it be given to any third party for any other form of research without the express permission of the college and interviewees concerned.

All interviews will be audiotaped. The audiotaped data will be transcribed and destroyed once the university quality assurance requirements have been met.

The results of this study will be published in a M. Ed dissertation. An article submission will be made to at least one DoE accredited article and at least one conference paper will be produced. Copies of the articles can be made available if requested.

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, *please feel free to contact Cavin McPherson (primary researcher), or Dr John Foncha (primary supervisor) by*

email at cmcpherson@cct.co.za or telephone 0712939194 or FONCHAJ@cput.ac.za or telephone at 083 875 8344 during office hours.

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because you are participating in this research study. If you have questions regarding your rights as a research subject, contact Ms. Liteboho Adonis [adonisli@cput.ac.za; 021 680 1585] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to *me* by *Cavin McPherson* in *English* and *I am* in command of this language. *I* was allowed to ask questions and these questions were answered to *my* satisfaction.
I hereby consent voluntarily to participate in this study. I have been given a copy of this form.

_____

Name of Subject/Participant

_____   _____

Signature of Subject/Participant or Legal Representative   Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____. *[He*/she] was encouraged and given ample time to ask me any questions. This conversation was conducted in *English* and *no translator was used.*

_____   _____

Signature of Investigator   Date

Appendix D1: Interview schedule for lecturers

Question 1. In your opinion, what kind of teaching and learning challenges do students with learning challenges in your classes, experience?

To find out if lecturers identify or are mindful of students who experience learning challenges in their classroom.

Question 2. What do you think of those challenges experienced by the students – what do you think causes their challenges, and how do the students deal with their challenges?

To find out if lecturers are empathetic and considerate of the possibility that there are students who struggle in class due to learning challenges.

Question 3. What teaching strategies do you currently use to teaching these students?

To find out if lecturers are educated on inclusive education and the use of appropriate teaching strategies.

Question 4. Are these teaching strategies you use, effective, or what challenges do you perhaps experience in teaching these students?

To find out if lecturers are being supported by the college and if they understand how to implement the correct teaching strategies for their students.

Question 5. What do you think, is the most appropriate or effective way or ways of teaching such students?

To find out if students are being supported by the college and if there are available resources to assist.

Question 6. What is your opinion can be done more, or different than what you are doing – what teaching strategies would be more effective for such students to overcome their challenges in learning and in teaching them?

To ascertain if the college plays an active role in the academic success of students.

Question 7. Do you have any further comments about this?

To find out if the lecturers have any added suggestions to assist in the academic success of students with learning challenges.

Appendix D2: Interview schedule for students

Question 1. What is your experience as a student at the institution?

Are students satisfied with the service they receive at the college.

Question 2. What is your current experience as a student with the teaching strategies used in the classroom?

Are students finding the teaching strategies being used in the classroom assisting them in their academics.

Question 3. What do you expect from the college?

Are students getting assistance from the college and lecturers.

Question 4. Do you experience challenges and difficulties that deter you from achieving academic success?

Are students experiencing challenges at home or with travelling to college

Question 5. In your opinion are these challenges accommodated in the classroom?

Are the challenges they experience being noticed by the lecturer. Have they asked for assistance

Question 6. Do you have personal recommendations to lecturers on their teaching strategies that would assist them to make your current or future experiences better in the classroom?

What suggestions do students have that may assist lecturers better their learning experience

Appendix E: Request for collecting data at the college of cape town

<div align="right">

22 Louie Botha street

Epping Garden Village

7460

</div>

Mr. Winks

College of Cape Town Head Office

334 Albert Rd

Salt River

7925

Dear Mr Winks

PERMISION TO DO RESEARCH IN YOUR COLLEGE

I am currently registered for M.Ed at CPUT. I am conducting a research project about teaching strategies for students with learning challenges in TVET colleges. For this purpose, I kindly request to interview four lecturers about the teaching of such students, as well as to do some classroom observation, to establish what teaching strategies might be appropriate for such students.

I kindly request your permission to interview four lecturers and to do observations in their lectures about teaching strategies.

Your College, the lecturers and the students will remain anonymous. The research is not about your College or the lecturers or the students, but about teaching strategies. I kindly request your permission in writing, please.

Thank you.

Yours faithfully,

C. McPherson

Appendix F: Observation Tool

No.	Aspects Observed	Yes	No	Comments
1.	Teaching strategy used accommodates students with learning challenge?			
2.	Lecturer investigates and gives individual attention to students with learning challenges?			
3.	Language usage: clear and unambiguous?			
4.	Lecturer uses examples to demonstrate a point?			
5	Lecturer engages students by providing an opportunity for them to participate			
6	Lecturer demonstrates good understanding of his subject?			
7	Lecturer uses a variety of teaching resources?			
8	Lecturer repeats and summarizes at the end of lesson?			
9.	Students participate by asking questions?			
10	Lecturer plays the role of a facilitator			

Appendix G1: Interviews with Lecturer 1

Question 1: In your opinion, what kind of teaching and learning challenges do students with learning challenges in your classes, experience?

The institution is in a secure safe and secure neighbourhood. Students have problems coming to college most times. But I think that the college itself is not located in a travel-friendly area as there is no immediate transport facilities close by besides the trains. The majority of students use public transport to get to the institution. I understand that they must take two sometimes three taxis to get to the institutions. So most students opt for taking the train but as we know that trains are altogether unreliable. Also, there has been one or two reported incidents that I know of at the train station not too far from the college. I think that incident alarmed management at the time, which created a lot of awareness at the college for students to walk in groups or try and travel in groups

Question 2: What do you think of those challenges experienced by the students – what do you think causes their challenges, and how do the students deal with their own challenges?

I don't think students get much support from family and they may not understand it themselves to be able to deal with the challenge themselves.

Question 3: What teaching strategies do you currently use to teaching these students?

….. very few are able to accommodate these types of students. I show students short subject related videos that assist them in their understanding. Also during some lessons, I take the students to the workshop to show them the components they learn in class. They love it!

Question 4   Are these teaching strategies you use, effective, or what challenges do you perhaps experience in teaching these students?

…….. I'm not trained in inclusive practices; the college needs to send us for training courses so that we are able to deal with such students." "…. We find that lecturers are appointed with no teachers' qualifications. To be honest they know nothing about teaching. I don't think there is a proper recruitment process.

Question 5: What do you think, is the most appropriate or effective way or ways of teaching such students?

Our students don't have access to a laptop or the internet at home. Some students don't even have a smartphone. So my solution is to issue workbooks with lesson slides and lots of question and answer exercises and problem-solving tasks. I find this is essential and brings along a better understanding of theoretical concepts and accommodates these students who do not have resources.

Appendix G2: Interviews with Lecturer 2

Question 1: In your opinion, what kind of teaching and learning challenges do students with learning challenges in your classes, experience?

the facilities are terrible at the institution, we have very old and dilapidated toilet facilities for students which never gets upgraded. I think the way these toilets look now is the way they were when this college was a school many years ago. Also, I don't think there is enough toilet facilities for students as there is only two urinals that work the last time I went into the student's toilets.

Also, I think we have a huge problem with classroom facilities, it seems all classrooms get given to the occupational unit or gets rented out to other private institutions to host their training programmes at the institution. Not minding that the lecturers at the campus is struggling with space as our classrooms are too small for the number of students I have. I think many staff members her has a problem with overcrowded classes and I don't think management cares about it. It's always just about the numbers and don't give a damn about the quality.

Question 2: What do you think of those challenges experienced by the students – what do you think causes their challenges, and how do the students deal with their own challenges?

Student challenges have been completely ignored from primary school and parents would also ignore that there is a possible challenge or that their children suffer due to the areas they live in. I am not qualified to diagnose learning challenges but most students come from areas where very little care is given to students. Students grow up in an area where there is an influx of gangsterism and drugs.

Question 3: What teaching strategies do you currently use to teaching these students?

……when students participate in class it creates constructive learning. I think the students like it when there is a constructive debate in class about the work, so I try to create debates like that in class.

Question 4   Are these teaching strategies you use, effective, or what challenges do you perhaps experience in teaching these students?

…… I'm not a qualified educational psychologist to diagnose specific learning challenges but for these students, I send them to the student support staff. I wait on the results of any appropriate intervention strategies.   …..but never get a response from them. The college must send us for training workshops instead of workshops that we know nothing about and that will never be of any use to us in the classroom situation.

Question 5: What do you think, is the most appropriate or effective way or ways of teaching such students?

Every student has a different ability in the classroom, so pairing an academically strong student with others creates a tremendous amount of support as there are times I am unable to give every student individual attention. There is just not enough time in the trimester.

Appendix G3 : Interviews with Lecturer 3

Question 1: In your opinion, what kind of teaching and learning challenges do students with learning challenges in your classes, experience?

I feel that the college is selfish in spending money at the institution. There is always something that breaks and then it takes maintenance a very long time to fix things. For example, my aircon in my classroom has been broken for a long time now and just never gets sorted out. The students struggle in summer as the windows in my class cannot open. This class is very hot during summer, and don't think students can concentrate at all in a hot confined classroom that has no ventilation.

Question 2: What do you think of those challenges experienced by the students – what do you think causes their challenges, and how do the students deal with their own challenges?

Students have socio-economic problems as a lot of our students come from poor backgrounds where parents' cannot afford their children studies. They don't have the necessary resources at home that could assist them. Like the internet, computers/laptops, emotional or financial support from parents or guardians. Some of these students go sleep with an empty stomach.

Question 3: What teaching strategies do you currently use to teaching these students?

I encourage participation in class, I sometimes let students explain by writing notes on the whiteboard.

Question 4   Are these teaching strategies you use, effective, or what challenges do you perhaps experience in teaching these students?

Often students are late or absent from class and miss out on work and fall behind, therefore I often encourage collaborative teaching where these types of students are then able to use their peers to catch up on work missed. In most cases, this works as I find students are caught up by most of their work. I do what I can, sometimes as I am not sure how will help the student.

Question 5: What do you think, is the most appropriate or effective way or ways of teaching such students?

I often encourage productive talk in my classroom, even when students use their home language to explain to one another as they are better able to relate and express themselves. However, one has to ask the student to recall in the medium of instruction to determine the level of understanding, as students cannot always manage all the details. I encourage active learning strategies and teaching techniques that increase student engagement in daily lessons and on the internet platforms.

Appendix G4 : Interviews with Lecturer 4

Question 1: In your opinion, what kind of teaching and learning challenges do students with learning challenges in your classes, experience?

I have been complaining about the windows in my classroom that does not open. I think a few years ago this matter was addressed in a staff meeting but nothing was ever done about it. Students is unable to work in condition like this. There is no ventilation in the classroom and I am pretty sure that this problem is common amongst most of the staff members here. I have addressed this with management a number of times but I don't think they care, because nothing gets done about it. I don't blame students for complaining or wanting to cut classes short

Question 2: What do you think of those challenges experienced by the students – what do you think causes their challenges, and how do the students deal with their own challenges?

Learners experience and live in isolation for most of their lives and the sad thing is that they have been living like this from a young age. These learners know how to duck and dive from their situation.

Question 3: What teaching strategies do you currently use to teaching these students?

…….the use of peer groups where students can tap into their peers' knowledge of the work to get a better understanding or catch up with work missed. In most cases, this works as I find students are caught up and understand the work by almost 70% better.

Question 4   Are these teaching strategies you use, effective, or what challenges do you perhaps experience in teaching these students?

Every student has a different ability in the classroom, so pairing an academically strong student with others creates a tremendous amount of support as there are times I am unable to give every student individual attention. There is just not enough time in the trimester to finish the syllabus.

Question 5: What do you think, is the most appropriate or effective way or ways of teaching such students?

I keep my students active because I know they are experiencing problems. So I would go to them and physically aid them by demonstrating then ask 'did you understand?' in order to get feedback from the students. I try to explain to him again because I want him/her to be competent. I tell them that there is no other option but to pass. I want them to have a sense of belonging, I want them to feel that they belong in this class. You belong in this class.

Appendix H1: Interviews with Student 1

Question 1. What is your experience as a student at the institution?

The college is nice, they make a new paint job in the beginning of the year yes. They redo the roof also, because it was bad here in winter the classrooms leak. But the toilet is not nice, toilet is always dirty yes. Also classrooms are not clean all the time. But I think its students, they eat in class and they leave the paper there on the desk or on the floor.

Why at this institution must I buy textbooks? At other institutions, they get textbooks for free. They get all the drawing equipment and calculator. Here, I must pay.

Management is a problem as they don't communicate….the timetable is very confusing. When I came here in N4, I didn't know where I needed to be in class. Nobody explains it to me, I wasn't sure if I was in group A or group B. I just follow the class. Sometimes I sit here the whole day and there is no class.

Question 2. What is your current experience as a student with the teaching strategies used in the classroom?

……of the lecturers don't explain very nicely. Sometimes I leave the class not knowing what is going on. I feel sometimes the lecturers are just not understanding at all. When I ask them to explain again.

Lecturers don't follow the right timetable. Sometimes I'm not sure if it has changed, but lecturers say that they had class beforehand or after the period that we supposed to have class. Most times I think lecturers arrive late for class then change the timetable.

After a lesson, it is difficult to know whether we are understanding the work or not as it seems lecturers assume that we understand. Lecturers fail to give relevant feedback after we come with the homework that was given.

Question 3. What do you expect from the college?

Education and work placement

Researcher: Are you saying that the education given is not good at the college?

The lecturers are constantly rushing through some of the work. I don't understand half the things they saying? Maybe it was because of pandemic

Question 4. Do you experience challenges and difficulties that deter you from achieving academic success?

new lecturers struggle in class, sometime the students tease them because he is new. We struggle because there is a new lecturer that comes in to teach in the other lecturers' place. But we don't learn anything from her.

I have to work so I can feed me and my brother every day. We don't have parents to help us. My parents' died a long time ago so I don't have support. I don't have money to come to school or for fees.

I did not have good results at the end of grade 11, so the college put me in the NCV programme. I finished up till level 4. But now I'm struggling in the N4 because I did not do the work that is being taught.

Question 5. In your opinion are these challenges accommodated in the classroom?

No sir, I live far and transport is a problem. If the college had transport available for us to come to college.

Question 6. Do you have personal recommendations to lecturers on their teaching strategies that would assist them to make your current or future experiences better in the classroom?

I would like it if lecturers can take us to the workshops more often. I think lots of students like doing practicals. Most of the students cannot understand the work in class.

Appendix H2: Interviews with Student 2

Question 1. What is your experience as a student at the institution?

I would like the college to implement more practical training at the college. There are workshops available that are not utilized. This will help us understand things better. Mr…. takes us on the field to show us the different brick patterns that we do in class. This I think is very helpful. If we could only do this with all our subjects.

The college by far has the worst administration department. These ladies do not know how to speak to us. They are so rude towards students. One of the students was telling me that she actually cried after one of the admin ladies was screaming at her. We don't get any proper assistance from the administration. I was am more worried about whether my registration has been sorted out, otherwise, I will not get resulted.

….the staff do not communicate when there is no class. I travel from far just to come to college and find that the timetable has changed. I don't think it's right as I wasted my mother's travel money.

Question 2. What is your current experience as a student with the teaching strategies used in the classroom?

The lecturer doesn't even give an introduction in the lesson he just expects us to know what is going on in class. I never did this work before.

I think that some lecturers don't plan their lessons like they are supposed to. Also, some of them give us added irrelevant material that makes us more confused at the end of the lesson.

Lecturers do not give us time to wrap our heads around what has been taught, they just immediately start with the next module or chapter. I think students must be allowed space to think and consume the knowledge that has been given to us.

Question 3. What do you expect from the college?

I thought there was sports here at the college

Researcher: So from an academic point of view what do you expect the college to help you?

I have no comment sir, because the lecturers here they don't explain enough and they explain fast.

Question 4. Do you experience challenges and difficulties that deter you from achieving academic success?

the teacher does not know how to explain the work to us. But most times we understand when we help each other, He has a lot of experience in the industry, but that does not always help us. He just reads from the book all the time

Sometimes I can't come to school because of the gangsterism in our area. The gangsters shoot you even if you just walking down the street. They run through our houses like it's a battlefield. They killed my brother.

I'm struggling to cope with the NATED programme. It feels as if the teacher is not teaching us the work that we must know. I finished my grade 12, but it feels as if I am going backwards.

Question 5. In your opinion are these challenges accommodated in the classroom?

Sir, this college, the lecturers' don't consider us. At school it was nice but know that my subjects I took was wrong.

Question 6. Do you have personal recommendations to lecturers on their teaching strategies that would assist them to make your current or future experiences better in the classroom?

Lecturers must show more videos so we can see what they are talking about in class.

Appendix H3: Interviews with Student 3

Question 1. What is your experience as a student at the institution?

Sir with the COVID 19 pandemic I feel that the college does not have enough ventilation in the classroom at the classroom in Room 61 all the windows cannot open. They are all riveted closed.

……also I have a big problem with the way the administration deals with the student. I know students are scared to go to enquire about anything at the admin.

Some lecturers do not respect other lecturers time slots. They tend to teach over the time allocated. Not all students do all 4 subjects so when we get to class, time is wasted waiting for the rest of the class to come before the lecturer can start.

Question 2. What is your current experience as a student with the teaching strategies used in the classroom?

I like Mr X he has a nice way of teaching and he is very considerate he takes us to workshops and shows us what the materials look like, but I think some students take advantage of his goodness. He always asks if you are ok and if there is anything that we need to talk to him about, we should speak to him.

I think there are lecturers that are struggling financially. They are just teaching to put food on the table. This might lead to lecturers giving unprepared lessons as they come to class not knowing where to start.

Lecturers do not allow the students to grasp what has been taught. I think that lecturers must allow time during class for a class discussion as this may allow lecturers to see if we understand what was being taught. I think we as a student can also learn off each other.

Question 3. What do you expect from the college?

I expect education from the college! Which we not getting

Experience of working, like for example how to work on site. Lecturers must take us to the workshops for practicals so we can get experience for working.

Question 4. Do you experience challenges and difficulties that deter you from achieving academic success?

the lecturer teachers from the question paper. He never explains things out of the book. He gets the memo and reads the answers to us.

We don't have money sir, we don't have food, sometimes we cannot buy electricity in the house so I cannot do homework. I must sometimes sit with a candle. When I come to school sometimes I am very hungry I cannot think.

I have never done drawings on school. Now I must do it in N4 and I don't know how. I'm struggling, I'm trying to work with some of my college students.

Question 5. In your opinion are these challenges accommodated in the classroom?

No none!

Researcher: Could you explain why you say no?

Online learning is difficult I can't cope with the way lecturers teach. Senior lecturers does not speak to us as students

Question 6. Do you have personal recommendations to lecturers on their teaching strategies that would assist them to make your current or future experiences better in the classroom?

I think the syllabus must be updated, the lecturers are teaching irrelevant work to us. The material in the textbooks is very old. One day I saw a syllabus that was last updated in 1976. We are using more advanced strategies in the industry.

Appendix H4: Interviews with Student 4

Question 1. What is your experience as a student at the institution?

The college is not transparent with us when it comes to COVID 19. Last week there was a lecturer that had COVID and we only found out the next week. He was teaching us that whole week. There is no ventilation in the classrooms and some of the classes are damaged or not maintained well. I think the teachers must be more strict with the students.

…..two occasions that I did not get resulted. I spoke to the admin lady a few times that trimester to make sure that my registration was correct. Every time she sends me away to come back later. Afterwards, I found out that I was not registered properly. This wasted my time at the college because I had to redo subjects again. I don't have money to redo.

For some students, we have to attend an academic support class because we did not perform academically. But the timetable is never aligned. I sometimes miss another class to attend an academic support class. In that case, I will always be behind with work.

Question 2. What is your current experience as a student with the teaching strategies used in the classroom?

…..at times I can't concentrate in class. I'm hungry, sometimes I don't eat in the evening or in the morning. When the teacher is teaching I'm having difficulty understanding.

Lecturers teach certain topics without teaching aids and this results to most of us students not understanding the topic in discussion. Most times its due to their resources not working from time to time. This takes up time from our lesson. But if lecturers were prepared they would be able to make other arrangements for teaching aids.

There are students in class that miss behaves, they make a noise and disturb the rest of us. I feel that the lectures do not reprimand them. This creates problems for other students as we cannot learn.

Question 3. What do you expect from the college?

To achieve what I want

Researcher: What do you mean by this?

I want to be successful and I want to get qualified. Some of the lecturers can help me get what I want because they know a lot about

Question 4. Do you experience challenges and difficulties that deter you from achieving academic success?

I am always late for college. The lecturer does not understand when I explain that I don't have money to take a bus. I can only take a bus to college after 8 am because it is cheaper. Then I get to college at 9 am.

My parents' are divorced, and I live with my mother but on a regular basis my mother goes to work overseas and I must stay at home alone. My father does not come and look after me so most times my grandfather comes to look after me.

Some of the teachers at the college don't realise that some of the work that we do in class, we have never done on school.

Question 5. In your opinion are these challenges accommodated in the classroom?

Yes, its hard though, but I try and cope and focus with them

Question 6. Do you have personal recommendations to lecturers on their teaching strategies that would assist them to make your current or future experiences better in the classroom?

I would like the lecturer to be more positive and try and encourage students. I think lectures are lacking this in class.

Appendix H5: Interviews with Student 5

Question 1. What is your experience as a student at the institution?

My experience as a student was not enjoyable

No comment sir! Not very fond of teaching methods used at the college sir

Question 2. What is your current experience as a student with the teaching strategies used in the classroom?

….. yes I was at the student support office but a lot of the time she is not there. I speak to her about my problems with lecturers because I don't understand. …… lecturer speaks too fast and other teachers always give homework. I don't have a place at home to do homework. I don't have a table or equipment.

The COVID 19 created a high rate of absenteeism in the college. This leaves us with nowhere to go sometimes we are sent to other lecturers to be looked after, but we are left to work on our own.

I feel that the classroom is very boring, where students do not engage in class. There is no excitement coming from students. Some even fall asleep. Lecturers don't use methods that excite the class or make it lively so that we feel like engaging. Sometimes I get the impression that lecturers are not passionate.

Question 3. What do you expect from the college?

I expect lecturers to speak appropriately to students

To understand and reason with students regarding their problems that they have.

Also more communication from management to students

Question 4. Do you experience challenges and difficulties that deter you from achieving academic success?

I must work, to pay for food in the house. In the morning I must take my brother to school. Sometimes I can't come to college because I'm tired.

I have difficulty coming to college most days as I must travel. There is no trains and I must take too many taxies to get to college. When I take a taxi it's very early in the morning and I will get robbed. They already took my phone and school bag twice.

Sometimes I come to the taxi rank, then there is a taxi violence and they shooting at taxi drivers.

In school, we did not have a choice but to do Mathematics Literacy as a subject. Here at College, we are just using pure Mathematics and the last time I did it was in grade 9.

Question 5. In your opinion are these challenges accommodated in the classroom?

No!
Researcher: Can you please explain why you say no?

The lecturers just don't understand what we as students go through in our personal lives. Most times I get very frustrated and I don't like talking about it sir

Question 6. Do you have personal recommendations to lecturers on their teaching strategies that would assist them to make your current or future experiences better in the classroom?

Lecturers are rushing to get the syllabus done. I think they must not rush and speak slower so that we can understand.

lecturer need to know how to properly communicate to students, no shouting, anger, discriminating, mocking and judging of students.

Appendix I1: Field notes for Observation of Lecturer

Addendum D: Observation

No.	Aspects Observed	Yes	No	Comments
1.	Teaching strategy used accommodates students with learning challenge?		✓	lecturer uses mostly lecturer centered approaches but allows a bit of interactive strategies.
2.	Lecturer investigates and gives individual attention to students with learning challenges?		✓	lecturer does not give individual attention. lecturer is not interactive and does not engage in discussions.
3.	Language usage: clear and unambiguous?	✓		language is clear & given in english. However most student english is not first language
4.	Lecturer uses examples to demonstrate a point?	✓		lecturer shows students using visual content as well as video clip related to lesson.
5	Lecturer engages students by providing an opportunity for them to participate	✓		lecturer demands students participation by asking question. Otherwise they would not engage in the lesson.
6	Lecturer demonstrates good understanding of his subject?	✓		lecturer appear knowledgeable on the subject.
7	Lecturer uses a variety of teaching resources?	~	.	lecturer uses a interactive white board and copied notes. video clip
8	Lecturer repeats and summarizes at the end of lesson?		✓	lecturer does not summarize prior work. Students are given work sheets to test what they have learnt.
9.	Students participate by asking questions?	✓		students participate. Students use worksheets on work covered in lesson
10	Lecturer plays the role of a facilitator		✓	lecturer does not use prior knowledge to build on existing knowledge.

Addendum D: Observation

No.	Aspects Observed	Yes	No	Comments
1.	Teaching strategy used accommodates students with learning challenge?	✓		lecturer basis her lecture) on the student. lectures students struggle to grasp lesson. many questions.
2.	Lecturer investigates and gives individual attention to students with learning challenges?		✓	lecturer does not give any student individual attention. It appear that the time allowed for was not enough for individual attention.
3.	Language usage: clear and unambiguous?	✓		lecturer speaks clearly may be unclear to student as he uses unfamilior words
4.	Lecturer uses examples to demonstrate a point?	✓		lecturer brought models & fire extingu. instruments to class
5	Lecturer engages students by providing an opportunity for them to participate	✓		students are very interactive
6	Lecturer demonstrates good understanding of his subject?	✓		lecturer appears knowledgable and understanding the subject.
7	Lecturer uses a variety of teaching resources?	✓		lecturer uses smart board, is very interactive
8	Lecturer repeats and summarizes at the end of lesson?	✓		lecturer summarises and reminds student of work to be done & work done.
9.	Students participate by asking questions?	✓		lecturer requests students to participate by being interactive. Student asks questions.
10	Lecturer plays the role of a facilitator	✓		lecturer uses student prior knowledge and builds on it.

Appendix I3: Field notes for Observation of Lecturer

Addendum D: Observation

No.	Aspects Observed	Yes	No	Comments
1.	Teaching strategy used accommodates students with learning challenge?	✓		lecturer uses a active approach
2.	Lecturer investigates and gives individual attention to students with learning challenges?	✓		lecture is interactive with students. Using projector. Encourages students who appear distracted. Engages with those that do not under
3.	Language usage: clear and unambiguous?	✓		lecturer speaks clearly when bringing message across to students.
4.	Lecturer uses examples to demonstrate a point?	✓		-internet examples -video
5	Lecturer engages students by providing an opportunity for them to participate	✓		lecturer forces involvemt. however students appear disrupted. by the social media
6	Lecturer demonstrates good understanding of his subject?	✓		lecturer appears to have good understanding of subject
7	Lecturer uses a variety of teaching resources?	✓		lecturer uses projector screen, active post cards
8	Lecturer repeats and summarizes at the end of lesson?	✓		Yes summarizes what was done. Also addresses future work to be done.
9.	Students participate by asking questions?		✓	lecturer forces questions & participation students are disruptive & mocks the lecturer
10	Lecturer plays the role of a facilitator	✓		lecturer uses prior knowledge to construct new knowledge.

170

Appendix I4: Field notes for Observation of Lecturer

Addendum D: Observation

No.	Aspects Observed	Yes	No	Comments
1.	Teaching strategy used accommodates students with learning challenge?		✓	Uses traditional methods how ever appears to be interactive at times.
2.	Lecturer investigates and gives individual attention to students with learning challenges?		✓	lecturer was giving a lesson on instruments on the day, therefore demonstrated instruments. No student
3.	Language usage: clear and unambiguous?	✓		lecturer speaks clearly & slowly
4.	Lecturer uses examples to demonstrate a point?	✓		lecturer had demonstrated through the usage of Instruments. This assists in understand.
5	Lecturer engages students by providing an opportunity for them to participate	✓		students participate in the lesson and are very interactive.
6	Lecturer demonstrates good understanding of his subject?	✓		lecturer appears to be well versed and demonstrates a good understanding
7	Lecturer uses a variety of teaching resources?		✓	On the day of observation the college experienced load shedding therefore his lesson plans were spoilt.
8	Lecturer repeats and summarizes at the end of lesson?		✓	students that were absent the day before did not know what Todays lesson was about due to the time, lesson could not be summarized
9.	Students participate by asking questions?	✓		students participate, lecturer probs question and demonstrations
10	Lecturer plays the role of a facilitator		✓	the lecturer does not use students prior knowledge

171